

Programme Outcomes (POs) and Course Outcomes (COs)



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POs, PSOs & COs

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BACHELOR OF EDUCATION (B.Ed.)

Programme Outcomes

After completion of this programme, pupil-teachers will be able to:

- PO-1: Demonstrate pedagogical knowledge in the preparation and transaction of curriculum.
- POs-2: Identify and employ suitable assessment techniques for facilitating learning.
- PO-3: Apply pedagogical skills to enhance learning effectiveness and to deal with classroom problems.
- PO-4: Prepare and present Lesson Plan by applying various pedagogical skills.
- PO-5: Detect diversities in an inclusive classroom setting and provides guidance and counselling services accordingly.
- PO-6: Understand moral values, ethics and accountability for being responsible citizens.
- PO-7: Use information and communication technologies for better engagement of learners.
- PO-8: Develop capacity to deal with adverse situations in school and society.
- PO-9: Develop the power of acceptance, tolerance and inter-personal communication skills for an ideal teacher.
- PO-10: Practice yogic exercise for all round development of personality.

Programme Specific Outcomes

After completion of this programme, pupil-teachers will be able to:

- PSO-1: Develop employability skills and competencies for teaching profession.
- PSO-2: Develop the skills necessary to prepare for OTET, OSSTET, CTET and other certification exams.
- PSO-3: Use technology in designing and developing ICT integrated learning resources.
- PSO-4: Develop leadership quality with managerial, organisational and supervision skills for smooth functioning of educational institutions.

FIRST YEAR
PE-1: EDUCATION, SCHOOL AND SOCIETY
(4 CREDITS) (FM:100)

Course Outcomes:

On completion of this course, pupil-teacher will be able to:

- CO 1: Understand the meaning and importance of education in life.
- CO 2: Analyse the principles of idealism, naturalism and pragmatism.
- CO 3: Integrate the educational thoughts and ideals of great thinkers of education in their life.
- CO 4: Appreciate the role of education in a changing society.
- CO 5: Adopt new ways of life and work for sustainable development of society.

PE-2: CHILDHOOD AND GROWING UP
(4 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, pupil- teacher will be able to:

- CO 1. Understand the typical characteristics and principles of growth and development in various stages of human life.
- CO 2. Assess developmental theories and contexts of development with respect to the innate nature of the child.
- CO 3. Detect the causes responsible for individual differences among learners and meeting the classroom issues arising out of such differences.
- CO 4. Examine the importance of family, school and society on the growth and development of the child.
- CO 5. Evaluate the importance of socio-cultural context in the lives of children.

PE-3: LEARNING AND TEACHING

(4 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, pupil– teacher will be able to:

- CO 1. Understand the meaning, nature and dimensions of learning.
- CO 2. Analyse the theoretical framework and educational implication of operant conditioning.
- CO 3. Describe the concept and process of meaningful learning.
- CO 4. Explain various modes of teaching and learning.
- CO 5. Justify teaching as a profession and professional ethics of teachers.

PE-4: CONTEMPORARY CONCERNS IN EDUCATION

(4 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, pupil– teacher will be able to:

- CO 1. Describe the prevailing social issues like inequalities, diversity, discrimination, marginalisation etc.
- CO 2. Analyse the role of education, school, and teacher in addressing various social issues.
- CO 3. Analyse Constitutional provisions and policy recommendations relating to education.
- CO 4. Develop professional values through curricular and co-curricular activities.
- CO 5. Assess the importance of socio-cultural context in the lives of children.

CPS-2: LEARNING AND ASSESSMENT

(4 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, pupil-teacher will be able to:

- CO 1. Understand the nature, purpose and types of educational assessment and evaluation.
- CO2. Adopt different types of tools and techniques for continuous and comprehensive assessment of learning in the school situation.
- CO3. Explain the importance of assessment for learning and its processes for enhancing the quality of learning and teaching
- CO 4. Analyze the trends and issues in learning and learner assessment.
- CO 5. Analyze and interpret results of assessment using rudimentary statistical methods.

CPS-3: PEDAGOGY OF SCHOOL SUBJECTS- ODIA

(4 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, pupil–teacher will be able to:

- CO 1. Understand the importance of mother tongue in their life.
- CO 2. Adopt and integrate different techniques and methods while teaching language.
- CO 3. Understand the sound patterns in language and rectify their pronunciation.
- CO 4. Synthesise the interdependence of four skills of language learning.
- CO 5. Develop teaching learning materials for language learning.

CPS-3: PEDAGOGY OF SCHOOL SUBJECTS-ENGLISH

(4 CREDITS) (FM:100)

Course Outcomes:

On completion of this course, the pupil–teacher will be able to:

- CO 1. Understand the importance of English language in their life.
- CO 2. Adopt and integrate different techniques and methods while teaching language.
- CO 3. Understand the sound patterns in language and rectify their pronunciation.
- CO 4. Synthesise the interdependence of four skills of language learning.
- CO 5. Develop teaching learning materials for language learning.

CPS-3: PEDAGOGY OF SCHOOL SUBJECTS-MATHEMATICS

(4 CREDITS) (FM:100)

Course Outcomes:

On completion of this course, the pupil–teacher will be able to:

- CO 1: Narrate and understand the evolution and nature of mathematics and its importance in the school curriculum in the context of the recent curricular reforms.
- CO 2: Apply various methods and approaches for teaching and learning mathematics especially suitable for the secondary school classes.
- CO 3: Develop lesson plans in Mathematics using traditional and constructivist approaches for effective class room transactions.
- CO 4: Develop and collect activities and resource materials for their use in enhancing the quality of learning mathematics at the secondary level.
- CO 5: Explain the concepts in Mathematics included in the secondary school curriculum and make pedagogical analysis of those concepts.

CPS-3: PEDAGOGY OF SCHOOL SUBJECTS- PHYSICAL SCIENCE

(4 CREDITS) (FM:100)

Course Outcomes :

On completion of this course, pupil–teacher will be able to:

- CO1. Understand the nature and importance of physical science and its relevance in secondary school curriculum.
- CO2. Adopt various methods and approaches to teaching-learning Physical Science suitable for the secondary school classes.
- CO3. Develop lesson plan in physical science for effective classroom transactions.
- CO4. Explain different activities and resource materials for their use in enhancing quality of learning of Physical Science at the secondary level.
- CO5. Use appropriate tools and techniques for continuous and comprehensive assessment of learning in Physical Science.

EPC-3: FINE ART

(2 CREDITS) (FM:50)

Course Outcomes:

On completion of this course, the pupil–teacher will be able to:

- CO1. Understand different forms of art.
- CO2. Differentiate two dimensional and three-dimensional teaching aids.
- CO3. Analyze different forms of traditional art.

EPC-4: PHYSICAL EDUCATION AND YOGA

(2 CREDITS) (FM:50)

Course Outcomes:

On completion of this course, the pupil–teacher will be able to:

- CO 1. Understand the need and importance of Yoga in human life
- CO 2. Develop values of recreation and play bringing all round development of personality.
- CO 3. Analyse the relation between yogic practices and life goals in modern society.

OCS-1: FRUIT AND VEGETABLE PRESERVATION

(2 CREDITS) (FM:50)

Course Outcomes:

On completion of this course, the pupil–teacher will be able to:

- CO1. Understand techniques of fruit and vegetable preservation.
- CO2. Develop economic values through fruit and vegetable preservation.

- CO 3.Explain different type of preservatives for different type of fruits and vegetables.

SECOND YEAR

PE-5: KNOWLEDGE AND CURRICULUM

(4 CREDITS) (FM:100)

Course Outcomes:

On completion of this course, pupil–teacher will be able to:

- CO 1.Understand different facts related to National Curriculum Framework 2005 and National Curriculum Framework 2009.
- CO 2.Explain knowledge, sources of knowledge and nature of knowledge.
- CO 3. Classify knowledge transmission and knowledge construction.
- CO 4. Use different theories of knowledge in the field of education.
- CO 5.Assess values like constitutional, socio-cultural, political, economic, environmental and global concern.

PE-6: EDUCATIONAL MANAGEMENT

(4 CREDITS) (FM:100)

Course Outcomes:

On completion of this course, pupil–teacher will be able to:

- CO 1.Understand the structure of educational management at different levels from national to institutional level.
- CO 2. Understand the process and system of administration, leadership and management of school education.
- CO 3. Identify and utilize various resources for effective school functioning .
- CO 4. Prepare reports of various school activities and records of school management.
- CO 5. Plan for the implications of various policies and provisions in respect of educational management.

PE-7 (A): CREATING AN INCLUSIVE SCHOOL

(2 CREDITS) (FM: 50)

Course Outcomes:

On completion of this course, pupil–teacher will be able to:

- CO 1.Understand the changing concepts related to inclusive education.
- CO 2.Identify the different categories of children with special needs, their problems in schooling and need of inclusive education to address their educational problems.
- CO 3. Analysis the barriers of inclusion in the existing schools.

PE-7(B): GENDER, SCHOOL AND SOCIETY

(2 CREDITS) (FM:50)

Course Outcomes:

On completion of this course, pupil–teacher will be able to:

- CO 1.State the key concepts related to gender issues.
- CO 2.Identify key gender issues in school, curriculum, textbooks and pedagogical process.
- CO 3. Explain different policy provisions relating to gender inequality.

PE-8(A): ACTION RESEARCH

(2 CREDITS) (FM:50)

Course Outcomes:

On completion of this course, pupil–teacher will be able to:

- CO 1. Develop scientific attitude towards teaching profession.
- CO 2.Evaluate teaching practices in a structured manner.
- CO 3.Explainschool issues, problems and areas of interest for personal as well as school progress.

PE-8(B): GUIDANCE AND COUNSELLING

(2 CREDITS) (FM:50)

Course Outcomes:

On completion of this course, pupil–teacher will be able to:

- CO-1. Describe concept, need, importance and principles of guidance and counselling.
- CO 2. Identify types of counselling programme in school.
- CO 3. Classify the tools and techniques used for guidance and counselling in school.

CPS-1: LANGUAGE ACROSS THE CURRICULUM

(2 CREDITS) (FM:50)

Course Outcomes:

On completion of this course, pupil–teacher will be able to:

- CO 1.Analyse the diversities of languages in the society.
- CO 2.Distinguish the importance of home language and school language in their life.
- CO 3.Develop their communication skills and oral skills.

CPS-3: PEDAGOGY OF SCHOOL SUBJECTS- HISTORY

(4 CREDITS) (FM:100)

Course Outcomes:

On completion of this course, pupil–teacher will be able to:

- CO1: Describe meaning, nature and scope of history and political science.
- CO2: Understand value of teaching history and political science in school curriculum.
- CO3: Explain curriculum as a resource material in teaching social science.
- CO4: Identify various methods and approaches to teaching-learning history.
- CO5: Prepare unit plans and lesson plans in history and political science.

CPS-3: PEDAGOGY OF SCHOOL SUBJECTS- BIOLOGICAL SCIENCE

(4 CREDITS) (FM:100)

Course Outcomes:

On completion of this course, pupil–teacher will be able to:

- CO1. State the nature and importance of Biological Science and its relevance in secondary school curriculum in context with recent curriculum reforms in school curriculum.
- CO2. Use various methods and approaches to teaching-learning Biological Science suitable for the secondary school classes.
- CO3. Plan unit lessons in Biological Science using traditional and constructivist approaches for effective classroom transactions.
- CO4. Develop and collect activities and resource materials for their use in enhancing quality of learning of Biological Science at the secondary level.
- CO5. Use appropriate tools and techniques for continuous and comprehensive assessment of learning in Biological Science.
- CO6. State the concepts in Biological Science included in the secondary school curriculum and make

EPC-1: CRITICAL UNDERSTANDING OF ICT

(2 CREDITS) (FM: 50)

Course Outcomes:

On completion of this course, pupil–teacher will be able to:

- CO 1. Distinguish between hardware and software approach to technology.
- CO-2. Understand the difference between instructional technology and communication technology.
- CO 3. Apply MS-Word, MS-Excel, and MS-Power Point in teaching learning process.
- CO 4. Use smart board in classroom teaching.
- CO 5. Aware about the challenges and barriers to ICT in education.

EPC-2: UNDERSTANDING THE SELF
(2 CREDITS) (FM: 50)

Course Outcomes:

On completion of this course, the pupil–teacher will be able to:

- CO 1. Develop Self-respect and Self-esteem.
- CO 2. Understand the importance of self-actualization and self-esteem.
- CO 3. Develop responsibility and accountability for teaching profession.



B.Sc. BIOTECHNOLOGY

Programme Outcomes:

- PO1: Grasp of fundamental and advanced knowledge and skill on various domains of biotechnology.
- PO2: Students develop Inter-disciplinary learning habit with integrated technologies.
- PO3: Enhancing the subject knowledge of students by using traditional and modern aspects of plant or animal biotechnology.
- PO3: To train students on different branches of Biotechnology such as genetics, molecular biology, biochemistry, immunology, fermentation technology, environmental biotechnology and tissue culture techniques and their applications for human welfare.
- PO4: To groom the students to meet futuristic challenges and national interests.
- PO5: To foster students' ability in designing and conducting experiments with analysis and interpretation of scientific data.
- PO6: To acquaint the students with the surrounding environment and relate the relevant biotechnological aspects.
- PO7: Develop social responsibilities towards emerging environment related issues and challenges.
- PO8: Gain entrepreneurship skills towards establishing innovative startups.
- PO9: Adopt code of ethics in professional and social context and demonstrate professional, ethical and legal behaviors in decision making.
- PO10: Develop written and oral communication skills to communicate effectively in industry, academia and research.

Programme Specific Outcomes:

- PSO1: To confer the students with all their search aptitude and skills required to work independently
- PSO2: To empower students about scientific temperament and social responsibilities.
- PSO3: To aware students regarding present environment challenges by imparting knowledge of advance modern techniques.
- PSO4: Empower the students to acquire interdisciplinary knowledge by connecting various aspects of biotechnology.

FIRST SEMESTER
C1: MICRO BIOLOGY
(4 CREDITS) (FM: 100)

Course outcomes:

On successful completion of the course, the student will be able to

- CO 1. Apply fundamental principles governing classification schemes to categorize microorganisms.
- CO2. Explain the concepts of microbial diversity, taxonomy and systematic and methods employed for replication, adaptations, and interaction with the host and environment.
- CO3. Describe the morphology, mechanism of infection and multiplication, and therapy of viruses that are significant to medicine.
- CO4. Describe the use of various substances to control microbial growth and show practical competency in the use of tools and techniques for the isolation and identification of microorganisms.
- CO 5. Apply the knowledge of environmental bacteria in sewage treatment and water quality control.

FIRST SEMESTER
C2: PLANT DIVERSITY AND PLANT PHYSIOLOGY
(4 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of the course, the student will be able to

- CO1. To develop an understanding of classification, diversity and identification, and classification and explore the economic importance of lower groups of plants
- CO2: To explain fossils and fossilization and geological timescale for evolution of life forms in the earth.
- CO 3. Comprehend various physiological processes and their underlying mechanism in plants
- CO 4. To relate photosynthesis with the formation of primary and secondary metabolites,
- CO5. To understand the phenomenon of mechanism and breaking of dormancy, role of plant growth hormones, micro and macronutrients water relations, nitrogen fixation and flowering mechanism in plants.

FIRST SEMESTER
GENERIC ELECTIVE PAPER-I
BIOCHEMISTRY AND MOLECULAR BIOLOGY
(4 CREDITS) (FM:100)

Course outcome:

On successful completion of the course, the student will be able to

- CO 1. Acquire knowledge in the quantitative and qualitative estimation of biomolecules.
- CO 2. Thoroughly understand the importance of biomolecules and their functions.
- CO 3. Understand the concepts of cellular function and molecular aspects of the biology.
- CO 4. Learn the concepts of central molecular biology spanning from DNA Replication till Protein Synthesis and Reverse transcription.

SECOND SEMESTER
C3: CELL BIOLOGY AND GENETICS
(4 CREDITS) (FM:100)

Course Outcome:

On successful completion of the course, the student will be able to

- CO1. Students will understand the structure and purposes of basic components of prokaryotic and eukaryotic cells, especially macromolecules, membranes, and organelles gain a thorough understanding of the chemistry behind heredity genetic transmission and the interactions between genes and environment, the work contributes to showing the importance of genetics.
- CO 2. Evaluate and apply knowledge of modern techniques in cellular biology.
- CO 3. Learn about the molecular causes of genetic abnormalities and diseases.
- CO 4. To educate society about diverse genetic problems, their inheritance patterns, and the development of strategies and procedures for battling diseases.
- CO5. Understanding the mechanism of sex determination and the role of environmental conditions in different organisms.

SECOND SEMESTER
C4: ANIMAL DIVERSITY AND PHYSIOLOGY
(4 CREDITS) (FM: 100)

Course Outcome:

On successful completion of the course, the student will be able to

- CO 1. comprehends various degrees of biological diversity through systematic classification and get familiar with taxonomic level animal identification.
- CO 2. demonstrate knowledge of the distinctive features and characteristics of the major invertebrate groups by differentiating between different types of body

symmetry and outlining the key similarities and differences between the Radiata and Bilateria, protostomes and deuterostomes, acoelomates, pseudocoelomates, and acoelomates.

- CO 3. exhibit understanding of the varied traits of the main vertebrate animal groupings by comparing and contrasting the members of the chordate subphyla Urochordata, Cephalochor data, and Vertebrata.
- CO 4. Develop critical thinking skills and apply physiological concepts and principles at the basic and applied levels.
- CO 5. Develop a working knowledge of major physiological systems and be able to associate anatomical areas with their specific function.

SECOND SEMESTER
GENERIC ELECTIVE PAPER II
RECOMBINANT DNA TECHNOLOGY
(4 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of the course, the student will be able to:

- CO1: Gain knowledge on the manipulation of gene, gene expression which will help them for further studies in the area of genetic engineering.
- CO 2. Learner DNA technology techniques and their application in the field of genetic engineering.
- CO 3. Gain knowledge about plasmids, vectors and gain knowledge on the construction of cDNA libraries.
- CO 4. Apply most appropriate recombinant-DNA techniques and other contemporary molecular techniques to understand the function of gene.

SECOND SEMESTER
GENERIC ELECTIVE PAPER-III
ENVIRONMENTAL BIOTECHNOLOGY AND BIOETHICS
(4 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of the course, the student will be able to:

- CO1. Expose to the diversity, function, ecological adaptation of microorganisms within the environment.
- CO 2. Know the importance of microbial life to key ecosystem process and teaches the role of biotechnology to address environmental issues.
- CO 3. Learn the ethical aspects of conducting research and safety aspects to be adhered in a research setting.
- CO 4. Gain sufficient knowledge to act as a responsible scientist and environmentally conscious.

THIRD SEMESTER
C5: MOLECULAR BIOLOGY
(4 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of the course, the student will be able to:

- CO 1. Understand the interactions among various systems of the cell, including those between DNA, RNA and proteins
- CO 2. Learn the regulatory mechanism of DNA, RNA and proteins.
- CO 3. Understand the chemical and molecular processes that occurs in and between cells.
- CO 4. Get insight into the most significant molecular and cell-based methods used today to expand their understanding of biology.
- CO 5. Design and implement experimental procedures using relevant molecular techniques.

THIRD SEMESTER
C6: BIO-CHEMISTRY AND METABOLISM
(4 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of the course, the student will be able to:

- CO1. Demonstrate an understanding of fundamental biochemistry principles, including topics specific to chemistry and biochemistry
- CO2. Design, carryout, and record the results of chemical and biochemical experiments using classical techniques, modern instruments, and/or computers, then analyze those results to draw reasonable, accurate conclusions.
- CO3. Explain that molecular and macromolecular structure as well as supramolecular architecture determine function and regulation.
- CO 4. Communicate biochemical concepts and understanding to members of a diverse scientific community, as well as to the general public.
- CO 5. Learn various techniques of enzyme activity analysis.

THIRD SEMESTER
C7: BIOSTATISTICS AND COMPUTER APPLICATIONS
(4 CREDITS) (FM:100)

Course Outcomes:

On successful completion of the course, the student will be able to:

- CO1. Describe the roles biostatistics serves in the various other discipline and demonstrate basic analytical techniques to generate results
- CO 2. Interpret results of commonly used statistical analyses in written summaries and demonstrate statistical reasonings skills accurately and contextually

- CO3. Apply statistical knowledge to design and conduct research studies and operate statistical software packages to conduct research studies.
- CO 4. Apply the MS office of computer application for interpretation of data.
- CO 5. Apply computer skills for statistical methods and techniques.

FOURTH SEMESTER

C8: IMMUNOLOGY

(4 CREDITS) (FM:100)

Course Outcomes:

On successful completion of the course, the student will be able to:

- CO 1. Describe key immunological principles and ideas and have fundamental understanding of immunological processes at the cellular and molecular level.
- CO 2. To provide students with knowledge on how the immune system works building on their previous knowledge from biochemistry, genetics, cell biology and microbiology
- CO 3. To promote critical thinking among students;
- CO4. Understand the fundamentals and identify the characteristics of autoimmunity, immune tolerance and immunodeficiency and the related diseases.
- CO 5. Understand the principles of immunization and the mechanisms behind immunity to infectious diseases.

FOURTH SEMESTER

C9: PLANT BIOTECHNOLOGY

(4 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of the course, the student will be able to:

- CO 1. Learn the techniques of sterilization and monitoring method of sterilization.
- CO 2. Learn different pathways of plant regeneration under in vitro conditions-organogenesis and somatic embryogenesis.
- CO 3. Techniques of establishing cell suspension culture, synthetic seeds and applications.
- CO 4. Culturing of reproductive structures- anther, microspores, embryos, endosperm, Ovule and ovary cultures and methods to produce haploids.
- CO 5. Protoplast isolation, culture and protoplast fusion-applications-.Soma clonal variation-applications.

FOURTH SEMESTER
C10: ANIMAL BIOTECHNOLOGY
(4 CREDITS) (FM:100)

Course Outcomes:

On successful completion of the course, the student will be able to:

- CO 1. Learn the basic techniques of media preparation, cell culture and its maintenance.
- CO 2. Understand the methods of cell separation, cloning and transformation of cells.
- CO 3. Acquire the skills for gene transfer methods and stem cell technology.
- CO 4. Understand the techniques of gene therapy, molecular and human genetic engineering.
- CO 5. Perform various experiments related to animal cell culture.

FOURTH SEMESTER
Generic Elective Paper-IV
BIO PROCESS ENGINEERING & TECHNOLOGY
(4 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of the course, the student will be able to

- CO 1. Get fundamental insights to exploit microbes for manufacturing of products which have huge industrial significance.
- CO2. Gain idea on various biochemical processes to obtain products such as food, chemicals, vaccines, medicines.
- CO3. Know various industrially important microorganisms and their growth conditions as well as applications.
- CO 4. Have a better appreciation for the role of biotechnology in industry using microbes

FIFTH SEMESTER
C11: GENETIC ENGINEERING
(4 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of the course, the student will be able to:

- CO1. Understand the learning tools and techniques in rDNA technology including enzymes, vectors and PCR.
- CO 2. Acquire skills for the construction of recombinant DNA through molecular cloning approaches
- CO 3. Perform the experiments for selection of recombinants and analysis of cloned genes

- CO 4. Understand the concepts of site-directed mutagens is and its application in protein engineering.
- CO 5. Acquire skill sets for developing transgenic plants and animals and their applications

FIFTH SEMESTER

C12: GENOMICS & PROTEOMICS

(4 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of the course, the student will be able to:

- CO 1. Understand various strategies and methods for genome sequencing
- CO 2. Browse and analyse data from various genome data bases.
- CO 3. Analyze the physico-chemical nature of proteins and their separation through sizes.
- CO 4. Acquires skills for analysis of proteomes using 2 D PAGE and mass spectrometry
- CO 5. Perform purification and sequencing of proteins

SIXTH SEMESTER

C13: ENVIRONMENTAL BIOTECHNOLOGY & BIOETHICS

(4 CREDITS) (FM:100)

Course Outcomes:

On successful completion of the course, the student will be able to:

- CO1.Explaintheimportanceofmicrobialdiversityandofmolecularapproachesinenvironmentalmicrobiologyand biotechnology
- CO2.Describeexistingandemergingtechnologiesthatareimportantintheareaofenvironmentalbiotechnology
- CO3. Describe biotechnological solutions to address environmental issues including pollution, mineral resource winning, renewable energy.
- CO 4. Understand about national and international laws concerning biotechnology and bioethical issues.
- CO 5. To comprehend various IPRs for protection of intellectual property

SIXTH SEMESTER
C14: BIO PROCESS ENGINEERING & TECHNOLOGY
(4 CREDITS) (FM:100)

Course Outcomes:

On successful completion of the course, the student will be able to:

- CO1. Understand the production of industrially important chemicals and chemotherapeutic products
- CO2. Acquire skills for enzyme and cell immobilization, food technology and microbial metabolic engineering.
- CO 3. Purify and characterize proteins, upstream and downstream processing.
- CO4. Understand the method of microbial cell centrifugation, ion exchange and recovery of biological products
- CO5. Analyse the rate equation for enzyme kinetics, growth kinetics and metabolic engineering of antibiotic biosynthetic pathways.

SIXTH SEMESTER
Discipline Specific Elective -1
BIOTECHNIQUES
(4 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of the course, the student will be able to:

- CO 1. Learn the various instrumentations that are used in the analytical laboratories.
- CO 2. Know the fundamental and applications of the instruments that are routinely used for the characterization of biomolecules.
- CO 3. Acquire basic knowledge on the theory, operation and function of analytical instruments.
- CO4. Learn the methodology involved in biotechniques and knowledge and practical skills of using instruments in biology and medical field.

SIXTH SEMESTER
Discipline Specific Elective 2
BIOINFORMATICS
(4 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of the course, the student will be able to:

- CO 1. Understand the concepts and applications of bioinformatics.
- CO 2. Apply basic principles of biology, computer science and mathematics to address complex biological problems.

- CO 3. Learn methodologies and softwares used in bioinformatics that will give them a comprehensive frame in data analysis.
- CO4. Learn basic novel strategies implemented through machine learning and artificial intelligence and understand how their applications in bioinformatics and allied domains.

SIXTH SEMESTER

Discipline Specific Elective 3

BIOENTERPRENEURSHIP

(4 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of the course, the student will be able to:

- CO 1. Gain numerous entrepreneurial skills.
- CO 2. Understand various operations involved in the venture creation.
- CO3: Identify scope for entrepreneurship in biosciences and utilize the schemes promoted through knowledge centres and various agencies
- CO 4. Build up a strong network within the industry.

SIXTH SEMESTER

Discipline Specific Elective 4

MEDICAL MICROBIOLOGY

(4 CREDITS) (FM:100)

Course Outcomes:

On successful completion of the course, the student will be able to:

- CO 1. Learn about culture, collection, handling and transport of clinical samples.
- CO 2. Know the interactions between human and microbes, diseases caused by microbes.
- CO 3. Learn about diagnosis of various microbial diseases.
- CO 4. Identify the diseases and understand their treatment plan.

SIXTH SEMESTER

DISCIPLINE SPECIFIC ELECTIVE

4: Project Reports & Seminar

(4 CREDITS) (FM:100)

- As elected Biotechnology based product
- Review articles
- Latest techniques and products of societal impact
- Contribution/discovery of Scientists in the field of Biotechnology
- Instrumentation and applications

M. Sc. IN BIOTECHNOLOGY

Programme Outcomes:

- PO1: Acquire knowledge for in-depth analytical and critical thinking to identify, formulate and solve the issues related to various aspects of Biotechnology.
- PO2: Inculcate scientific communication skills, scientific writing and data recording required for Pharma industry, hospital Regulatory Agencies, & Academia.
- PO3: Demonstrate the ability to work on research projects and assignments.
- PO4: Enhance the ability of the students to take research initiative, design strategies with social cohesion between research and social context.
- PO5: Aware about ethical issues and challenges related to biotechnology.
- PO6: Equipped to take independent decisions for startups or entrepreneurial launches and also become a new knowledge generator in Biotechnology.
- PO7: Proficient knowledge in the lead domains of biotechnology including Bioprocess technology, Animal biotechnology, plant Biotechnology, microbiology, genetic engineering, and Bioinformatics.
- PO8: Demonstrate the ability to use digital tools and software for mining and analyzing data related to biotechnology.
- PO9: Enhanced ability for collaborative research work with different scientific community.
- PO10: Demonstrate conceptual learning through systematic analysis and critical thinking.

Programme Specific Outcomes:

- PSO1: To gain fundamental knowledge in various aspects of biotechnology and their applications.
- PSO2: To demonstrate and apply their knowledge of cell biology, biochemistry, microbiology and molecular biology to solve the problems related to the field of biotechnology.
- PSO3: To understand various facets of molecular procedures and basics of genomics, proteomics and metabolomics that could be employed in early diagnosis and prognosis of human diseases.
- PSO4: To familiar with basic laboratory instruments and understand the principle of measurements using those instruments with experiments.
- PSO5: To understand, analyse and implement the knowledge related to research ethics, intellectual property rights and patent formulation.

FIRST SEMESTER
BT-101 BIOCHEMISTRY
(4 CREDITS) (F.M.: 70)

Course Outcomes:

On successful completion of this course, student will be able to:

- CO 1. Demonstrate an understanding of fundamental biochemistry principles, including topics specific to chemistry and biochemistry
- CO 2. Design, carry out, and record the results of chemical and biochemical experiments using classical techniques, modern instruments, and/or computers, then analyze those results to draw reasonable, accurate conclusions.
- CO 3. Explain that molecular and macromolecular structure as well as supramolecular architecture determine function and regulation.
- CO 4. Communicate biochemical concepts and understanding to members of a diverse scientific community, as well as to the general public.
- CO 4. Learn various techniques of enzyme activity analysis.

FIRST SEMESTER
BT-102 CELL BIOLOGY AND GENETICS
(4 CREDITS) (F.M.: 70)

Course Outcomes:

On successful completion of this course, student will be able to:

- CO1. Understand three fundamental aspects in biological phenomenon: a) what to seek; b) how to seek; c) why to seek?
- CO2. Explain about organization of cell membranes and the transport across it, about cell-cell and cell-ECM communications, cellular signalling process as well as cytoskeletal networks;
- CO3. Understand the nuclear architecture and delineate import and export across nuclear pore, chromatin organization, cell cycle process and apoptosis;
- CO4. Explain the structural and functional relationships of various organelles such as mitochondria, chloroplast, ER, Golgi complex, lysosome with detailed understanding of protein sorting and vesicular trafficking;
- CO5. Describe fundamental molecular principles of genetics.

FIRST SEMESTER
BT-103 MICROBIOLOGY
(4 CREDITS) (F.M.: 70)

Course Outcomes:

On successful completion of this course, student will be able to:

- CO1. Describe microbial diversity, microbial taxonomy and systematics and explain the processes used for replication, adaptations and interaction with the host and environment.
- CO2. Demonstrate practical skills in the use of tools and techniques for isolation and identification of microorganisms and describe the application of different agents to control microbial growth.
- CO3. Explain pathogenesis, morphology, mode of infection, multiplication of medically important viruses and their treatment.
- CO4. Explain principles/concept of Prokaryotic and Eukaryotic genetics, Viral genetics and application in research.
- CO5. Explain the different factors regulating microbial interactions and its significance in the natural microbial communities influenced by the specific environmental characteristics of soils, oceans and biofilms.

FIRST SEMESTER
BT-104 MOLECULAR BIOLOGY
(4 CREDITS) (F.M.: 70)

Course Outcomes:

On successful completion of this course, student will be able to:

- CO1. Acquire better understanding and comparative knowledge regarding most of the essential aspects of molecular research
- CO2. Learn DNA replication, recombination and repair, transcription and translation.
- CO3. Understand the biology and application of antisense technologies and biology of cancer
- CO6. Aware of the modern tools and techniques of genomics and isolation and identification of genes
- CO6. Understand the regulation of gene expression mechanism in prokaryotes and eukaryotes

BT-105 LABORATORY-I
(BIOCHEMISTRY AND ANALYTICAL TECHNIQUES)
(4 CREDITS) (F=70)

Course Outcomes:

On successful completion of this course, student will be able to:

- CO1. Elaborate concepts of biochemistry with easy to run experiments.
- CO2. Familiarize with basic laboratory instruments and understand the principle of measurements using those instruments with experiments in biochemistry
- CO3. Understand the experimental protocol and analyse the data of protein, carbohydrate and enzyme analysis.
- CO4. Know the principles and working method of different instruments related to biotechnology.
- CO5. Develop working strategies for handling spectrophotometer, gel electrophoresis system, chromatography etc.

BT-106 LABORATORY-II
(MICROBIOLOGY AND MOLECULAR BIOLOGY TECHNIQUES)
(4 CREDITS) (I= 10+10, F=40)

Course outcomes:

On successful completion of this course, student will be able to:

- CO1. Gain hands on experience in isolation, purification and characterization of biomolecules.
- CO2. Isolate, characterize and identify common bacterial organisms.
- CO3. Determine bacterial load of different samples.
- CO4. Perform antimicrobial sensitivity tests;
- CO5. Preserve bacterial cultures.

BT-107 FUNDAMENTALS OF PHYSICAL SCIENCES/ BIOLOGICAL SCIENCES
(NON-CREDIT)

Course Outcome:

- Students should be able to have a firm foundation in fundamentals and application of current chemical, physical and mathematical scientific theories.

AC-101 FUNDAMENTALS OF COMPUTER APPLICATION
(3 CREDITS) (I= 10+10, F= 30)

Course Outcomes (COs):

After completion of the course, the students will be able to:

- Learn basis of Basics of MS Windows. (Remembering) Demonstrate basic understanding of computer applications with reference to MS Windows, MS excel

and MS PowerPoint. (Applying).

- Generate spreadsheets, charts and presentations. (Creating) Design personal, academic and business documents using MS Office. (Creating).
- Model the modes of development of self-learning materials and prepare different types of instructional material. (Applying) Explain different OERs, MOOCs available for effective learning. (Understanding).
- Develop learners' e-portfolios. (Creating) Classify various e-resources for effective learning. (Analysing).
- Describe the concept of artificial intelligence and its applications in teaching learning. (Understanding) determine similarity index of the various documents like dissertations, the select through plagiarism testing software. (Evaluating).

SECOND SEMESTER

BT-201 GENETIC ENGINEERING

(4 CREDITS) (F.M.: 70)

Course Outcomes:

After completion of this course successfully, the students will be able to

- explain the basic principles behind gene cloning and the usage of tools thereof.
- apply the knowledge of molecular cloning and design cloning strategy
- apply most appropriate recombinant-DNA techniques to under the function of gene and its interaction.
- explain various contemporary techniques towards tagging and knockout of genes.
- explain various r-DNA techniques towards silencing and editing of genes & analyse published results in the field of rDNA technology.

BT-202 IMMUNOBIOLOGY AND IMMUNOTECHNOLOGY

(4 CREDITS) (I= 20+10, F= 40)

Course Outcomes:

After completion of this course successfully, the students will be able to

- CO1.To access knowledge in Immunology and to understand their practical applications.
- CO2.To understand the mechanism of immune system.
- CO3.This course will help students to understand the immunity, diseases, disorders and other related infections.
- CO4.students will be able to apply their immunology knowledge in health and diagnostic areas for designing novel therapeutics.
- CO5.To impart concepts of Tumor immunology and cancer immunotherapy

BT-203 BIOSTATISTICS AND BIOINFORMATICS

(4 CREDITS) (I= 20+10, F= 40)

Course Outcomes

After completion of this course successfully, the students will be able to

- CO1. Define the principal concepts of biostatistics
- CO2. Collect data relating to variable/variables which will be examined, calculate, and interpret parametric and nonparametric statistics from these data.
- CO3. Identify different distribution forms (Normal, Binomial and Poisson) relating to the variable/variables.
- CO4. Develop an understanding of basic theory of these computational tools;
- CO5. Gain working knowledge of these computational tools and methods.

BT-204 PHYSIOLOGY AND DEVELOPMENTAL

BIOLOGY (4 CREDITS) (I= 20 +10, F= 40)

Course Outcomes

After completion of this course successfully, the students will be able to

- CO1. explain the anatomical and physiological understandings of various organs, understand functioning of important physiological systems including cardiovascular, renal, respiratory, nervous and endocrine systems.
- CO2. understand the cellular and molecular basis of development, differentiation and embryogenesis in model organisms like Dictyostelium, Drosophila, C. elegans and vertebrates
- CO3. explain the sugar transport, translocation processes, light and dark reactions of photosynthesis, nitrate assimilation, and biological nitrogen fixation photorespiration mechanism in plants.
- CO4. they will explain the relations between secondary metabolites and plant defense.
- CO5. Explain the plant hormones and their roles in plant development and explain the physiological changes that occurred during different stress conditions such as water deficit, salinity, heat, and chilling stresses.
- CO6. Achieve proper understanding of the molecular, cellular, and morphogenesis-related processes which underlie plant development.

BT-205 LABORATORY-III

(GENETIC ENGINEERING AND BIOINFORMATICS)

(4 CREDITS) (I= 10+10, F= 40)

Course Outcomes:

After completion of this course successfully, the students will be able to

- CO1. to gain hands-on experience in gene cloning, protein expression and purification. describe contents and properties of most important

bioinformatics databases;

- CO2.perform text- and sequence-based searches and analyze and discuss results in light of molecular biological knowledge;
- CO3.explain major steps in pairwise and multiple sequence alignment.
- CO4.explain principle and execute pairwise sequence alignment by dynamic programming;
- CO5.predict secondary and tertiary structures of protein sequences.

BT-206 LABORATORY-IV (IMMUNOLOGY AND DIAGNOSTICS)

(4 CREDITS) (I= 10+10, F= 40)

Course Outcomes:

After completion of this course successfully, the students will be able to

- CO1. access knowledge in Immunology and to understand their practical applications.
- CO2. understand the mechanism of immune system.
- CO3. help students to understand the immunity, diseases, disorders and other related infections.
- CO4. apply their immunology knowledge in health and diagnostic areas for designing novel therapeutics.

BT-207 SUMMER TRAINING REPORT(3-CREDIT) (F= 50)

Students will undertake summer training or collect material on a special topic and deliver a seminar as part of the course.

THIRD SEMESTER

BT-301 PLANT AND ANIMAL BIOTECHNOLOGY

(4 CREDITS) (I= 20+10, F= 40)

Course Outcomes:

After completion of this course successfully, the students will be able to

- CO1. understand about basic design of a cell culture laboratory and minimum essential requirements, maintenance of cells, tissues and organs along with the scale up process
- CO2. explain about various applications of cell culture technology for virus production, therapeutic protein and vaccine production, toxicity testing and disease modelling along with advanced tools such as stem cells and tissue engineering, lab-on-chip technology, 3D printing and nanobiotechnology
- CO3. understand basics and applications of various assisted reproductive technology such as artificial insemination, embryo transfer, in vitro fertilization and transgenic animal technology.
- CO4. techniques of establishing cell suspension culture, synthetic seeds and applications. Culturing of reproductive structures - anther, microspores, embryos,

endosperm, Ovule and ovary cultures and methods to produce haploids.

BT-302 BIOPROCESS ENGINEERING AND INDUSTRIAL BIOTECHNOLOGY

(4 CREDITS) (I= 20+10, F= 40)

Course Outcomes:

After completion of this course successfully, the students will be able to

- CO1.study the design of the bioreactors and the kinetics and dynamics behind the bioprocess technology.
- CO2.design medium for microbial growth
- CO3.state the significance of aeration and agitation for synthesis of bioproducts and modes of operation of Fermenter.
- CO4.collect the proficient knowledge of translation of lab data to pilot level, they will be able to solve features involved in the scale up process, process monitoring and control.
- CO5.develop the capacity of production processes and control of aerobic and anaerobic systems

BT-303 GENOMICS, PROTEOMICS AND MOLECULAR DIAGNOSTICS

(4 CREDITS) (I= 20+10, F= 40)

Course Outcomes:

After completion of this course successfully, the students will be able to:

- CO1.define and describe structural, functional and comparative genomics.
- CO2.learn detail structure and organization of genes and other DNA elements in a genome.
- CO3.describe advanced techniques and methods used for genome analysis, such as DNA markers, PCR, microarrays and NGS platforms.
- CO4.describe significance of studying global gene expression profile.
- CO5.describe advanced techniques and methods used for proteome analysis, such as 2D PAGE, Mass Spectrometry and polypeptide sequencing.

BT-304 IPR, BIOSAFETY AND BIOENTREPRENEURSHIP

(4 CREDITS) (I= 20+10, F= 40)

Course Outcomes

After completion of this course successfully, the students will be able to

- CO1.learn about different intellectual property rights (IPRs) and their different kinds
- CO2.understand the process of patent filing
- CO3.aware about the patenting of materials of biological origin

- CO4.acquire knowledge of ethical practices appropriate to biotechnology research
- CO5.know about different international regulations associated with risk assessment and biosafety.

BT-305

RESEARCH METHODOLOGY AND SCIENTIFIC COMMUNICATIONS SKILL

(4 CREDITS) (I= 20+10, F= 40)

Course Outcomes:

After completion of this course successfully, the students will be able to

- CO1.understand about selection of biotechnological research problem and the stages involved in executing research.
- CO2.students should be able to understand various presentation skills and scientific communication skills.
- CO3.understand various technical writing skills, drafting of report and publication skills.learn to perform database search and computing skills for fine tuning the research outputs.
- CO4.learn about plagiarism and ethics involved in scientific publications, peer-review process.

BT-306 LABORATORY-V (ANIMAL & PLANT BIOTECH. AND GENOMICS)

(4 CREDITS) (I= 10+10, F= 40)

Course Outcomes:

After completion of this course successfully, the students will be able to

- CO1.gain basic skills in plant and animal biotechnology.
- CO2.acquire knowledge and understanding of fundamentals of genomics and proteomics.
- CO3.aware of recent technologies related to animal cell culture, media preparation and maintenance.
- CO4.learn the techniques of micropropagation, subculturing and artificial seed formation.
- CO5.gain basic information related to DNA isolation, gel electrophoresis and sequencing.

BT-307 LABORATORY-VI
(BIOPROCESS ENGG, AND TECHNOLOGY)
(4 CREDITS) (I= 10+10, F= 40)

Course Outcomes:

After completion of this course successfully, the students will be able to

- CO1.To study the design of the bioreactors and the kinetics and dynamics behind thebioprocess technology.
- CO2.Design medium for microbial growth
- CO3.State the significance of aeration and agitation for synthesis of bioproducts andmodes ofoperation of Fermenter.
- CO4.Collect the proficient knowledge of translation of lab data to pilot level, they will be able to solve features involved in the scale up process, process monitoring and control.
- CO5. Develop the capacity of production processes and control of aerobic and anaerobicsystems

BT-308 SEMINAR-I
(1 CREDIT) (I= 10 marks)

Students will deliver a seminar on a topic of choice preferably but not necessarily in the area where they wish to pursue their final dissertations and the same will be evaluated by a panel of teachers

FOURTH SEMESTER
BT-401 ELECTIVE-I
[ENVIRONMENTAL BIOTECHNOLOGY/ NANOBIO TECHNOLOGY]
(4 CREDITS) (I= 20+10, F=40)

ENVIRONMENTAL BIOTECHNOLOGY

Course Outcomes:

After completion of this course successfully, the students will be able to

- CO1.explain technologies, tools and techniques in the field of environmental biotechnology by recognizing the various global and regional environmental concerns due to natural causes and/or human activities, and the impact of these on various forms of life including native biodiversity and
- CO2.investigate some examples of different types of environmental pollution and their impacts
- CO3.aware on emerging concerns such as climate change, waste management or reductions in fossil fuels, and new technologies for addressing these.
- CO4.understand the role of microorganisms as biotechnological agents for combating various environmental pollution and management of biotic and

abiotic stress.

- CO5.exploring environmental resources for new technologies

NANOBIOTECHNOLOGY

Course Outcomes:

At the end of the course, the students should be able to

- CO1.Understand about basics of nanobiotechnology with specific nanostructures
- CO1.Explain about nanoparticles structures, types and various applications in drug delivery,diagnostics, imaging (theranostics) and as biosensors
- CO1.Understand basics and applications of nanofibers and their process of synthesis through electrospinning, carbon nanotubes and various nanomaterials characterization techniques
- CO1.Explain the safety of nanomaterials, nanotoxicity and various assays for assessment,ecotoxicity and various biomedical applications
- CO1.Understand nanostructures in biological materials and their application in tissue engineering and regenerative medicine

BT-402

DISSERTATION(10 CREDITS) (F- 450)

Students will undergo dissertation in a topic of choice under the supervision of the faculty members of the dept. and/or in co-supervision of Professors/scientists from other research academic/research institutes towards partial fulfillment of the award of the M.Sc degree.

BT-403

PROJECT PROPOSAL PREPARATION AND PRESENTATION

(3 CREDITS) (F- 50)

Students will undergo dissertation in a topic of choice and will submit a project report and make a presentation as part of the project undertaken towards partial fulfillment of the award of the M. Sc degree.

AC-401: Women and Society (3 CREDITS)

(I=10+10, F- 30)

Course Outcomes

After completion of Course students will be able to:

- CO1.Familiarize with the women lead environmental movements and women's participation in the climate resilience natural resources management.
- CO2.Acquire knowledge on the differential impact of climate change disasters.
- CO3.Be familiar with the role of technology and how has ICT brought about a change in women's everyday lives and livelihoods.
- CO4. enhance critical thinking in the use and management of technology in different productive sectors across different category of women.

- CO5. Gain an insight into the women and law from rights and equality of opportunity in the access to justice as well as the nuances involved in it. Skill Based Certificate Course on

MOLECULAR TECHNIQUES FOR INTEGRATIVE RESEARCH

1. Name of Department offering SBCC: Dept. of Biotechnology, RDWU
2. Title of SBCC : Molecular Techniques For Integrative Research
3. SBCC Code : BT/SBC/MTIR
4. Semester for offering : 2nd or 3rd.
5. Applicable to Class : PG Only
6. Duration : 42 Hours (Theory-20 hours; Practice-20 hours)
7. Time : 09:00 AM- 10:00 AM/ 4:00 PM-5:00 PM
8. Weekdays : variable

SYLLABUS STRUCTURE

COURSE CODE: BT/SBC/MTIR

COURSE TITLE: MOLECULAR TECHNIQUES FOR INTEGRATIVE RESEARCH

Credits: 03	Full marks: 50	Total hours: 42
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Course Outcomes

- CO1. The objective of the course is to provide a theoretical and practical introduction into various molecular techniques.
- CO2. Students will be trained in working with molecular laboratory equipment and biological solutions for molecular research.
- CO3. Students will be emphasized on planning, presentation and critical evaluation of laboratory results.
- CO4. Students can independently handle basic molecular equipment.
- CO5. They can use web-based data resources for bio molecular analyses

Ph.D. IN BIOTECHNOLOGY

Programme Outcomes:

- PO1: This degree programme provides opportunity to students to study the application of biotechnology in depth which someone may wish to apply for building blocks in area of research.
- PO2: Inculcate scientific communication skills, scientific writing and data recording required for Pharma industry, hospital Regulatory Agencies, & Academia.
- PO3: Demonstrate the ability to work on research projects and assignments.
- PO4: Enhance the ability of the students to take research initiative, design strategies with social cohesion between research and social context.
- PO5: Aware about ethical issues and challenges related to biotechnology.
- PO6: Acquire knowledge for in-depth analytical and critical thinking to identify, formulate and solve the issues related to various aspects of Biotechnology.
- PO7: Proficient knowledge in the lead domains of biotechnology including Bioprocess technology, Animal biotechnology, plant Biotechnology, microbiology, genetic engineering, and Bioinformatics.
- PO8: Demonstrate the ability to use digital tools and softwares for mining and analyzing data related to biotechnology.
- PO9: Enhanced ability for collaborative research work with different scientific community.
- PO10: An ability to demonstrate a critical awareness of current gaps in research and practice in the field.

Program Specific Outcomes:

- PSO 1: Doctoral research helps in shaping the future of specialist by individual cognitive activities aimed at obtaining new, knowledge, solving theoretical and practical problems, self-education and self-realization.
- PSO2: To demonstrate and apply their knowledge of cell biology, biochemistry, microbiology and molecular biology to solve the problems related to the field of biotechnology.
- PSO3: To understand various facets of molecular procedures and basics of genomics, proteomics and metabolomics that could be employed in early diagnosis and prognosis of human diseases.
- PSO4: To familiar with basic laboratory instruments and understand the principle of measurements using those instruments with experiments.
- PSO5: To understand, analyse and implement the knowledge related to research ethics, intellectual property rights and patent formulation.

PAPER 1:
RESEARCH METHODOLOGY & COMPUTER APPLICATION
(4 - CREDITS) (100 MARKS)

Course Outcome:

On successful completion of this course, student will be able to:

- CO1.Gain knowledge of ethical issues related to Research and Publication, patents and rights and intellectual property rights.
- CO2.Able to review of existing work in the field of choice.
- CO3.Use of open courseware like INFLIBNET, ShodhGanga etc.
- CO4.Use computing skills and computer applications in research to draw reasonable, accurate conclusions
- CO5.Utilize the tools/software like LaTeX, MS-Office, Active Scholar and alike.

PAPER 2:
ADVANCES IN BIOTECHNOLOGY
(4 CREDITS) (100 MARKS)

Course Outcomes:

On successful completion of this course, student will be able to:

- CO1.Describe microbial diversity, microbial taxonomy and systematics and explain the processes used for replication, adaptations and interaction with the host and environment.
- CO2.To learn and get introduced to some rapidly evolving fields, including genome editing techniques and regulation of gene expression by different types of RNAs
- CO3.Understand basics and applications of various assisted reproductive technology such as artificial insemination, embryo transfer, in vitro fertilization and transgenic animal technology
- CO4.Explain the structural and functional relationships of various organelles such as mitochondria, chloroplast, ER, Golgi complex, lysosome with detailed understanding of protein sorting and vesicular trafficking;
- CO5.Describe fundamental molecular principles of genetics.

PAPER3: REVIEW OF RELATED LITERATURE

(2CREDITS) (50Marks)

Course Outcomes

On successful completion of this course, student will be able to have:

- CO 1. Relevance of the reviews.
- CO 2. Finding the research gap.
- CO 3. Standard and quality of writing the review.
- CO 4. Style of presentation.
- CO 5. Answering the question by Examiners
- CO 6. Clarification of queries raised by the participants.

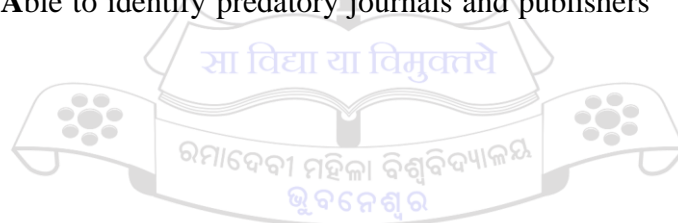
PAPER 4: RESEARCH & PUBLICATION ETHICS

(2 CREDITS)(50 Marks)

Course Outcomes

On successful completion of this course, student will be able to:

- CO1. Gain knowledge on different ethical philosophies
- CO2. Able to apply the ethics and scientific conduct in relation to research and publication.
- CO3. Adapt best standard practices in research
- CO4. Get information on consequences of violating publication ethics
- CO1. Able to identify predatory journals and publishers



B.Sc. BOTANY

Programme Outcomes

- **PO1. Imparting knowledge and understanding:** Able to compare and contrast the characteristics, their occurrence, morphological differences, and life cycles of plant diversity ranging from virus, prokaryotic to eukaryotic complex forms.
- **PO2:** Learn the functional aspects of plants from gene to organ level.
- **PO3** Able to explain the ecological interrelation of life on the earth by tracing energy and nutrient flow through the environment in different strata related to the structure of populations, communities and ecosystems.
- **PO4.** To learn the socioeconomic values of natural resources for a sustainable development of the society. Gain detailed knowledge about the economically important plants.
- **PO5.** The field and the laboratory work enhance the implementation of theoretical knowledge and their intellectual skills to construct and test hypotheses, to plan, conduct and write a report on an independent project.
- **PO6. Intellectual skills able to:** 1. Think logically and organize tasks into a structured form. 2. Assimilate knowledge and ideas based on wide reading and through the internet. 3. Transfer of appropriate knowledge and methods from one topic to another within the subject. 4. Understand the evolving state of knowledge in a rapidly developing field.
- **PO7. Practical Skills:** 1. Study of plant and microbial diversity. 2. Plant classification and identification, anatomy, and morphology. 3. Study of Plant physiology, plant biochemistry, genetics, plant breeding, etc. 4. Ecological study of the local areas
- **PO8. Transferable Skills:** 1. Use of information technology for accumulation and sharing of data. 2. Dissemination of scientific ideas in writing and orally. 3. Creation of team spirit. 4. Access of E- library resources. 5. Regularity, punctuality, devotion and career planning
- **PO9. Interdisciplinary approach:** A aware of the role of plant science as well as other biological sciences in interdisciplinary research as well as in daily life

Programme Specific Outcomes

- **PSO 1.** Students can work in projects in the fields of life sciences and biotechnology.
- **PSO 2.** Seminar and projects included in the syllabus will make the student deliver ideas and scientific information with clarity.
- **PSO 3.** Application of information of economic and medicinal importance of plants for family and society.
- **PSO 4.** Knowledge about origin of crop plants and their propagation will help in conservation of important plants.

FIRST SEMESTER
AECC-1 ENVIRONMENTAL STUDIES AND DISASTER MANAGEMENT
(4 CREDITS) (FM:100)

Course Outcomes

On successful completion of the course students will be able to :

- CO 1 . Students understand about problems of environmental pollution and Impact of pollution on human and ecosystem and control measures.
- CO 2. Students will learn about increase in population growth and understand the issues of use of resources in proper manner leading to sustainable development.
- CO 3. Learn about causes and impacts of Disasters and Case studies of National and Global disasters and risk reduction approaches of Disasters with safety issues in mitigating Industrial disasters.
- CO 4. Basic idea about the mode of transmission and course of some communicable and non-communicable diseases and knowledge on the Importance and methods of prevention of epidemics and pandemics

CORE I : MICROBIOLOGY AND PHYCOLOGY

(4 CREDITS) (FM: 100)

Course Outcomes

On successful completion of the course students will be able to :

- CO 1. Basic understanding of microbiology, psychology.
- CO 2. Observation of microbe in field and laboratories.
- CO 3. Gain knowledge about the systematic position the occurrence, distribution, morphology, anatomy, method of reproduction, life history of microbes and algae.
- CO 4. Economic importance of microbes and algae.

CORE II : BIOMOLECULES AND CELL BIOLOGY

(4 CREDITS) (FM:100)

Course Outcomes

On successful completion of the course students will be able to :

- CO 1. Basic knowledge about different biomolecules of plants and analysis of some.
- CO 2. Understanding of cell structure, division and function.
- CO 3. Know the plants at cellular level i.e. the chemical composition, structural and functional aspects of the biomolecules, structural organization of the cells.
- CO 4. Study of the various organelles, their functions and cell division.

**GE-1A: GENERIC ELECTIVE PAPER I: BIODIVERSITY
(MICROBES, ALGAE, FUNGI AND ARCHIGONIATES)
(4 CREDITS) (FM: 100)**

Course Outcomes

On successful completion of the course students will be able to :

- CO 1. Have knowledge of viruses and the viral replication cycles.
- CO 2. Understand the physiology of and application of bacteria for human welfare.
- CO 3. Knowledge of various types of algae and fungi as well as their distribution in nature.
- CO 4. Understand the characteristics and uniqueness of lower plants (bryophytes and pteridophytes).
- CO 5. Have Knowledge of the gymnosperm flora and their importance to nature.

**SECOND SEMESTER
AECC-II (MIL Alternative English)
(4 CREDITS) (FM: 100)**

Course Outcome

On successful completion of the course students will be able to :

- CO 1. Demonstrate high-level proficiency in writing and speaking English
- CO 2. Employ effectively the language of their discipline and develop skills in organizing and expressing ideas and viewpoints with clarity and coherence in writing and speech
- CO 3. Formulate and defend original arguments
- CO 4. Enumerate skills in narration, description, and argumentation.

**CORE III: MYCOLOGY AND PHYTOPATHOLOGY
(6 CREDITS) (FM: 100)**

Course Outcomes:

On successful completion of the course students will be able to :

- CO 1. Know Importance of fungi in industry, agriculture and medicine.
- CO 2. Gain knowledge about the Kingdom-Fungi including their systematic status, occurrence, mode of nutrition, structural variations and lifecycle.
- CO 3. Study the Lichen, a symbiotic association of fungi with algae, and their economic significance.
- CO 4. Gain knowledge about the diseases caused by the viruses, bacteria, and fungi in plants.

Core IV : ARCHEGONIATE
(6 CREDITS) (FM:100)

Course Outcomes

On successful completion of the course students will be able to :

- CO 1. Know Evolution of first land plants Geologic time Understand the impact of ecological and climate change on plants.
- CO 2. Gain knowledge about the Kingdom-Plantae, the land plants, their origin and adaptation.
- CO 3. Learn to know about rang of thallus organization, structure, reproduction, evolutionary trends and economic importance in bryophytes, petridophytes and gymnosperms.
- CO 4. Know palaeobotany- geological time scale, fossils and fossilization processes taking some examples from petridophytes and gymnosperms.

GE-2A GENERIC ELECTIVE PAPER II:
PLANT PHYSIOLOGY & METABOLISM
(6 CREDITS) (FM:100)

Course Outcomes

On successful completion of the course students will be able to :

- CO 1. Learn about plant physiology and metabolism which includes plant water relations, mineral nutrition and translocation of nutrients.
- CO 2. Learn about photosynthesis, respiration in plants. Study about structure and properties of enzymes.
- CO 3. Learn about various plant growth hormones and response of plants to light and temperature.
- CO 4. Understand plant response to light and temperature. Understand photo periodism and photo morphogenesis.

THIRD SEMESTER
CORE V : ANATOMY OF ANGIOSPERMS
(6 CREDITS) (FM:100)

Course Outcomes

On successful completion of the course students will be able to :

- CO 1. Internal Organization of plants Primary and secondary growth patterns.
- CO 2. Learn the internal structures like cell, tissue, organs of the angiosperms
- CO 3. Learn the tissue organization and their structural comparison in leave, roots and stem of both dicot and monocot plants.
- CO 4. Normal and anomalous secondary growth of angiospermic plants.

CORE VI : ECONOMIC BOTANY

(6 CREDITS) (FM:100)

Course Outcomes

On successful completion of the course students will be able to :

- CO 1. Gain knowledge about the origin, evolution, domestication of economically important plants which are indispensable for life.
- CO 2. Learn about cereals, legumes, sugar, spices, drugs, oils and fat, essential oils, rubber, timber, fiber etc.
- CO 3. Learn parts of the plants that are economically important and methods to extract it.
- CO 4. Learn about habit and cultivation of economically important plants.

CORE VII : GENETICS

(6 CREDITS) (FM:100)

Course Outcomes

On successful completion of the course students will be able to :

- CO 1. Gain knowledge about the laws of inheritance.
- CO 2. Learn about extra chromosomal inheritance, linkage and crossing over.
- CO 3. Learn about gene mapping, variation in chromosome structure and number, mutation.
- CO 4. Learn fine structure of gene, population and evolutionary genetics.

SEC-I (COMMUNICATIVE ENGLISH)

(4 CREDITS) (FM:100)

Course Outcomes

On successful completion of the course students will be able to :

- CO 1. Build speaking and listening skills and develop a neutral accent and improve general standard of pronunciation
- CO 2. Learn beyond the conventional syllabus and be prepared to meet challenges while seeking a job.
- CO 3. To be able to synthesize knowledge and use it creatively to better understand and improvise themselves
- CO 4. Be able to communicate effectively through written reports, presentations, and discussions

FOURTH SEMESTER
CORE VIII : MOLECULAR BIOLOGY
(6 CREDITS) (FM:100)

Course Outcomes

On successful completion of the course students will be able to :

- CO 1. Learn the historical perspective and the proof of nucleic acids as genetic material.
- CO 2. Structure of DNA and RNA, replication and their organization within the cell.
- CO 3. Detailed functions of nucleic acids related to protein synthesis (gene expression).
- CO 4. Function of genes.

CORE IX : PLANT ECOLOGY AND PHYTOGEOGRAPHY
(6 CREDITS) (FM:100)

Course Outcomes

On successful completion of the course students will be able to :

- CO 1. Know the detailed structure of various ecosystems (abiotic and biotic components) and their functions.
- CO 2. Know Various edaphic factors in relation to plant adaptations.
- CO 3. Learn Interrelationships of the living world and the environment.
- CO 4. Learn Concepts of Population and community.

CORE X : PLANT SYSTEMATICS
(6 CREDITS) (FM:100)

Course Outcomes

On successful completion of the course students will be able to :

- CO 1. Gain knowledge on plant systematic, herbarium and its preparation, e-flora, Taxonomic hierarchy, binomial nomenclature.
- CO 2. Learn System of classification, their merits and demerits.
- CO 3. Learn Phylogeny of angiosperms
- CO 4. Know Descriptive studies of a number of families of taxonomic importance.

SEC II (QUANTITATIVE APTITUDE & DATA INTERPRETATION)
(4 CREDITS) (FM:100)

Course Outcomes

On successful completion of this course, students will be able to

- CO 1. Have a good command over quantitative aptitude and logical thinking.
- CO 2. Understand various quantitative methods.
- CO 3. Understand data and draw inference from data.

- CO 4. Improve their critical thinking skills

FIFTH SEMESTER

CORE XI : REPRODUCTIVE BIOLOGY OF ANGIOSPERMS

(6 CREDITS) (FM:100)

Course Outcomes

On successful completion of this course, students will be able to

- CO 1. Gain knowledge about reproductive structures and their activities in plants.
- CO 2. Know about variations in the structures, developments, functions of reproductive parts of the angiospermic flower and their involvement in the process of reproduction.
- CO 3. Learn the types of pollinations and their significance.
- CO 4. Learn Fertilization and embryogenesis

CORE XII : PLANT PHYSIOLOGY

(6 CREDITS) (FM: 100)

Course Outcomes

On successful completion of this course, students will be able to

- CO 1. Knowledge about plant physiology and growth.
- CO 2. Gain knowledge about the plant water relationships and Mineral nutrition and their uptake.
- CO 3. Plant growth regulators and their physiological roles in plant growth and developments.
- CO 4. Learn Physiology of flowering and involvement of phytochromes.

DSE I: ANALYTICAL TECHNIQUES IN PLANTS

(6 CREDITS) (FM:100)

Course Outcomes

On successful completion of this course, students will be able to

- CO1. Gain Knowledge of the principles of microscopy, autoradiography, chromatography, electrophoresis and spectrophotometry.
- CO 2. Learn Various methods for cell fractionation.
- CO 3. Learn Radioisotopes and their uses.
- CO 4. Learn the statistical methods and formulas to represent data and Handling of instruments in laboratory.

DSE II: PLANT BREEDING

(6 CREDITS) (FM:100)

Course Outcomes

- On successful completion of this course, students will be able to
- CO 1. Know Basic understanding of Crop improvement.
- CO 2. Know Basic understanding of germplasm and plant genetic resources.
- CO 3. Use of breeding techniques for crop improvement
- CO 4. Learn Conservation of plant genetic resources

SIXTH SEMESTER

CORE XIII : PLANT METABOLISM

(6 CREDITS) (FM:100)

Course Outcomes

On successful completion of this course, students will be able to

- CO 1. Have Knowledge about the mechanism of photosynthesis, respiration, synthesis and assimilation of Nitrogen.
- CO 2. Gain knowledge on the concept of metabolism and signal induction, carbon assimilation, Carbon oxidation and ATP synthesis.
- CO 3. Learn Lipid metabolism: synthesis and breakdown and its significance.
- CO 4. Know Nitrogen metabolism: nitrogen fixation and ammonia assimilation.

CORE XIV : PLANT BIOTECHNOLOGY

(6 CREDITS) (FM:100)

Course Outcomes

On successful completion of this course, students will be able to

- CO 1. Learn Basic understanding of methods of gene transfer, plant tissue culture, genetic engineering and creating genetically modified plants.
- CO 2. Learn History of Biotechnology.
- CO 3. Learn Study about biosafety issues involved.
- CO 4. Gain Knowledge about recombinant DNA technology and their applications.

DSE III: STRESS BIOLOGY

(6 CREDITS) (FM:100)

Course Outcomes

On successful completion of this course, students will be able to

- CO 1. Learn Basics of plant stress and its types.
- CO 2. Learn Causes of plant stress
- CO 3. Learn Stress tolerance.

- CO 4. Learn Stress adaptations

**DSE IV: INDUSTRIAL AND ENVIRONMENTAL MICROBIOLOGY
(THEORY+PRACTICAL)/ PROJECT WORK**

(6 CREDITS) (FM:100)

Course Outcomes

On successful completion of this course, students will be able to

- CO 1. Understanding industrial and environmental microbiology.
- CO 2. Knowledge about isolation and culture of microbes.
- CO 3. Learn Role of microbes in water treatment and agriculture.
- CO 4. Learn Importance of microbes in industry, environment and agriculture.



B.Sc. CHEMISTRY

Programme Outcomes

- PO1: Students acquire knowledge about the concept of Organic, Inorganic and Physical Chemistry.
- PO2: Students be able to appreciate the applications of chemistry in day to day life and explore new areas of Chemistry and Allied fields of Science and technology.
- PO3: Identify and describe the underlying principles behind chemical techniques relevant to academic and industry.
- PO4: Knowledge will be gain on the safe handling of chemicals in research fields as well as in chemistry laboratory.
- PO5: The ability to implement chemistry in an integral activity of social, economic and environmental problems.
- PO6: Students develop the skill on different methods of qualitative and quantitative Analysis.
- PO7: Find out the green route for chemical reaction for sustainable development.
- PO8: Develop an efficient written and oral communication skills i.e. the ability to transmit the complex theories in an easier method.
- PO9: An ability to conduct experiments, analyse data and interpret data, while observing responsible and ethical scientific conduct.
- PO10: A familiarity with and application of safety and chemical hygiene regulations and practice.

Programme Specific Outcomes

Programme Specific Outcomes Students will be able to have

- PSO-1 Clear understanding of the fundamental concepts in Organic, Inorganic and Physical Chemistry.
- PSO-2 Ability to perform scientific experiments skillfully by application of procedural knowledge
- PSO-3 Idea about research in chemistry and knowledge of the significance of the scientific concepts learnt which finds application in Industry, medicine and modern research.
- PSO-4 Capacity of working in research labs and related fields and Skills necessary to be employed in the various sectors like chemicals, pharmaceuticals, food and materials industries and most importantly competency to clear different national level competitive examinations.

FIRST SEMESTER
Core I : INORGANIC CHEMISTRY-I
(6 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of this course, students will be able to

- CO 1. Know Basic idea of the atoms, about the history and recent developments.
- CO 2. Have idea about the periodic properties of elements and relate the periodicity of elements with their properties.
- CO 3. Have Knowledge about different types of chemical bonds, hybridization and structure of compounds and molecules based on various theories.
- CO 4. Distinguish metallic bonding from other types of bonds.
- CO 5. Skills on performing acid -base titrations of mixtures and oxidation-reduction titration in mixture systematically and also learnt safety handling of chemicals.

Core II: PHYSICAL CHEMISTRY-I
(6 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of this course, students will be able to

- CO 1. Describe the behaviour of gases and application of different laws on real gases.
- CO 2. Explain the liquid state of the matter and idea about the pH scale.
- CO 3. Explain the solid state of matter and the related properties.
- CO 4. Describe the buffer, solubility products etc.

SECOND SEMESTER

Core III: ORGANIC CHEMISTRY I
(6 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of this course, students will be able to

- CO 1. Describe the electronic forces present in the organic molecules and the different types of organic reactions, explain the stereochemistry of organic molecule, recognize the mechanism involved in various reactions also explain the optical activity and geometrical isomerism.
- CO 2. Discuss the preparation and interpret the physical and chemical properties of alkanes, alkenes and alkynes.
- CO 3. Distinguish different types of organic reactions and reactivity of different intermediates.
- CO 4. Apply the principles of organic qualitative analysis to identify organic compounds of CHO system and determine the melting point of pure samples.

- CO 5. Perform chromatographic separation of organic molecules by using TLC, Paper chromatographic technique.

Core IV: PHYSICAL CHEMISTRY II

(6 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of this course, students will be able to

- CO 1. Define the terms and laws of thermodynamic; calculate various energy changes and heat capacities of different systems also predict the conditions of thermodynamic equilibrium and spontaneity of reactions.
- CO 2. Recognize the thermodynamic conditions for one and two component systems.
- CO 3. Describe about the quantitative treatment of principle of chemical equilibrium.
- CO 4. Explain about the colligative properties of different solutions.
- CO 5. Determine the heat capacity of calorimeter, calculate the integral enthalpies of various salts and enthalpy of hydration of salts and determine the enthalpy of neutralization of acid base mixture.

THIRD SEMESTER

Core V: INORGANIC CHEMISTRY-II

(6 CREDITS) (FM: 100)

Course Outcomes:

On successful completion of this course, students will be able to

- CO 1. Classify different metallurgical operations, describe the HSAB principle.
- CO 2. Compare the structure and bonding in boranes, carboranes, metal clusters, polyhalides, pseudohalogens etc.
- CO 3. Describe the inert pair effect, different hydrides, and anomalous behaviour of s and p block elements.
- CO 4. Compare the compounds formed by noble gases and different types of inorganic polymers like silicones, silicates etc.
- CO 5. Prepare different inorganic compounds, estimate the amount of chlorine in bleaching powder, standardize amount of copper present in the given solution.

Core VI : INORGANIC CHEMISTRY-II

(6 CREDITS) (FM:100)

Course Outcomes

On successful completion of this course, students will be able to

- CO 1. Classify different metallurgical operations describe the HSAB principle.
- CO 1. Compare the structure and bonding in boranes, carboranes, metal clusters, polyhalides, pseudohalogens etc.

- CO 1. Describe the inert pair effect, different hydrides, and anomalous behaviour of s and p block elements.
- CO 1. Compare the compounds formed by noble gases and different types of inorganic polymers like silicones, silicates etc.
- CO 1. Prepare different inorganic compounds, estimate the amount of chlorine in bleaching powder, standardize amount of copper present in the given solution.

Core VII : PHYSICAL CHEMISTRY-III

(6 CREDITS) (FM:100)

COURSE OUTCOMES

On successful completion of this course, students will be able to

- CO 1. Explain the phase equilibrium, phase diagrams.
- CO 2. Describe binary solution and can derive different laws.
- CO 3. Derive the rates of equations from mechanistic data.
- CO 4. Comprehend the applications of catalyst and its action and analyse the surface phenomena.
- CO 5. Skill to analyse and arrive at the adsorption isotherms, determine the distribution coefficients between two solvent systems, calculate the kinetics of different reactions.

FOURTH SEMESTER

Core VIII: INORGANIC CHEMISTRY-III

(6 CREDITS) (FM:100)

Course Objectives

- CO 1. To study fundamentals of transition chemistry.
- CO 2. To study about the physicochemical properties of d-block and f-block elements.
- CO 3. To study the basic principles of bioinorganic chemistry.

COURSE OUTCOME MISSING

Core IX: ORGANIC CHEMISTRY-III

(6 CREDITS) (FM:100)

Course Outcomes:

On successful completion of this course, students will be able to

- CO 1. Explain different nitrogen containing compounds and their importance.
- CO 2. Elucidate the structure and chemistry of natural products (terpenes and alkaloids).
- CO 3. Explain the chemistry of heterocyclic chemistry and write the mechanisms involved in the reactions of nitrogen containing compounds.

- CO 4. Apply the principles of organic qualitative analysis to identify organic molecules containing extra elements (N, S, X).
- CO 5. Able to identify different nitrogen containing compounds and prepare derivatives of the compounds for conformation.

Core X: PHYSICAL CHEMISTRY-IV

(6 CREDITS) (FM:100)

Course Outcomes

On successful completion of this course, students will be able to

- CO 1. Define theories of conductivity, laws of weak and strong electrolytes and its role in titrimetric analysis.
- CO 2. Explain different types of electrochemical cells.
- CO 3. Theories behind potentiometric and conductometric titrations and its application.
- CO 4. Explain electrical properties of microscopic particles.
- CO 5. Handle electrochemical instruments such as conductometer and potentiometer to carry out qualitative estimations and develop skill to handle instruments.

FIFTH SEMESTER

Core XI: ORGANIC CHEMISTRY-IV

(6 CREDITS) (FM:100)

Course Outcomes:

On successful completion of this course, students will be able to

- CO 1. Explain different spectroscopic methods for identification of organic molecules.
- CO 2. Illustrate the principle of UV-Vis, IR, NMR spectroscopy and Mass spectrometry.
- CO 3. Interpretation of spectral data of simple molecules and solving the problems related to it.
- CO 4. Comprehend the preparation, properties, structure and importance of carbohydrates (mono, di and polysaccharides).
- CO 5. Perform qualitative analysis of different carbohydrates, unknown organic compounds containing bi-functional groups, estimate the amounts of sugars present in the given sample qualitatively and also identify the labelled peaks of unknown organic compounds by NMR and IR data.

Core XII: PHYSICAL CHEMISTRYV

(6 CREDITS) (FM:100)

Course Outcomes:

On successful completion of this course, students will be able to

- CO 1. Describe the quantum mechanics and identify the application of quantum chemistry in Molecular Orbital and Valence Bond theories and construct hybridization schemes.
- CO2. Describe the basic principles of molecular spectroscopy, Skill to elucidate the structure and chemical composition of the sample from the different molecular spectra.
- CO3. Explain the chemical bonding in different covalent molecules qualitatively.
- CO 4. Describe the principles of absorption spectra in visible range, Raman spectra.
- CO 5. Verification of laws of absorption for qualitative estimation of inorganic sample, perform spectrophotometric titrations. Compare the laws of absorption by using colorimetric method and spectrophotometric method and estimate different metal cations by colorimetric method.

DSE-1: POLYMER CHEMISTRY

(6 CREDITS) (FM:100)

Course Outcomes:

On successful completion of this course, students will be able to

- CO 1. Have an idea regarding the fundamentals of polymers, biopolymers and synthetic polymers.
- CO 2. Explain the mechanism and kinetics of polymerization.
- CO 3. Know the methods for characterizing the polymers.
- CO 4. Know the preparation, properties and uses of different polymers.
- CO 5. Synthesize different polymers in laboratory, analyse the polymers by colorimetric method, by the use of viscometer, and identify the labelled peaks in IR spectra of known polymer.

DSE-II : GREEN CHEMISTRY

(6 CREDITS) (FM:100)

Course Outcomes:

On successful completion of this course, students will be able to

- CO 1. Comprehend the principles, limitation of green chemistry.
- CO 2. Design the chemical synthesis by using green approach.
- CO 3. Synthesize some real world reaction by using green method.
- CO 4. Have the idea of future trends in research by using green approach.
- CO 5. Synthesize some compounds by green methods. Use safer chemicals for different synthesis.

SIXTH SEMESTER
Core XIII: INORGANIC CHEMISTRY-IV
(6 CREDITS) (FM:100)

Course Outcomes:

After reading this paper, students will be able to

- CO 1. Explain the classification and bonding in organometallic compounds.
- CO 2. Describe the various theories for the explanation of stability of organometallic compounds and their application.
- CO 3. Know use of different organometallic compounds for the synthesis. Qualitatively analyse the inorganic salt mixture by H₂S scheme.
- CO 4. Deduce the thermodynamic and kinetic aspects of organometallic compounds.
- CO 5. Separate and estimate the salt mixture qualitatively and separate the salt mixtures containing insoluble components or combination of interfering anions.

Core XIV: ORGANIC CHEMISTRY-V
(6 CREDITS) (FM:100)

Course Outcomes:

After reading this paper, students will be able to

- CO 1. Comprehend the classification and properties of amino acids and nucleic acids.
- CO 2. Explain the classification, characteristics and mechanism of enzyme action.
- CO 3. Know the various bio-metabolisms.
- CO 4. Describe the theories of important pharmaceutical compounds and dyes, identify biologically important molecules and their role in human life, and define the terminologies used in biological systems.
- CO 5. Prepare different organic compounds, estimate simple amino acid and vitamin-C, determine the iodine number of oil/fat. Develop skill of quantitative analysis of some bio-molecule.

DSE –III INDUSTRIAL CHEMICALS AND ENVIRONMENT
(6 CREDITS) (FM: 100)

Course Outcomes:

After reading this paper, students will be able to

- CO 1. Have idea about pollution causing by different industrial chemicals.
- CO 2. Take measures to control environmental pollution. Describe methods to take necessary action to reduce pollution.
- CO 3. Estimate different types of water pollutant.
- CO 4. Measure dissolved CO₂ in gives sample. Prepare some environmentally safer chemicals.

- CO 5. Assess the impact of environmental pollution by measuring various testing parameters

ALTERNATIVE TO DSE-IV: DISSERTATION

(6 CREDITS) (FM: 100)

Course Outcomes:

After reading this paper, students will be able to

- CO 1. Choose the right source to review the literature.
- CO 2. Perform some basic research.
- CO 3. Compile and interpret the data.
- CO 4. Present the project finding in a publishable format.
- CO 5. Use of different Chemistry software and know the ethics research.

ALTERNATIVE TO DSE-IV: ANALYTICAL METHODS IN CHEMISTRY

(6 CREDITS) (FM:100)

Course Objectives

CO 1. To introduce the undergraduates about the different spectroscopic methods, qualitative and quantitative aspects of analysis and different separation techniques .

COURSE OUTCOME MISSING

GENERIC ELECTIVE (GE-I)

ATOMIC STRUCTURE, BONDING, GENERAL ORGANIC CHEMISTRY &

ALIPHATIC HYDROCARBONS (6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able to

- CO1.
- CO2. Understand the organization of atoms and molecules.
- CO3. Predict the shapes and geometries of molecules.
- CO4. Synthesize different organic compounds with functional group attachment and analysis.
- CO5. Study the preparation and properties of different organic compounds.

GENERIC ELECTIVE (GE-II)

CHEMICAL ENERGETICS, EQUILIBRIA & FUNCTIONAL ORGANIC

CHEMISTRY (6 CREDITS) (FM: 100)

Course Outcomes:

After reading this paper, students will be able to

- CO 1. Students will able to perform calculations with ideal and real gases; predict chemical equilibrium and spontaneity of reactions by using thermodynamic principles.

- CO 2. Students will be able to apply the concepts of colloids and gels.
- CO 3. Students will be able to learn depth knowledge about solid & liquid states.
- CO 4. Students will be able to synthesize alkyl halides, aryl halides, alcohols, phenols etc.
- CO 5. Students will be able to study basic concepts of organic chemistry of compounds containing carboxylic acid, ether, esters etc

GENERIC ELECTIVE (GE-III)

CHEMISTRY OF S- AND P-BLOCK ELEMENTS, STATES OF MATTER & CHEMICAL KINETICS (6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able to

- CO 1. Gain an idea about general principles of metallurgy, acid-base concepts.
- CO 2. Gain a thorough knowledge about the s and p Block Elements.
- CO 3. Design experiment to measure the rate of a reaction.
- CO 4. Measure viscosity and surface tension of a liquid.
- CO 5. Study the concept of solids state chemistry.

GENERIC ELECTIVE PAPER- IV (GE-IV)

ORGANOMETALLICS, BIOINORGANIC CHEMISTRY, POLY NUCLEAR HYDROCARBONS AND UV, IR SPECTROSCOPY (6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able to

- CO1. Students will gain an idea about s and p-block elements, their properties and uses.
- CO2. Students will gain a thorough knowledge of noble gases and their uses.
- CO3. Students will be able to study surface tension of liquids.
- CO4. Students will be able to study chemistry of s and p block elements, noble gases and inorganic polymers.
- CO5. Students will be able to introduce general principles of metallurgy.

M.Sc. IN CHEMISTRY

Programme Outcomes

- **PO1: Critical Thinking:** Students will have the capability to apply analytic thought to a body of knowledge; analyse and evaluate evidence, arguments, claims, and beliefs on the basis of empirical evidence; identify relevant assumptions or implications; formulate coherent arguments; critically evaluate practices, policies and theories by following scientific approach to knowledge development
- **PO2: Effective Communication:** Students will acquire the ability to express thoughts and ideas effectively in writing and orally in English and regional and make meaningful interpretation by people, ideas, books, media and technology.
- **PO3: Social Interaction:** Elicit views of others, mediate disagreements and help reach conclusions in group settings.
- **PO4: Effective Citizenship:** Demonstrate empathetic social concern and equity centred national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.
- **PO5: Values and Ethics:** Recognize different value systems including own, understand the moral dimensions of different decisions, and accept responsibility for them.
- **PO6: Environment and Sustainability:** Understand the issues of environmental contexts and sustainable development.
- **PO7: Self-directed and Life-long Learning:** Acquire the ability to engage in independent and life-long learning in the broadest context of socio-technological changes

Programme Specific Outcomes (PSOs):

At the completion of the M.Sc. Analytical Chemistry program, the students of our Department will able to:

- **PSO1:** Work in the interdisciplinary and multidisciplinary areas of chemical sciences and its applications.
- **PSO2:** Analyse the data obtained from sophisticated instruments (like FTIR, NMR, and Apply green/sustainable chemistry approach towards planning and execution of research in frontier areas of chemical sciences.
- **PSO3:** Have sound knowledge about the fundamentals and applications of chemical and scientific theories
- **PSO4:** Apply appropriate techniques for the qualitative and quantitative analysis of chemicals in laboratories and in industries.
- **PSO5:** Helps in understanding the causes of environmental pollution and can open up new methods for environmental pollution control.
- **PSO6:** Acquires the ability to synthesize, separate and characterize compounds using laboratory and instrumentation techniques.
- **PSO7:** Carry out experiments in the area of organic analysis, estimation, separation, derivative process, inorganic semi micro analysis, preparation, conductometric and

potentiometric analysis. Learns about the potential uses of analytical industrial chemistry, medicinal chemistry.

- PSO8: Understands the background of organic reaction mechanisms, complex chemical structures, and instrumental method of chemical analysis, molecular rearrangements and separation techniques.

FIRST SEMESTER

HC-101: INORGANIC CHEMISTRY-I

(CREDIT-5) (Int:20+10 End-sem:70)

Course Outcomes:

After reading this paper, students will be able to have

- CO 1. Students will understand stereochemistry and they will distinguish the stereochemistry of different inorganic compounds and ions.
- CO 2. They will be able to predict structures of main group compounds.
- CO 3. They will be able to analyze the point group of various molecules.
- CO 4. Students will learn to apply the great orthogonality theorem by the use of character tables.
- CO 5. Students will be able to identify the synthesis and applications of main group elements like Boranes, Carboranes, Silicones, Silicates, Boron nitride, Borazines, Phosphazenes etc. and also about Hydrides, Oxides and Oxoacids of pnictogens (N, P), chalcogens (S, Se & Te) and halogens, Xenon compounds, Pseudo halogens and Interhalogen compounds.

CH-102: ORGANIC CHEMISTRY-I

(CREDIT-5) (Int:20+10 End-sem:70)

Course Outcomes:

After reading this paper, students will be able to have

- CO 1. Students will be able to explain reaction mechanism, kinetics and thermodynamics of organic reaction.
- CO 2. Students will be able to identify examples of various types of reactions and their application.
- CO 3. Students will be able to analyze the mechanism involved in organic reactions.
- CO 4. Students will be able to identify several name reactions with free radical, elimination reactions.
- CO 5. Students will understand the aromatic electrophilic & nucleophilic reactions.

HC-103CH-103: PHYSICAL CHEMISTRY-I

(CREDIT-5) (Int:20+10 End-sem:70)

Course Outcomes:

After reading this paper, students will be able to have

- CO 1. Students will be able to analyse concepts and realization of the development of scientific ideas about structure and bonding.
- CO 2. Students will be able to analyze the application of quantum chemistry.
- CO 3. Students will be able to identify the applications of variation method and perturbation theory to the Helium atom.
- CO 4. Students will understand the VBT and MOT for atoms

HC-104: INORGANIC CHEMISTRY-Practical

Course Outcomes:

After reading this paper, students will be able to have

- CO 1. Students will be able to understand the knowledge inorganic salts and insoluble inorganic samples.
- CO 2. Students will be able to identify the tests used to detect inorganic salts and insoluble inorganic samples.
- CO 3. Students will be able to analyze mixture of inorganic salts and insoluble inorganic samples.
- CO 4. Students will be able to identify acid and basic radicals in a sample of unknown mixtures.
- CO 5. Students will be able to handle air and moisture sensitive chemicals for the synthesis and study of complexes and inorganic reactions.

SECOND SEMESTER

HC-201: INORGANIC CHEMISTRY-II

(CREDIT-5) (Int:20+10 End-sem:70)

Course Outcomes:

After reading this paper, students will be able to have

- CO 1. Students will apply scientific knowledge to understand CFT and MOT of transition metal complexes.
- CO 2. Students will be able to analyse Orgel and Jahn-Teller diagrams, structure of mixed metal oxides and chemistry of inner transition elements.
- CO 3. Students will be able to analyze the chemistry of transition metal complexes and transition elements.
- CO 4. Students will be able to identify the CFSE of various metal complexes.
- CO 5. Students will understand the various bonding in metal-ligand complexes

HC-202: ORGANIC CHEMISTRY-II
(CREDIT-5) (Int:20+10 End-sem:70)

Course Outcomes:

After reading this paper, students will be able to have

- CO 1. Students will be able to explain the bonding of complex polyenes, aromaticity.
- CO 2. Students will be able to analyse the idea of reaction mechanism of carbonyl compounds and get an insight into different theories and application of pericyclic reactions.
- CO 3. Students will be able to design logical synthetic steps toward synthesis of a target molecule.
- CO 4. Students will identify the concepts of various pericyclic reactions and disconnection approach.
- CO 5. Students will be able to discuss about stereochemistry of organic compounds.

HC-203: PHYSICAL CHEMISTRY -II
(CREDIT-5) (Int:20+10 End-sem:70)

Course Outcomes:

After reading this paper, students will be able to have

- CO 1. Students will be able to identify micellar systems, CMC, solubilization and reverse micelles.
- CO 2. Students will be able to analyse adsorption isotherms and catalytic activity in surfaces.
- CO 3. Students will identify the concepts of electrochemistry and ion-ion, ion-solvent interactions and electrodes.
- CO 4. Students will be able to explain about error analysis.
- CO 5. Students will be able to identify ion-ion and ion-solvent interactions.

HC-204 ORGANIC CHEMISTRY PRACTICAL

Course Outcomes:

After reading this paper, students will be able to have

- CO 1. Students will be able to purify and separate a mixture of organic samples.
- CO 2. Students will be able to perform synthesis of derivatives of simple functional groups and purify them.
- CO 3. Students will be able to understand the use of TLC and column chromatography.
- CO 4. Students will identify the functional groups present in organic molecules.
- CO 5. Students will be able to isolate organic compounds from a mixture of organic samples.

CE-201(A): ORGANIC SPECTROSCOPY-I

(CREDIT-5) (Int:20+10 End-sem:70)

Course Outcomes:

After reading this paper, students will be able to have

- CO 1. Students will understand various spectroscopies such as UV, IR, NMR, MS.
- CO 2. Students will be able to demonstrate the skill about the instrumentation of UV, IR, NMR, MS.
- CO 3. Students will calculate the absorption maxima of conjugated molecules using Woodward rule.
- CO 4. Students will be able to apply the idea of functional groups present in a molecule from IR spectroscopic data.
- CO 5. Students will elucidate the structure and molecular mass of small organic molecules.

CE-201(B) POLYMER CHEMISTRY

(CREDIT-5) (Int:20+10 End-sem:70)

Course Outcomes:

After reading this paper, students will be able to have

- CO 1. Students will define and identify about polymeric systems, their classifications, the naming and their properties.
- CO 2. Students will apply their knowledge of various synthetic methods for polymers for analysis.
- CO 3. Students will be able to explain and demonstrate the idea about polymerization process, glass transition, crystallinity and morphology of polymers.
- CO 4. Students will understand about the preparation, properties and uses of natural and Synthetic polymer.

OE-201CH 206: ENVIRONMENTAL CHEMISTRY

(CREDIT-4) (End-sem:50)

Course Outcomes:

After the completion of course students will be able to

- CO 1. Describe the structure and significance of the spheres of the environment, the important environmental issues and the factors responsible for their cause.
- CO 2. Understand the significance of environmental science as a subject, explain the chemical nature and interaction of the air, water and soil, apply analytical tools to determine and measure pollutants in various environmental samples.
- CO 3. Explain environmental pollution issues and the remedies thereof, and understand about green chemistry principles and their applications.

THIRD SEMESTER
HC-301 SPECTROSCOPY-II
(CREDIT-5) (Int: 20+10 End-sem:70)

Course Outcomes:

After the completion of course students will able to

- CO 1. Students identify and list various spectroscopic techniques.
- CO 2. The students will understand molecular spectroscopy and their application to different molecules.
- CO 3. Students will be able to analyse instrumental methods such as ESCA, NQR, IR, polarography, thermal analysis which will help them in practical life.
- CO 4. Students will be able to discuss spectroscopy, in particular, rotational, vibrational, electronic and ESR.

HC-302: PERICYCLIC REACTIONS AND PHOTOCHEMISTRY

(CREDIT-5) (Int: 20+10 End-sem: 70)

Course Outcomes:

After the completion of course students will able to

- CO 1. Understand the molecular origin of pericyclic reactions.
- CO 2. Understand the concept of interaction of organic compounds with light and subsequently trigger the reaction.
- CO 3. Understand the mechanism photochemistry of alkene, carbonyl compounds and aromatic compounds.

HC-303 PHYSICAL CHEMISTRY PRACTICAL

(CREDIT-5) (Int: 20+10 End-sem: 70)

Course Outcomes:

After the completion of course students will able to

- CO 1. Students will be able to perform saponification Experiments.
- CO 2. Students performing the experiments will be capable of handling the conductivity meter, pH meter and potentiometer.
- CO 3. Also it gives a real feel of the electrochemistry, such a verification of Debye-Huckel Onsager equation, neutralisation of weak acids.
- CO 4. Determination of K_{sp} of sparingly soluble salt and conductometric titrations, which are taught in theory.

CE-301 BIOCHEMISTRY

(CREDIT-5)

(Int: 20+10 End-sem:70)

Course Outcomes:

After the completion of course students will able to

- CO 1. Upon completion of this course students will be able to understand how enzyme catalyzes the reaction with outmost efficiency.
- CO 2. Acid-base catalysis and covalent catalysis of enzyme, strain and distortion during enzyme catalysis.
- CO 3. Structure and biological functions of various coenzymes, and the origin of mechanism of enzyme action.

CE-301 (B) BIO-INORGANIC AND SUPRAMOLECULAR CHEMISTRY

(CREDIT-5)

(Int:20+10 End-sem:70)

Course Outcomes:

After the completion of course students will able to

- CO 1. Understand and acquire knowledge of effect of deficiency and toxicity of metals in both human and plant systems.
- CO 2. Describe the structural and functional relationships, mechanisms and importance of metalloenzymes.
- CO 3. Understand the fundamentals of supramolecules, supramolecular reactions and catalysis, devises.

CE-302(A) ORGANO TRANSITION METAL CHEMISTRY

(CREDIT-5)

(Int:20+10 End-sem:70)

Course Outcomes:

On completion of this course, the student will be able to

- CO 1. Describe the structure and bonding aspects of different organotransition metal compounds and their correlations with the stability and reactivity of such compounds.
- CO 2. Identify the different types of organotranstion metal complexes catalyzed reactions and explain mechanistic pathways of different catalytic reactions.
- CO 3. Describe the important applications of organometallic homogeneous catalysis in the production of organic chemicals.

CE-302(B)SOLID- STATE CHEMISTRY
(CREDIT-5) (Int:20+10 End-sem:70)

Course Outcomes:

On completion of this course, the student will be able to

- CO 1. Learn the structure, properties and the synthesis of solid materials.
- CO 2. More significantly, crystal defects, electronic properties of solid can be easily explained. Also it will enable the student to interpret of crystal structure by X-ray diffraction and neutron diffraction method.
- CO 3. After going through the course, it is believed that the student will be self-confident to

FOURTH SEMESTER
HC-401ORGANIC SYNTHESIS

(CREDIT-5) (Int:20+10 End-sem:70)

Course Outcomes:

Upon completion of this course students will be able to understand

- CO 1. The philosophy of synthesis of various natural products.
- CO 2. Understand the reactivity pattern and underlying reaction mechanism of different oxidizing and reducing reagents.
- CO 3. Understand the art of selective protection and deprotection of alcohol, amine, carbonyl and carboxyl groups in organic compounds.

HC-402APPLIED CHEMISTRY PRACTICAL

(CREDIT-5) (Int:20+10 End-sem:70)

Course Outcomes:

On successful completion of this course, students will be able to

- CO 1. To perform experiment on preparation of polymers and their basic characterizations.
- CO 2. To perform the analysis of different water parameters using classical and instrumental methods.
- CO 3. To understand the principles behind the experiment performed in the laboratory.

HC-403 DISSER TATION

(CREDIT-5) (Int:20+10 End-sem:70)

Course Outcomes:

On successful completion of this course, students will be able to

- CO 1. Students will gain skill regarding searching, selecting and arranging papers while doing the literature survey.
- CO 2. Students will be able to conduct of these experiments will enable a student to know about the concept of experimental investigation.

- CO 3. Students will be able to analyze the results.
- CO 4. Students will be able to write the dissertation in effective way by discussing with their supervisor.

CE-401(A)SPECTROSCOPY-III:

(CREDIT-5) (Int:20+10 End-sem:70)

Course Outcomes:

On successful completion of this course, students will be able to

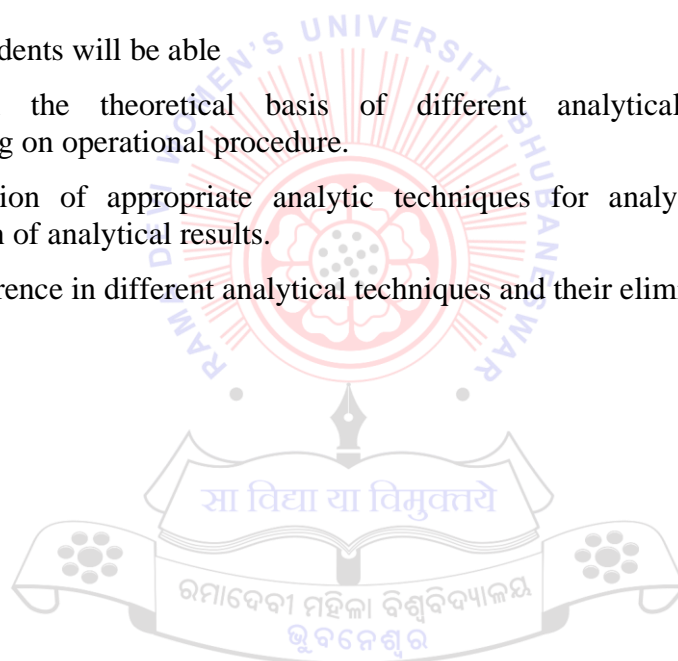
- CO 1. See the spectroscopic techniques discussed are very routine and useful, it is essential every student must have exposure to the course.
- CO2. Competent in explaining and solving most of chemical structure analysis.

CE-401(B) ANALYTICAL CHEMISTRY

Course Outcomes:

At the end of the students will be able

- CO1.Explain the theoretical basis of different analytical techniques with understanding on operational procedure.
- CO2. Selection of appropriate analytic techniques for analysis of sample and interpretation of analytical results.
- CO3. Interference in different analytical techniques and their elimination.



B. COM.

Programme Outcomes :

On completion of this programme, the students will be able to:

- PO1: Gain a thorough knowledge in different areas of Commerce like Accounting, Finance, Auditing, Marketing, HR and Laws
- PO2: Acquire skills like Effective communication, Numerical ability, decision making, problem solving, leadership.
- PO3: Develop competency in students to make them employable in the global market
- PO4: Enrich their knowledge for career enhancement.
- PO5: Develop research skills in different domain of commerce amongst learners
- PO6: Facilitate pursuing further professional courses like CA, CFA, CMA, CS, MBA, UPSC.
- PO7: Recognize different value systems and ethics, understand the moral dimensions and accept responsibility
- PO8: Conduct case studies, seminars, project works will enable students to get practical exposure and bridge gap between industry and academia
- PO9: Join the industry, setup own entities and enhancing entrepreneurial skills and mindset.
- PO10: Integrate functional knowledge with strategic skills.

Programme Specific Outcomes:

On completion of this programme, the students will be able to:

- PSO1: Prepare graduate equip with creative and required analytical, interpersonal and communication skills through Skill Enhancement Courses (SEC).
- PSO2: Acquired practical learning from project work and industrial visit.
- PSO3: Prepare the students for appearing higher studies like M.com, M.B.A., CA and CMA etc.
- PSO4: Students can also get the practical skills to work as accountant, audit assistant, tax consultant and other financial supporting services.

FIRST SEMESTER

CORE-I: FINANCIAL ACCOUNTING

(6 CREDIT) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Develop the skill of recording financial transactions and preparation of reports in accordance with GAAP and Students are able to understand the Accounting Standards Ind AS (Indian Accounting Standards), IFRS (International Financial Reporting Standards) & XBRL (extensible Business Reporting Language)
- CO2. Know the skill of preparation of financial statements of sole Traders and Partnership Firms

- CO3. Equip the students to get in-depth knowledge of Hire Purchase and Instalment Systems and
- CO4. Accounting for Branch & Department and also the Concepts of operating and financial lease.

CORE-II : BUSINESS LAW

(6 CREDIT) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Get in-depth understanding of the Indian Contract act 1872 along with some specific contracts like Bailment, Pledge, and contingent contract.
- CO2. Equip with knowledge regarding various provisions relating to Sale of Goods Act 1930 regarding contract of sale, condition and warranty, transfer of ownership and unpaid seller.
- CO3. Understand the meaning, types and legal provisions relating to partnership and LLP.
- CO5. Acquire knowledge of various types of Negotiable instruments, and their endorsement and dishonour procedure.

GE-I : MICRO ECONOMICS

(6 CREDIT) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Develop the ability to explain core economic terms, concepts, and theories.
- CO2. Understand how optimum real-life decisions are taken by individuals under situations of scarcity.
- CO3. Use supply and demand to determine changes in market equilibrium (price and output) and describe the features of different types of market and decide the price and output under various market situations
- CO4. Analyse the impact of various government policies.

ETHICS AND VALUES

(6 CREDITS)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Have changes in their perceptions and practices towards women and develop proper attitude towards women and value their work and contribution
- CO2. Come forward to challenge the unethical treatments against women
- CO3. End gender-based hierarchy and hegemony, remove the feeling that women are counter to men and bring about a complementarity among the hitherto existing gender binary

- CO4. Pioneer in creating a gender equal society where the well-being, happiness and security of the women will be well protected & contributing towards a better and happier society.

AECC-2 :MIL (Odia)
(4 CREDIT) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Students of other departments of the University can easily present their theoretical knowledge in Odia by studying Odia Grammar and Communication skills in the course AECC-II
- CO2. Students of Science, Commerce and Humanities can fluently discuss their research findings in their mother tongue (ODIA)
- CO3. Though we receive higher education in various subjects and media of instruction, it is always more givers and the receiver.
- CO4. Odia language is essential for Professionals like a doctor, scientist or educator to become intelligible as well as amiable for others.

MIL :(ALTERNATIVE ENGLISH)
(4 CREDIT) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Demonstrate high-level proficiency in writing and speaking English and employ effectively the language of their discipline.
- CO2. Develop skills in organizing and expressing ideas and viewpoints with clarity and coherence in writing and speech
- CO3. Enumerate skills in narration, description, and argumentation, ascertain insight into different cultures and gain good knowledge that includes understanding recent developments in language and literature.
- CO4. Develop acumen for a better understanding of the diversity of human experiences and acquire openness to new ideas, perspectives, and ways of thinking.

MIL (HINDI)
(4 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Gain knowledge on Hindi poets and their poems and understand the
- CO2. variations in ancient, medieval and modern poetry.
- CO3. Acquire knowledge on different perspectives of writers through their prose.
- CO4. Gain understanding of basic structure of Hindi sentence and grammar.
- CO4. Develop a skill of essay writing.

SECOND SEMESTER
CORE-III : COST ACCOUNTING
(6 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Confident in managing cost issues, prepare cost sheet and also keep a check on cost for taking managerial decisions.
- CO2. Know various methods of pricing of material issues and techniques of material control.
- CO3. Acquire skills about accounting for labour cost, methods of wage payment and Allocation, Apportionment and absorption of overheads.
- CO4. Understand various aspects of contract costing, preparation of contract account and able to prepare process accounts and know the treatment of process loss.

CORE-IV: CORPORATE LAW
(6 CREDITS) (FM: 100)

Course Outcomes

On completion of this course, the students will be able to:

- CO1. Understand the regulatory aspects involved in different types of companies covering the Companies Act 2013 and legal documents and their usage essential for operations and management of company.
- CO2. Equip with role, duties and power of director and company secretary in a company.
- CO3. Understand the various types and issues of share capital and debentures also framework of dividend distribution.
- CO4. Synthesis Company processes, meetings and application of corporate principles in board meeting.

(GE-II) : MACRO & INDIAN ECONOMY
(6 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Apply the modern tools of macro-economic analysis so as to minimize the adverse impact of macroeconomic factors on business.
- CO2. Understand comprehensive understanding of Indian Economy
- CO3. Understand various Govt. policies, programs and how planning and infrastructure support can develop an economy
- CO4. Acquainted with economic concepts, models of international trade aware about international blocks and their importance

THIRD SEMESTER

Core-V : CORPORATE ACCOUNTING

(6 CREDIT)

(FM: 100)

Course Outcomes

On completion of this course, the students will be able to:

- CO1. Know about maintenance of books of accounts, statutory books, annual returns, issue and underwriting of share and debentures along with accounting treatment of ESOPs and ESPS.
- CO2. Acquire conceptual clarity about the techniques to prepare financial statements of companies along with knowledge regarding valuation of goodwill and shares.
- CO3. Acquainted with various provisions of buyback of shares and redemption of preference shares and debentures.
- CO4. Know various modes of liquidation, its consequences

CORE-VI: INCOME-TAX LAW AND PRACTICE

(6 CREDIT)

(FM: 100)

Course Outcomes

On completion of this course, the students will be able to:

- CO1. Understand various provisions of Income Tax Act, its practical applications. and residential status of persons.
- CO2. Know computation of income under the Head of salary, House property, Profits and Gains from business profession, Capital gains and other sources.
- CO3. Know various deductions, exemptions under specific head.
- CO4. Determine total income and assess tax liability of assesses and also acquainted with the provisions of filing of returns, assessment procedures, TDS etc

CORE-VII: MANAGEMENT PRINCIPLES AND APPLICATION

(6 CREDIT)

(FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Absorb various management concepts such as planning, organizing, implementing, staffing, coordinating, controlling, motivating and Managerial Grid.
- CO2. Make use of different management principles in the course of decision making in different forms of business organizations.
- CO3. Recognize the human skills, motivational skills, communication skills and conceptual skills as per industry requirements about basic management skills.
- CO4. Diagnose various styles and qualities of efficient leadership, Coordination, Controlling mechanism

GE-III: BUSINESS STATISTICS

(6 CREDITS) (FM: 100)

Course Outcomes

On completion of this course, the students will be able to:

- CO1. Understand basic statistical concepts like data and measures of central tendency along with their applications with the use of excel.
- CO2. Understand the computation of measures of variation and the application of it to analyse the nature of the data with the use of excel.
- CO3. Understand the strength and direction of linear relationship between variables and to predict the changes in variable due to the other variables with the help of statistical software.
- CO4. Learn the concept and applications of index numbers and time series in effective business decision making.

SKILL ENHANCEMENT COURSES

(SECC OPTION I) ENGLISH COMMUNICATION

(4 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Enhance their ability to build and enrich their communication skills and build up the four primary skills in students in the academic as well as in the wider domains of use like public offices.
- CO2. Acquire analytical and comprehension reading skills, identify basic principles of communication, build speaking and listening skills
- CO3. Learn beyond the conventional syllabus and be prepared to meet challenges while seeking a job and synthesize knowledge and use it creatively to better understand and Improve themselves
- CO4. Communicate effectively through written reports, presentations and Discussions and develop a neutral accent and improve general standard of pronunciation

HIRD SEMESTER

CORE-VIII: GST AND INDIRECT TAXES

(6 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Understand the basic concepts, definitions and terms related to Goods and Service Tax (GST).
- CO2. Know salient features of CGST Act, SGST Act and IGST Act and also acquainted with the procedure relating to levy, collection and exemption from GST.

- CO3. Know about the time, place and value of supply and also know provisions relating to registrations, return, assessment.
- CO4. Learn about GST council, GSTN, GST Eco-system and Division of Administrative Powers

CORE-IX : FUNDAMENTALS OF DATA MANAGEMENT

(6 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Apply word processing and power point concepts, features and components particular for creating business documents, data analysis and graphical representations.
- CO2. Create spread sheet by using functions and templates in advanced MS-Excel and make use of advanced MS-Excel tools for statistical data analysis to aid effective decision making.
- CO3. Maintain accounting records and its management by applying DBMS.
- CO4. Know practical application of various web designing tools

CORE-X: MANAGEMENT ACCOUNTING

(6 CREDITS) (FM: 100)

Course Outcomes

On completion of this course, the students will be able to:

- CO1. Gain knowledge on the nature, source and purpose of management information and apply various accounting techniques for taking managerial decisions.
- CO2. Analyse and interpret the financial data in order to help management to make policies, strategies and control the organization effectively.
- CO3. Develop knowledge and understanding of how to prepare and process basic cost and quantitative information for decision-making in a variety of business contexts.
- CO4. Prepare budgets, compare actual costs with standard costs and analyse any variance and apply performance measurements for planning and control.

GE-IV: PRINCIPLES OF MARKETING

(6 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Acquire basic knowledge of concepts, principles, tools and techniques of marketing
- CO2. identify marketing components and fit them in the value chain along with the various marketing strategies

- CO3. Marketing strategy and can apply the conceptual knowledge and analytical tools to systematically analyse and solve marketing problems
- CO4. Acquaint with recent trends developments in marketing

SEC-2 : QUANTITATIVE APTITUDE AND LOGICAL THINKING

(4 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Use their logical thinking and analytical abilities to solve Quantitative aptitude questions from company specific and other competitive tests and Solve questions related to Time and distance and time and work etc. from company specific and other competitive tests.
- CO2. Understanding solve puzzle related questions from specific and other competitive tests and Solve questions related to permutation & combinations and probabilities from company specific and other competitive tests.
- CO3. Detect errors of grammar and usage in a given sentence/text and rectify them by making appropriate changes and Solve questions based on critical reasoning.
- CO4. Analyze reading passages and quickly find out the correct responses to questions asked by using reading skills like skimming, scanning, reading between the lines, etc.

FIFTH SEMESTER

CORE-XI : COMPUTERIZED ACCOUNTING AND E-FILING OF TAX RETURNS

(6 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Understand how to Create company, enter accounting voucher entries including advance voucher entries, do reconcile Bank statement, maintain pay roll records in Tally software.
- CO2. Automate and integrate all the business operations, such as sales, finance, purchasing, inventory, and manufacturing.
- CO3. Design Computerized Accounting System by using DBMS Package
- CO4. Prepare and submit Income Tax Return (ITR) offline and online.

CORE-XII: FUNDAMENTALS OF FINANCIAL MANAGEMENT

(6 CREDITS) (FM: 100)

Course outcomes

On completion of this course, the students will be able to:

- CO1. Understand Basic Concepts, objectives and important functions of Financial Management and environment in which a firm has to operate;
- CO2. Identify various sources of finance and calculate the cost of capital;
- CO3. Take decisions on various capital expenditures and distribution of dividend; and
- CO4. Manage working capital of the organisation.

DSE-1 : (ACCOUNTING AND FINANCE)
FINANCIAL MARKETS, INSTITUTIONS AND SERVICES
(6 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Understand the financial institutions operating in India and services provided by them;
- CO2. Appreciate various functions of Financial Institutions & Non-Banking Financial Institutions and their role in sectorial development;
- CO3. Understand and distinguish between the asset/ fund based financial services and fee-based services; and
- CO4. Know the operations of various financial assets/ instruments and the regulatory framework in place.

DSE-1: BANKING AND INSURANCE
INDIAN BANKING AND INSURANCE SYSTEM
(6 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. acquired practical knowledge of structure and functions of banks including procedure and practice in opening and operating accounts of different types of customers.
- CO2. Know the meaning, types and principles of insurance.
- CO3. Understand theory and practice of Life and General insurance.
- CO4. Equip with the meaning and functions of agents, procedure for becoming an agent and settlement of policy claims.

DSE-1: (MANAGEMENT)
HUMAN RESOURCE MANAGEMENT
(6 CREDITS) (FM: 100)

Course Outcomes

On completion of this course, the students will be able to:

- CO1. Manage the most important assets of organization i.e., human beings which is much needed to ensure growth of that organization.
- CO2. Integrate perspective on role of HRM in modern business, plan human resources and implement techniques of job design
- CO3. Develop competency to recruit, train, and appraise the performance of employees and design of compensation and salary administration
- CO4. Handle employee issues and evaluate the new trends in HRM

DSE-II: (ACCOUNTING AND FINANCE)
FINANCIAL STATEMENT ANALYSIS AND REPORTING
(6 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Develop practical skills on the use of financial statements of a company.
- CO2. Enhance the ability to compute and interpret different financial ratios.
- CO3. Assess the usefulness of financial information in making a decision.
- CO4. Develop the ability of preparing and evaluating the statutory, non-statutory, integrated and sustainable reports of a company.

DSE-II : (BANKING AND INSURANCE)
MERCHANT BANKING AND FINANCIAL SERVICES
(6 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Understand the structure and function of mercantile banking and various financial services available in the present business world.
- CO2. Understand the Concept of Financial Services and Regulation of Financial Servicesmarket.
- CO3. Know about the processes of factoring and forfeiting
- CO4. Gain knowledge about depository system and SEBI regulation relating to brokeragebusiness in India.

DSE-II: (MANAGEMENT) INTERNATIONAL BUSINESS
(6 CREDITS) (FM: 100)

Course Outcomes :

On completion of this course, the students will be able to:

- CO1. Understand concepts and modes of entry into international business along withinternational business environment.
- CO2. Gain overall idea about various theories relating to International Business and variousinternational economic organisations like- WTO, UNCTAD, OPEC etc.
- CO3. Know various regional economic groups, international financial institutions along withforeign exchange market and risk management mechanism.
- CO4. Have comprehensive understanding about the source of trade finance and promotionalmeasures taken for development of foreign trade.

SIXTH SEMESTER
CORE-XIII: AUDITING AND CORPORATE GOVERNANCE
(6 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Differentiate between different aspects of auditing especially for internal check, internal control and planning, procedures, and documentation for analytical review of audit reports.
- CO2. Understand and evaluate the role, rights, duties of company auditors and various types of audits.
- CO3. Understand the concept of corporate governance in organizations and its essence for management and provide and assimilate information leading to failure of organisation and corporate scams.
- CO4. Recognize the essence of CSR and ethics in business

CORE XIV: BUSINESS MATHEMATICS
(6 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Make use of matrix and determinants; formulate solution of system of linear equations using matrix inversion method.
- CO2. Understand and apply the linear, quadratic equation and progression and concepts of derivatives in business.
- CO3. Apply the concepts of functions, interest, annuity, methods of counting for business sustainability.
- CO4. Interpret various interpolation methods and finite difference concepts in business Forecasting

DSE-III: (ACCOUNTING AND FINANCE)
FUNDAMENTALS OF CORPORATE TAX PLANNING
(6 CREDITS) (FM: 100)

Course Outcomes :

On completion of this course, the students will be able to:

- CO1. Understand the concepts of tax planning, tax management, tax avoidance, tax evasion residential status of a company and provisions of MAT;
- CO2. Know the provisions of carry forward and set off of losses and unabsorbed depreciation
- CO3. Equipped with the provisions of tax planning relating to capital gain and scientific research
- CO4. Know about Procedure of Assessment, Return Filing, Penal provision and Double taxation Relief.

DSE-III: (BANKING AND INSURANCE)
FUNDAMENTALS OF INVESTMENT
(6 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Identify different investment alternatives, the need for investor protection and understand how the investment environment affects investment decision processes;
- CO2. Estimate various yields and its inherent risks;
- CO3. Know how the o Fundamental Analysis and Technical Analysis is done; and
- CO3. Do the portfolio analysis and use financial derivatives

DSE-III: (MANAGEMENT)
CONSUMER AFFAIRS AND CUSTOMER CARE
(6 CREDITS) (FM: 100)

Course Outcomes :

On completion of this course, the students will be able to:

- CO1. Understand the conceptual framework on consumers & markets and the mechanism of internal and external complaints handling.
- CO2. Familiarise the students with the concept and mechanism of consumer protection Act 1986, role of various regulators in consumer protection.
- CO3. Gain knowledge on various grievance redress mechanism under CPA.1986
- CO4. Acquire knowledge about file of a complaint, limitation period, procedures for filing, offences and penalties etc

DSE-IV SECTION A- BUSINESS RESEARCH METHODS
(6 CREDITS) (FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Understand the concept, significance & purpose of research.
- CO2. Identify a problem/ need, translate it into a research problem, and use the appropriate techniques to define it.
- CO3. Understand the formulation of hypotheses; choose the most appropriate qualitative and quantitative methods of business research, their advantages, disadvantages and appropriate application with the help of SPSS, Advanced Excel.
- CO4. Develop the skill of preparing different research reports.

SECTION B PROJECT REPORT MARKS (30 + 20)

(6 CREDIT)

(FM: 100)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Understand the practical application of research in business.
- CO2. Use the appropriate techniques to solve the research problems
- CO3. Understand the formulation of hypotheses; choose the most appropriate qualitative and quantitative methods of business research, their advantages, disadvantages and appropriate application with the help of SPSS, Advanced Excel.
- CO4. Develop the skill of preparing different research reports.



MASTER OF COMMERCE (M.Com.)

Program Outcomes:

On completion of this programme, the students will be able to:

- PO 1. Develop managerial, analytical, communication, employability and strategic skills to meet the ever changing challenges of the business environment
- PO 2. Enhance proficiency in the areas like Accountancy, Taxation, Laws, Business Strategy, Finance, Auditing, Accounting Standards, Reporting, Entrepreneurship and contemporary areas in the discipline of commerce
- PO 3. Prepare students for cross-country professional courses
- PO 4. Familiarise students with the dynamic organisational culture & leadership qualities
- PO 5. Application of information technology and digital tools in the domain of commerce
- PO 6. Pursue advance research by applying critical thinking & analytical reasoning in the field of business and commerce
- PO 7. Proficiency with the ability to qualify competitive and professional examinations
- PO 8. Holistic development of students to create responsible citizenry through social, moral, ethical and professional code of conduct
- PO 9. Bridging the gap between academia and industry to enhance learners' ability through problem solving skills to face the challenges and achieve excellence
- PO 10. Plan and develop Start-up & Entrepreneurial ventures independently through acquired Skills

Program Specific Outcomes

On completion of this programme, the students will be able to:

- PSO1: Students can go for further professional courses like CA/CS/CMA/CFA/UPSC
- PSO2: Acquired passion for research in various fields like Accountancy, Finance, Marketing, HR and Entrepreneurship
- PSO3: Acquired practical learning from internship, field visit, industrial visit & research projects
- PSO4: Understand and develop new dimension of knowledge through open elective to cater the need of industry.

FIRST SEMESTER

HC– 01: ADVANCED FINANCIAL MANAGEMENT

(CREDITS:5) (INT :20+10 END-SEM:70)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Understand various financial concepts, principles, and theories in smooth functioning of their business.
- CO2. Devising strategies to manage the company
- CO3. Take better decisions and forecast the future.
- CO4. Aware about the challenges and opportunities of Financial Management.
- CO5. Learn various techniques of financial management and make appropriate financial planning.

HC-102: CORPORATE FINANCIAL ACCOUNTING

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Familiarize with the provisions & procedures of preparing financial statements of company.
- CO2. Manage and govern company's monetary operations and decisions of investing capital.
- CO3. Develop awareness about Corporate Financial Accounting in conformity with the latest provisions of the Companies Act, 2013.
- CO4. Acquainted with various provisions of accounting for buy back of share, ESOP, liquidation, Amalgamation & absorption etc.
- CO5. Acquire solid foundation in accounting and reporting requirements of the Companies Act and relevant Indian Accounting Standards.

HC-103: MARKETING MANAGEMENT

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

At the end of the course, the students will be able to:

- CO1. Familiarize with marketing, and its concepts and its evolution and to acquaint with the marketing Mix and the marketing environment.
- CO2. Understand consumer behaviour and about of the concept of product, Product Planning and Development
- CO3. Demonstrate the significance and implications of distribution channels in marketing

- CO4. Acquire the skills to critically analyses the promotion mix in the competitive market environment
- CO5. Evaluate the emerging trends in marketing and Marketing research

HC-104: THEORY AND PRACTICE OF INSURANCE

(CREDITS:5) (INT :20+10 END-SEM:70)

Course Outcomes:

At the end of the course, the students will be able to:

- CO1. Know about the basic concepts and principles of insurance and re-insurance;
- CO2. Urge to insure self and also the organization that they will be working;
- CO3. Calculate the premium and confidence to guide others in claim settlement process.
- CO4. Realize about the indispensability of the insurance in their own life; and
- CO5. Understand various provisions of IRDA & different types of insurance & its relevance.

ALLIED CORE -101:

COMPUTER APPLICATION

(CREDITS:5) (INT :20+10 END-SEM:70)

Course Outcomes:

At the end of the course, the students will be able to:

- CO1: Learn basis of Basics of MS Windows. (Remembering)
- CO2: Demonstrate basic understanding of computer applications with reference to MS Windows,MS excel and MS PowerPoint. (Applying)
- CO3: Generate spreadsheets, charts and presentations. (Creating)
- CO4: Design personal, academic and business documents using MS Office. (Creating)
- COS: Model the modes of development of self-learning materials and prepare different types of instructional material. (Applying)
- CO6: Explain different OERS, MOOCs available for effective learning. (Understanding)
- CO7: Develop learners' e-portfolios. (Creating)
- CO8: Classify various e-resources for effective learning. (Analyzing)
- CO9: Describe the concept of artificial intelligence and its applications in teaching learning. (Understanding)
- C010: determine similarity index of the various documents like dissertations, theses etc through plagiarism testing software. (Evaluating)

SECOND SEMESTER

HC-201: ORGANISATIONAL BEHAVIOUR

(CREDITS:5)(Int :20+10 End-Sem:70)

Course Outcomes:

After completion of this paper student would be able to:

- CO1. Understand the Concepts of Organizational Behavior, Group Dynamics, Personality, Perceptions and Motivation Theories
- CO2. Have a Better Insight about Leadership Concept, Styles, and Theories
- CO3. Know the Basics of Interpersonal and Organizational Communication
- CO4. Develop Competence on Sources and Types of Organizational Conflicts and their Resolution.
- CO5. Understand about the stress and how to cope with stress in the organization
- CO6. Know about organizational Change and Development

HC-202: RESEARCH METHODOLOGY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

- CO1. Understand the concept of scientific research
- CO2. Gain knowledge on research methods, methodology and develop research design
- CO3. Equip with various methods of data collection and data processing
- CO4. Learn various statistical tools for data analysis
- CO5. Know the art of writing research reports and research papers

HC-203: BUSINESS STATISTICS

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

- CO1. Acquire fair idea about the need for using statistics tools;
- CO2. Confident to use statistical tools independently both in their research and in daily life;
- CO3. Take better decisions and forecast the future;
- CO4. Gained Knowledge to deal with numerical and quantitative issues in business and knowledge on statistical, graphical and algebraic techniques;
- CO5. Understand Statistical applications in global business forecasting

HC-204: INTERNATIONAL BUSINESS ENVIRONMENT

(CREDITS:5)(Int :20+10 End-Sem:70)

Course Outcomes:

After completing this course, student would be able to:

- CO1. Know about international business and describe how it differs from domestic business with respect to laws, regulations and taxation;
- CO2. Identify and describe the factors and forces that affect the organisation's decision to internationalize its business;
- CO3. Identify and analyse the challenges in working, communicating, and negotiating in a cross-cultural context;
- CO4. Gained knowledge on international business with respect to foreign trade/international business.
- CO5. Evaluate the global business environment in terms of economic, social, legal aspects and strategies adopted by firms to expand globally.

CE-201.1 CORPORATE TAX PLANNING

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After completion of this paper student would be able to:

- CO1. Identify the rationale behind corporate tax planning by recognizing different tax planning principles;
- CO2. Classify different aspects of tax planning and generalize its dimensions by reading charge to income tax, minimum alternative tax and deductions;
- CO3. Apply tax planning avenues in mergers, slump sale and business conversions by illustrating practical problems;
- CO6. Analyze and appraise tax planning schemes for capital gains discriminate leasing and hire purchase with regard to tax benefits;
- CO6. Understand various tax implications in the business & consider it while taking business decisions.

CE-201.2: INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After completion of this paper student would be able to:

- CO1. Know about securities markets, options, Futures and their use in hedging the risk
- CO2. Understand of various theories in solving the organizational problems;
- CO3. Understand the intricacies and ability to analyze securities in designing a portfolio;
- CO4. Familiarize on using techniques for analyzing securities;

- CO5. Gained insight into various issues in portfolio construction, revision and evaluation

CE 201.3 : (MARKETING GR.)
INTERNATIONAL MARKETING
(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After completion of this paper student would be able to:

- CO1. Develop Insights about the need of international market and its process of international marketing in present scenario
- CO2. Learn the importance of the international marketing organization
- CO4. To evaluate the various decisions related to branding, labeling and pricing required a product or service globally.
- CO5. To analyses the global distribution and advertising decisions
- CO6. Know about Exim Policy and Exim Bank

OPEN ELECTIVE – 201 : FUNDAMENTALS OF BANKING
(CREDITS:4) (End-Sem:50)

Course Outcomes:

After completion of this paper student would be able to:

- CO1. Develop Fundamental knowledge of Indian banking system.
- CO2. In depth understanding of relationship between banks and its customers.
- CO3. Knowledge regarding various function of bank.
- CO4. Understanding about conceptual framework of negotiable instruments and cooperative banking system in India.
- CO5. Familiarize with the recent development in the field of banking.

THIRD SEMESTER

HC-301: HUMAN RESOURCE MANAGEMENT
(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After completion of this paper student would be able to:

- CO1. Understand the concept, objectives and changing role of HRM and Job analysis that facilitates students to design a job description and job specification for various levels of employees.
- CO2. Understand procurement process that includes; HRP, factors affecting Recruitment sources, selection process and placement.
- CO3. Differentiate training and development and understand methods of training Identify the various training methods and design a training program.
- CO4. Understand the concept of performance appraisal process in an organization.

- CO5. Know about wage and salary Administration and factors affecting wage and salary administration and Grievances handling procedures.

HC-302: IFRS AND INDIAN ACCOUNTING STANDARDS

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After completion of this paper student would be able to:

- CO1. Understand the concept, structure, disclosure requirements of IFRS
- CO2. Gain knowledge on application of Ind AS for preparing financial statements
- CO3. Know standards on Inventory, PPE & Financial reporting
- CO4. Learn the aspects related to EPS, separate financial statements, investment in subsidiaries, associates and joint ventures
- CO5. Learn the standards for recognition, measurement and disclosure requirements of interim reporting, lease and intangible assets

HC-303 : BUSINESS DATA ANALYTICS

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After completion of this paper student would be able to:

- CO1. Know about the basics of information technology and capability to analyse the importance of information technology for the managers;
- CO2. Understand on the process of implementation of IT on business;
- CO3. Develop the skills to apply information technology on business;
- CO4. Gained the knowledge about the professional ethics and responsibility while using IT;
- CO5. Translate results of business analytic projects into effective courses of action;

CE-301.1 : ADVANCED ACCOUNTING

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After completion of this paper student would be able to:

- CO1. Develop strong numerical and quantitative skills relating to valuation of goodwill and share;
- CO2. Understand and prepare the financial statements of banks and insurance companies
- CO3. Understand of accounting for Holding company and conversion of Partnership to Limited Company.

- CO4. Know legal provisions of bonus issue, right issue of share and treatment of profits or loss prior to incorporation.
- CO5. Familiarize with Royalty and Voyage.

CE– 301.2 : INTERNATIONAL FINANCIAL MANAGEMENT

Course Outcomes:

After completion of this paper student would be able to:

- CO1. Acquire basic understanding and familiarity with the forex markets and its mode of transaction;
- CO2. Know about various factors taken into consideration while getting into forex trade;
- CO3. Know the existence of various international institutions that cater to the international financial requirements.
- CO4. Explain various ways the exchange rates evolved over the years in the international markets;
- CO5. Understand, analyze and prepare the Balance of Payments account for a country.

CE- 301.2: SUPPLY CHAIN MANAGEMENT AND LOGISTICS

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After completing this course, the student would be able to:

- CO1. Develop Insights about the supply chain management system
- CO2. Know the designing of supply chain management
- CO3. Understand the basics of the inventory management system
- CO4. Develop the skill of purchasing and vender management
- CO5. Evaluate the implementation of cost-effective solutions to assist enterprises enhance their competitive advantage

CE- 302.1 : ACCOUNTING FOR MANAGERIAL DECISION MAKING

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After reading this paper, students would be able to;

- CO1. Understand the application of financial, cost and management accounting.
- CO2. Analyze and interpret the financial and cost accounting Information to take managerial decisions
- CO3. Build an increasingly sophisticated level of understanding on budgeting and budgetary control techniques

- CO4. Gain relevant skills on cost controlling techniques
- CO5. Develop Balance score card and management reports

CE-302.2 : FINANCIAL MODELLING AND VALUATION

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes:

After reading this paper, students would be able to:

- CO1. Understand of the concepts of financial modelling, valuation & risk management;
- CO2. Developed the skill of capital investment decisions of corporates by use of various finance models;
- CO3. Equipped themselves with the latest concepts of modelling used in financial structure capital structure, etc.;
- CO4. Equipped with the skills for management of current assets & working capital.
- CO5. Design and build a comprehensive financial model and create dashboards using those financial models to take decisions

CE-302.3 : RETAIL MANAGEMENT

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, the student would be able to;

- CO1. Understand of the retail history and its function
- CO2. Know buying process, retail marketing strategies and target markets
- CO3. Know about retail location and its evaluation
- CO4. Identify proper logistics in SCM
- CO5. Apply IT in Retail Marketing and understanding its challenges, solutions.

FIELD INTERNSHIP – 201

(CREDITS:3)

(End-Sem:50)

Course Outcomes:

After completing Field Internship, the student would be able to

- CO1. Reinforce experiential and contextual learning.
- CO2. Enhance classroom learning by making connections with the real world.
- CO3. Develop ability to test the theoretical learning in practical situations by accomplishing the tasks assigned during the internship period.
- CO4. Hone the skills to apply various soft skills such as time management, positive attitude and communication skills during accomplishment of the assigned tasks.

- CO5. Acquire wider perspectives of a work environment and benefit from a mentor or supervisor's experience and advice.

FOURTH SEMESTER

HC- 401: DERIVATIVES AND RISK MANAGEMENT

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After reading this paper students would be able to;

- CO1. Understand risk and risk management through derivatives
- CO2. Gain knowledge on “Futures as a derivative market instrument”
- CO3. Develop the skill of understanding options and option pricing strategies
- CO4. Able to understand hedging strategies through “Swap”
- CO5. Gain knowledge on regulatory framework of derivatives

HC- 402 : CORPORATE GOVERNANCE AND BUSINESS ETHICS

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After reading this paper, students would be able to:

- CO1. Gain Insights of corporate governance & its models and also focuses on various National & International scandals.
- CO2. Understanding on various national and international committees and their performance along with the current reporting practices of Corporate Governance.
- CO3. Understanding the application of ethics in business organization and its role in developing good corporate governance.
- CO4. Impart knowledge regarding role of various committees and SEBI guidelines for protection of investors right;
- CO5. Role and responsibilities of the auditors in enforcing good governance

HC- 403: DISSERTATION

(CREDITS:5) (End-Sem:100)

CE-401.01 : ADVANCED AUDITING AND PROFESSIONAL ETHICS

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After reading this paper, students would be able to:

- CO1. Understand the responsibilities of management and the auditor in relation to an audit.
- CO2. Evaluate historical financial information by applying professional skepticism and judgement.

- CO3. Design audit processes and procedures to be undertaken by auditors in conducting audit
- CO4. Evaluate the sufficiency and appropriateness of the audit evidence gathered.
- CO5. Evaluate circumstances that may give rise to modifications to the auditor's report or the auditor's opinion.

CE-401.02 : EMERGING BUSINESS LAWS

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After reading this paper, students would able to;

- CO1. Gain fair idea about an emerging business law;
- CO2. Understand of how to manage and run a business successfully;
- CO3. Aware of various business laws and regulations to defend their litigations;
- CO4. Understand as how affect these laws on business, trade and commerce; and
- CO5. Gain knowledge about problem solving techniques and to be able to present coherent,concise and legal argument

CE-401.03: CUSTOMER RELATIONSHIP MANAGEMENT

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After completion of this paper student will be able to

- CO1. Understand the concept of the CRM
- CO2. Know the importance of the CRM in Marketing
- CO3. Impart the basic knowledge of the Role of CRM in increasing the sales of the company
- CO4. Develop the Skill to implement CRM in a business
- CO5. Aware and analyses the different issues in CRM

ALLIED CORE -401 :WOMEN AND SOCIETY

(CREDITS:35) (Int :15 End-Sem:35)

Course Outcomes:

After reading this paper, students would able to;

- CO1. Students will familiarize with the women lead environmental movements and women's participation in the climate resilience natural resources management.
- CO2. Students will acquire knowledge on the differential impact of climate change disasters.
- CO3. Students will be familiar with the role of technology and how has ICT brought about a change in on women's everyday lives and livelihoods.

- CO4. It will enhance students' critical thinking in the use and management of technology in different productive sectors across different category of women.
- CO5. Students will gain an insight into the women and law from rights and equality of opportunity in the access to justice as well as the nuances involved in it.
- CO6. Students will entrust with the duties of framing reports, conducting research and development activities and solving the issues of injustice imparted to the public.



Ph.D. IN COMMERCE

PROGRAM OUTCOMES (POs):

- PO1: The students should learn to apply the knowledge of statistics and management to the solution of multifaceted problems.
- PO2: An ability to demonstrate a critical awareness of current issues in commerce which are informed by leading edged research and practice in the field.
- PO 3: Understand use techniques, skills and tools skills to carry out empirical as well as conceptual research in the area of business studies.
- PO 4: Attracting to recognize the importance of professional development by pursuing the doctorate studies or faces competitive examinations that offer challenging and rewarding careers.
- PO 5: To get an expertise on research through participating in various conferences, seminars, research workshops to improve and enhance their research knowledge.

PROGRAM SPECIFIC OUTCOMES (PSOS):

- PSO1: To promote the growth and development of Commerce, Management, and allied disciplines through the use of research.
- PSO2: To nurture scholars for advanced careers in commerce research, teaching, practice, consulting, training, and development.
- PSO3: To equips students with the necessary skills and expertise to engage in creative and innovative research, publish scholarly works, and validate the findings of their research in various areas of commerce.
- PSO4: The programme emphasizes the integration of sound theoretical concepts with practical a applications and emerging trends.

PAPER 01: RESEARCH METHODOLOGY AND COMPUTER APPLICATION

Course Outcomes:

After completion of this paper student will be able to

- CO1. Understand social science research aspects to imbibe scholarly concerns in addressing a research problem.
- CO2. Gain a comprehensive understanding of the concept of Sampling Theory and Measurement scales.
- CO3. Understand the analytical approach, tools and techniques in testing hypothesis.
- CO4. Ability to know research software SPSS, Amos, EViews, Stata with their basic tools.

PAPER 02: ACCOUNTING AND FINANCE

Course Outcomes:

After completion of this paper student will be able to

- CO1. Examine the viability of Financial Statements in the light of Corporate Restructuring.
- CO2. Understand the feasibility of different investment opportunities.
- CO3. Fair idea about the changing scenario of Indian Financial System.
- CO4. Ability to analyze the emerging concepts in Derivatives Market.

PAPER-III: REVIEW OF RELATED LITERATURE

Course Outcomes:

On completion of this course, the students will be able to:

- CO1. Identify the research gap and write the review in a synchronized manner.
- CO2. Select a research area of their interest and Identify variables relevant to the selected research area.
- CO3. Summarize the findings of different research studies.
- CO4. Write a thematic paper on any contemporary issue in the subject and present thematic paper.

PAPER- IV: RESEARCH AND PUBLICATION ETHICS

Course Outcomes:

After completion of this paper student will be able to

CO1. Understand the basics of philosophy of science and ethics, research integrity, publication ethics.

CO2. Identify research misconduct and predatory publications.

CO3. Comprehend indexing and citations, open access publications, research metrics (citations, h- index, impact factor etc).

CO4. Use plagiarism tools for a valid and ethical research report.

B.Sc. COMPUTER SCIENCE

Programme Outcomes

- PO1. Scientific knowledge: Apply the knowledge of science, mathematics, and computing to the solution of complex scientific problems.
- PO2. Problem analysis: Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using principles of mathematics, natural sciences, and applied sciences.
- PO3. Design/development of solutions: Design solutions for complex problems and design system processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- PO4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- PO5. Modern tools usage: Create, select, and apply appropriate techniques, resources, and modern computing and IT tools including prediction and modeling to complex scientific activities with an understanding of the limitations.
- PO6. The software engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional practice.
- PO7. Environment and sustainability: Understand the impact of the professional software engineering solutions in societal and environmental contexts, and demonstrate the need for sustainable development.
- PO8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the scientific practice.
- PO9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO10. Communication: Communicate effectively on complex activities with the scientific community and with the society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PO11. Project management: Demonstrate the scientific and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- PO12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broad context of technological change.

Programme Specific Outcomes

A graduate with a B.Sc. in Computer Science will have the ability to

- PSO1. Demonstrate in the following core knowledge areas Data Structures and Programming Languages, Databases, Software Engineering and
- PSO2. Development Computer Architecture and Security

- PSO3. Apply problem-solving skills and the knowledge of computer science to solve real world problems.
- PSO4. Develop technical project reports and present them orally among the users

B.SC COMPUTER SCIENCE

FIRST SEMESTER

CORE-I : PROGRAMMING USING C

(CREDITS : 6)

(FM:100)

Course Outcomes:

After completing this course, students will be able to:

- CO1. Understand fundamentals of C, learn various programming constructs, and write C programs using operators and control structures.
- CO2. Develop C programs with pointers and arrays, perform pointer arithmetic.
- CO3. Apply code reusability with functions, demonstrate dynamic memory allocation, and command line arguments.
- CO4. Handle files using several file handling mechanisms, solve problems using derived data types.

Core-II: DIGITAL LOGIC

(CREDITS : 6)

(FM:100)

Course Outcomes

After competing this course, students will be able to:

- CO1. Able to define different logic gates, illustrate realization of Boolean expression in SOP and POS form and design it using logic gates
- CO2. Able to design the logic circuits like adder, subtractor etc.
- CO3. Become accustomed to design and test combinational circuits
- CO4. Become accustomed to design and develop sequential circuits

SECOND SEMESTER

CORE-III: PROGRAMMING USING C++

(CREDITS : 6)

(FM:100)

Course Outcomes:

After completing this course, students will be able to:

- CO1. Understand the difference between structure-oriented programming and object-oriented programming.
- CO2. Apply various object-oriented features like class, object, constructor and destructor to solve various computing problems using C++ language.
- CO3. Understand and apply concepts of inheritance and operator-overloading,

- CO4. Write programs that perform various operations on files

CORE–IV: DATA STRUCTURE

(CREDITS : 6)

(FM:100)

Course Outcomes:

After completing this course, students will be able to:

- CO1. Analyze performance of algorithms and implement various operations on array and Linkedlist.
- CO2. Apply the basic operations of stacks and queues to solve real world problems.
- CO3. Represent data using trees to use them in various real life applications.
- CO4. Analyze and implement various sorting algorithms to solve real world problems

THIRD SEMESTER

CORE– V: JAVA PROGRAMMING

(CREDITS : 6)

(FM:100)

Course Outcome

After completing this course, students will be able to:

- CO1. Understand basic concepts of OOP, introduction to classes and objects through Java Language and apply
- CO2. Apply the concepts of constructors, overloading, parameter passing, access control, Inheritance
- CO3. Use Packages and Interfaces.
- CO4. Implement Exception Handling, Threads and able to access and manipulate databases

CORE-VI: DATABASE SYSTEMS

(CREDITS : 6)

(FM:100)

Course Outcomes

After completing this course, students will be able to:

- CO1. Understand the basics of database management system
- CO2. Use Structured Query Language (SQL) for database Creation and manipulation.
- CO3. Demonstrate the working of different concepts of DBMS.
- CO4. Construct a database by using data definition, data manipulation and control languages.
- CO5. Implement and test the project developed for an application. Apply mathematical and formal techniques for solving problems in computer science related to database applications

CORE – VII: DISCRETE MATHEMATICAL STRUCTURE

(CREDITS : 6)

(FM:100)

Course Outcomes:

After competing this course, students will be able to:

- CO1. Analyze statements using propositional and predicate logic, prove theorems using mathematical induction, understand sets, functions and relations and their properties.
- CO2. Solve counting problems using counting principles, permutations, combinations, and pigeonhole principle, solve linear and non-linear recurrence relations using generating functions.
- CO3. Apply principles and concepts of graph theory to solve real world problems.
- CO4. Model DFAs, NFAs, grammars for different languages, minimize DFAs, apply pumping lemma to prove a language is not regular.

FOURTH SEMESTER

CORE–VIII: OPERATING SYSTEM

(CREDITS : 6) (FM:100)

Course Outcomes:

After competing this course, students will be able to:

- CO1. Able to understand the difference between different types of modern operating systems, virtual machines and their structure of implementation and applications.
- CO2. Able to understand the difference between process & thread, issues of scheduling of userlevel processes / threads and their issues & use of locks, semaphores, monitors for synchronizing multiprogramming with multithreaded systems and implement them in multi threaded programs.
- CO3. Able to understand the concepts of deadlock in operating systems and how they can be managed / avoided and implement them in multiprogramming system.
- CO4. Able to understand the design and management concepts along with issues and challenges of main memory, virtual memory and file system.

CORE – IX: COMPUTER NETWORKS

(CREDITS : 6)

(FM:100)

Course Outcome

After completing this course, students will be able to:

- CO1. To understand various types of signals, transmissions, multiplexing and networks.
- CO2. To understand about error detection and error correction techniques.
- CO3. To learn about IPv4 and IPv6 and various transport layer protocols.
- CO4. To learn about Email and protocols used to transfer data.

CORE – X: COMPUTER GRAPHICS

(CREDITS : 6)

(FM:100)

Course Outcomes

After completion of the course, a student will be able to

- CO1. Analyze the background processes involved in computer graphics displays, understanding of Algorithms.
- CO2. Use Mathematics in Vector. Create Segments and apply clipping to different shapes.
- CO3. Understand and apply algorithms used in Computer Graphics.
- CO4. Apply methods suitable for 2D and 3D Transformation such as Translation, Rotation, Scaling, Reflection, Shear etc.
- CO5. Apply Clipping algorithm for viewing transformation

FIFTH SEMESTER

CORE – 11: WEB TECHNOLOGIES

(CREDITS : 6)

(FM:100)

Course Outcome

After completion of the course, a student will be able to

- CO1. Develop simple web pages using HTML, and Cascading Styles sheets
- CO2. Develop web pages using DHTML and Cascading Styles sheets.
- CO3. Develop a dynamic web pages using JavaScript (client side programming).
- CO4. Develop an interactive web applications using PHP.

CORE – XII: SOFTWARE ENGINEERING

(CREDITS : 6)

(FM:100)

Course Outcomes

After completion of the course, a student will be able to

- CO1. Ability to gather and specify requirements of the software projects.
- CO2. Ability to analyze software requirements with existing tools
- CO3. Able to understand and apply the basic project management practices in real life projects
- CO4. Able to differentiate different testing methodologies

SIXTH SEMESTER
CORE–XIII : ARTIFICIAL INTELLIGENCE
(CREDITS : 6) (FM:100)

Course Outcomes

After completion of the course, a student will be able

- CO1. To learn the basic concepts of AI principles and approaches.
- CO2. To develop the basic understanding of the building blocks of AI.
- CO3. To learn how to represent Knowledge
- CO4. To learn basic concept of Natural Language Processing

CORE –XIV : ALGORITHM DESIGN TECHNIQUES
(CREDITS : 6) (FM:100)

Course Outcomes:

After competing this course, students will be able to:

- CO1. Write sorting algorithms, analyze the efficiency of algorithms using asymptotic notations, argue the correctness of algorithms using loop invariants.
- CO2. Understand the concept of hashing, describe and apply the divide-and-conquer paradigm, derive and solve recurrences describing the performance of divide-and-conquer
- CO3. Synthesize greedy and dynamic-programming algorithms, solve and analyze several problems using greedy and dynamic programming techniques.
- CO4. Explain major graph algorithms and analyze the time complexity

DSE-I: NUMERICAL TECHNIQUES

(4 CREDITS) (FM:100)

Course Outcomes:

After competing this course, students will be able to:

- CO1. Understand computer arithmetic and truncation errors in detail.
- CO2. Find numerical techniques to find the roots of algebraic equations, and check the accuracy of the solutions.
- CO3. Describe various interpolating methods and apply several numerical methods in real life problems.
- CO4. Apply numerical methods to find numerical integration, and numerical solutions of ordinary differential equations.

DSE –II :UNIX SHELL PROGRAMMING

(CREDITS : 6) (FM:100)

Course outcomes

After competing this course, students will be able to:

CO1. To learn the basics of UNIX OS, UNIX commands and File system.

- CO2. To familiarize students with the Linux environment.
- CO3. To learn fundamentals of shell scripts and shell programming.
- CO4. To be able to write simple programs using UNIX.

DSE-II : DATA SCIENCE

(CREDITS : 6) (FM:100)

Course Outcomes

After competing this course, students will be :

- CO1. Able to do some innovative work with applying the knowledge gained from various courses undergone in the earlier years.
- CO2. Able to know the complete project life cycle and the project time estimation & its management.
- CO3. Able to gain knowledge of various simulation tools.
- CO4. Able to culture working in a team

DSE–IV: PROJECT WORK/ DISSERTATION OR DATA MINING

(CREDITS : 6) (M:100)

Course Outcomes

After competing this course, students will be :

- CO1. Able to do some innovative work with applying the knowledge gained from various courses undergone in the earlier years.
- CO2. Able to know the complete project life cycle and the project time estimation & its management.
- CO3. Able to gain knowledge of various simulation tools.
- CO4. Able to culture working in a team

GE–1: COMPUTER FUNDAMENTALS

(CREDITS : 6) (FM:100)

Course Outcomes:

After competing this course, students will beable :

- CO1. understand about the definition and data representation of computer.
- CO2. understand different devices and memory of computer.
- CO3. understand and apply concepts of computer organization and architecture,
- CO4. understand some recent emerging technologies and their applications.

GE – 2: C AND DATA STRUCTURE

(CREDITS : 6)

(FM:100)

Course Outcome

After completing this course, students will be able to :

- CO1. Understand and formulate the algorithms to programs (in C language) and develop programs using the basic elements like control statements.
- CO2. Apply modular programming approach and recursion mechanism to solve complex problems.
- CO3. Implement Programs with pointers, and learn to use the pre-processors.
- CO3. Apply the basic operations of stacks and queues and implement various sorting algorithms to solve real world problems.



M.Sc. IN COMPUTER SCIENCE

Programme Outcomes (POs)

After completion of the course, the student will achieve the following:

- PO1.Engineering knowledge: Apply the knowledge of mathematics, science, and computer sciencespecialization to evaluate, analyse, synthesize, model and integrate technologies to solvecomplex scientific problems.
- PO2.Problem analysis: Analyse complex scientific problems critically, apply independent judgmentfor synthesizing information to make intellectual and/or creative advances for conductingresearch in a wider theoretical and practical context.
- PO3.Design/development of solutions: Design and develop a system to provide a wide range ofpotential, feasible and optimal solutions for critical and challenging scientific problems to meetthe desired needs within social areas such as economics, environmental, and ethics.
- PO4.Conduct investigations of complex problems: Research skill to extract information pertinent tounfamiliar problems through literature survey and experiments, apply appropriate researchmethodologies, techniques and tools, design, conduct experiments, analyse and interpret data,demonstrate higher order skill and view things in a broader perspective, contributeindividually/in group(s) to the development of scientific/technological knowledge in one ormore domains of Science.
- PO5.Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern ITtools including prediction and modelling to complex scientific activities with an understandingof the limitations.
- PO6.The engineer and society: Apply reasoning informed by the contextual knowledge to associated , health, safety, legal and cultural issues and the consequent responsibilities relevant tothe professional practice.
- PO7.Environment and sustainability: Understand contemporary issues in providing technologysolutions for sustainable development considering impact on economic, social, political, andglobal issues and thereby contribute to the welfare of the society.
- PO8.Ethics: Acquire professional and intellectual integrity, professional code of conduct, ethics ofresearch and scholarship, consideration of the impact of research outcomes on professionalpractices and an understanding of responsibility to contribute to the community for sustainabledevelopment of society.
- PO9.Individual and team work: Possess knowledge and understanding of group dynamics, recognize opportunities and contribute positively to collaborative-multidisciplinary scientificresearch, demonstrate a capacity for self-management and team work ,decision- making based onopen-mindedness, objectivity and rational analysis in order to achieve common goals andfurther the learning of themselves as well as others.
- PO10.Communication: Communicate with the science community, and with society at large,regarding complex engineering activities confidently and effectively, such as, being able to comprehend and write effective reports and design documentation by

adhering to appropriate standards, make effective presentations, and give and receive clear instructions.

- PO11. Project management and finance: Demonstrate knowledge and understanding of management principles and apply the same to one's own work, as a member and leader in team, manage projects efficiently in respective disciplines and multidisciplinary environments after consideration of economic and financial factors.
- PO12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in life-long learning independently, with a high level of enthusiasm and commitment to improve knowledge and competence continuously.

Programme Specific Outcomes (PSOS)

A graduate with a M.Sc. in Computer Science will have the ability to

- PSO1. Communicate computer science concepts, designs, and solutions effectively and professionally.
- PSO2. Apply knowledge of computing to produce effective designs and solutions for specific problems.
- PSO3. Use software development tools, software systems, and modern computing platforms.

FIRST SEMESTER

HC-101 :DISCRETE MATHEMATICAL STRUCTURE

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

Upon successful completion of this course, students will be able to:

- CO1. Apply mathematical logic to solve problems and prove theorems.
- CO2. Understand sets, relations, functions and discrete structures.
- CO3. Solve counting problems by applying counting techniques, permutations, combinations, pigeonhole principle.
- CO4. Learn various concepts of graph theory and apply to real world problems.
- CO5. Understand the algebraic structure: Group, Ring, Field.

HC-102 : COMPUTER SYSTEM ARCHITECTURE [

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcome

Upon successful completion of this course, students will be able to:

- CO1. Understand the advanced concepts of computer architecture.
- CO2. Analyze the major differentials of RISC and CISC architectural characteristics.
- CO3. Investigate modern design structures of Pipelined and Multiprocessors systems.
- CO4. Acquainted with recent computer architectures and I/O devices, as well as the low level language required to drive/manage these types of advanced hardware.

- CO5. Prepare selected reports that imply some emergent topics supporting material essence.

HC-103 : DATABASE SYSTEMS IMPLEMENTATION

(CREDITS:5) (Int :20+10 End-Sem:70)

Course outcomes

Upon successful completion of this course, students will be able to:

- CO1. Analyse application data using E-R modelling and describe the logical and physical database designs.
- CO2. Understand relational algebra, calculus and apply structured query language (SQL) for database definition and manipulation.
- CO3. Demonstrate an understanding of normalization theory and apply such knowledge to the normalization of a database.
- CO4. Use transaction management systems
- CO5. Use Concurrency Control methods and apply security on database systems.

HC-104: Database System & Python Practical

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

Upon successful completion of this course, students will be able to:

- CO1. Ability to understand the various kinds of SQL commands
- CO2. Demonstrate the operation on database table.
- CO3. Ability to make customized query efficiently on a database.
- CO4. Ability to apply query techniques for realistic data.
- CO5. Write, test, and debug simple Python programs.
- CO6. Ability to understand Python code, develop medium difficulty applications in Python

SECOND SEMESTER

HC-201 : DATA STRUCTURE & ALGORITHM

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

Upon successful completion of this course, students will be able to:

- CO1. Analyze the efficiency of algorithms using asymptotic notations, apply divide-and-conquer method to design algorithms, and solve recurrences.
- CO2. Use standard data structures like hash tables, heaps, and trees to store data efficiently.
- CO3. Explain major graph algorithms and apply these algorithms to solve real world problems.
- CO4. Design and analyze algorithms using greedy technique and dynamic programming.

- CO5. Understand complexity classes P, NP, co-NP, NP-hard, NP complete and NP complete reductions.

HC-202 : OPERATING SYSTEMS

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

Upon successful completion of this course, students will be able to:

- CO1. Analyze the concepts of Operating System.
- CO2. Analyze the concepts of process, thread and deadlock situation and Illustrate the Scheduling of a processor for a given problem instance.
- CO3. Analyze memory management techniques and implement page replacement Algorithm.
- CO4. Understand the implementation of file systems and directories.
- CO5. Understand the implementation of file system using UNIX operating system.

HC-203: THEORY OF COMPUTATION

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After completion of the course, a student will be able to

- CO1. Describe the concept of abstract machines and their power to recognize the languages.
- CO2. Apply finite state machines for modelling and solving computing problems.
- CO3. Design context free grammars for formal languages.
- CO4. Distinguish between decidability and undecidability.
- CO5. Solve mathematical tools and formal methods
- CO6. Apply mathematical and formal techniques for solving problems in computer science

HC-204 : DATA STRUCTURE & OPERATING SYSTEM LAB PRACTICAL

CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

Upon Completing the Course, Students will be able to

- CO1. For a given sorting problem (Merge/Insertion/Quick) student will be able to implement it and analyze the same to determine the time and computation Complexity.
- CO2. Student will be able to implement program for Graph traversal Algorithm & Hashing Technique.
- CO3. Implements various OS Scheduling Algorithms.
- CO4. Implements various Memory Scheduling Algorithms

- CO5. Emphasize hands-on experience working with various algorithm associated with DataStructure and Operating Systems

CE-201 : ARTIFICIAL INTELLIGENCE
(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After completion of the course, a student will be able to

- CO1. Study the concepts of AI and related searching algorithms.
- CO2. Develop the knowledge skills and it's representational structure in AI
- CO3. Study the concepts of natural language processing in AI.
- CO4. Study the concepts of supervised/unsupervised machine learning and game technique.
- CO5. Study how design the programming skill in PROLOG, and concepts of pattern recognition approaches.

CE-201 : DATA SCIENCE
(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of the course, a student will be able to

- CO1. To explicate data analysis techniques and quantitative modelling for the solution of realworld Business problems.
- CO2. To report findings of analysis and effectively present using data visualization techniques
- CO3. To demonstrate knowledge of statistical data analysis techniques utilized in business Decision making.
- CO3. To provide insights about the roles of a Data Scientist, such as a developer, an analyst, astatistical Expert etc.
- CO4. To understand the techniques and tools for transformation of data

OE-01 : E-COMMERCE
(CREDITS:4) (End-Sem:50)

Course Outcomes

After completion of the course, a student will be able to

- CO1. To explicate data analysis techniques and quantitative modelling for the solution of realworld Business problems.
- CO2. To demonstrate knowledge of statistical data analysis techniques utilized in business Decisionmaking.
- CO3. Applying the e-commerce concept in business world

THIRD SEMSTER

HC-301: COMPUTER NETWORKS

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of the course, a student will be able to

- CO1. Identify data communications system components, network topologies, and protocols.
- CO2. Analyze different features of analog and digital transmission.
- CO3. Analyze the working principles and protocols of data link layer.
- CO4. Identify and differentiate working principles and protocols of network and transport layer.
- CO5. Identify and implement different types of application in application layer.

HC-302 :SOFTWARE ENGINEERING

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After completion of the course, a student will be able to

- CO1. To provide the idea of decomposing the given problem into Analysis, Design, Implementation, Testing and Maintenance phases.
- CO2. To provide an idea of using various process models in the software industry according to given circumstances.
- CO3. To differentiate different testing methodologies and their utilities.
- CO4. To understand and apply the basic project management practices in real life projects
- CO5. To enhance the ability to work in a team as well as independently on software projects

HC-303 : COMPUTER NETWORK & SOFTWARE ENGINEERING LAB

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcome

After completion of the course, a student will be able to

- CO1. Acquire knowledge of Networking Parameters
- CO2. Able to do establish Client/Server Communication using Socket
- CO3. Learn how to use File Transfer protocol
- CO4. Learn to use Software Engineering Tools to develop various automated systems.
- CO5. Using UML tools to analyse project work

THIRD SEMESTER
CEC-301 : COMPILER DESIGN

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After completion of the course, a student will be able to

- CO1. Understand the internal steps of compiler.
- CO2. Understand the fundamental concepts of formal language.
- CO3. Implementation of top down and bottom up parsers.
- CO4. Understand the usage of lex and yacc tools.
- CO5. Understand SDD, SDT, intermediate code generation and machine code generation.

CE-301: GRAPH THEORY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of the course, a student will be able to

- CO1. Explain the concept of formal graph-theoretic definitions, notations, apply Handshaking theorem and Havel-Hakimi theorem, learn about graph isomorphism.
- CO2. Find shortest paths in graphs, understand connectedness in graphs, and define Eulerian graphs Hamiltonian graphs.
- CO3. Learn about trees and tree traversal algorithms, apply algorithms to find minimum spanning trees.
- CO4. Understand graph planarity, find geometric and combinatorial dual, learn about matching and coverings in graphs,
- CO5. Define Independent set, and clique in a graph and understand graph colouring in detail

CEC-302 : CLOUD COMPUTING

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes:

After completion of the course, a student will be able to

- CO1. Explain the core concepts of the cloud computing paradigm: how and why this paradigm shift came about, the characteristics, advantages and challenges of Cloud.
- CO2. Develop applications using various models and services in cloud computing.
- CO3. Understand virtualization and outline their role in enabling the cloud computing system model and implement different load balancing algorithms in cloud.
- CO4. Explain Service Management in Cloud Computing.
- CO5. Understand security mechanisms implemented at different levels.

CEC-302 :SOFT COMPUTING
(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of the course, a student will be able to

- CO1. Describe human intelligence and AI and explain how intelligent system works.
- CO2. Apply basics of Fuzzy logic and use of heuristics based on human experience
- CO3. Describe with genetic algorithms and other random search procedures useful while seeking global optimum in self-learning situations.
- CO4. Identify the issues in multi-objective optimization problems and apply different multi objective optimization techniques.
- CO5. Apply different ANN techniques to real world problems

FOURTH SEMESTER

HC-401: APPLIED CRYPTOGRAPHY
(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcome

After completion of the course, a student will be able to

- CO1. Illustrate the concepts of Network Security and Compare Various Symmetric and Asymmetric Cryptographic methods used for Network Security
 - CO2. Gain familiarity with prevalent network and distributed system attacks, defences against them, and forensics to investigate the aftermath.
 - CO3. Develop a basic understanding of cryptography, how it has evolved, and some key encryption techniques used today
- CO4. Summarize different Authentication Techniques such as hashing, various digital signature techniques, etc
- CO5. Determine appropriate mechanisms for protecting information systems ranging from operating systems to database management systems and to applications.

HC-402 JAVA & APPLIED CRYPTOGRAPHY PRACTICAL

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

At the end of the course, the student should be able to:

- CO1. Implement the cipher techniques
- CO2. Develop the various security algorithms
- CO3. Use different open source tools for network security and analysis
- CO4. Understand OOP concepts and basics of Java programming

CE-401 DATA MINING
(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcome

At the end of the course, the student should be able to:

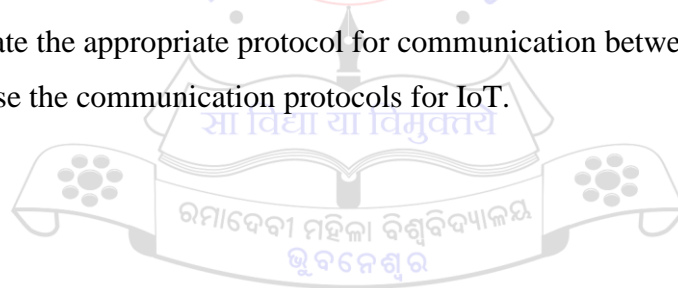
- CO1. Design a data mart or data warehouse for any organization
- CO2. Develop skills to write queries using DMQL
- CO3. Extract knowledge using data mining techniques
- CO4. Adapt to new data mining tools.
- CO5. Apply the techniques of clustering, classification, association finding, feature selection and visualization to real world data

CE-401: INTERNET OF THINGS
(CREDITS:5) (Int :20+10, End-Sem:70)

Course Outcomes

At the end of the course, the student should be able to:

- CO1. Identify the Components that forms part of IoT Architecture.
- CO2. Determine the most appropriate IoT Devices and Sensors based on Case Studies.
- CO3. Setup the connections between the Devices and Sensors.
- CO4. Evaluate the appropriate protocol for communication between IoT.
- CO5. Analyse the communication protocols for IoT.



Ph.D. IN COMPUTER SCIENCE

PAPER- I :RESEARCH METHODOLOGY AND COMPUTER APPLICATIONS

Course Outcomes:

After completion of this paper student will be able to

- CO1. Understand social science research aspects to imbibe scholarly concerns in addressing a research problem.
- CO2. Gain a comprehensive understanding of the concept of Sampling Theory and Measurement scales.
- CO3. Understand the analytical approach, tools and techniques in testing hypothesis.
- CO4. Ability to know research software SPSS, Amos, EViews, Stata with their basic tools.

PAPER- II :ADVANCES IN COMPUTATIONAL RESEARCH

Course outcome

After completion of this paper student will be able to

- CO1. review the research on Cloud Computing and Advanced Computer Networking
- CO2. know the recent applications of Softcomputing
- CO3. get the idea of implementation of algorithms in different computational fields
- CO4. find out the security in Cloud, Networking, Cyber and Images.
- CO5. familiarize with MATLAB

PAPER- III: REVIEW OF RELATED LITERATURE

Course Outcomes:

- CO1. Conduct review of related literature
- CO2. Identify the research gap and write the review in a synchronized manner
- CO3. Select a research area of their interest
- CO4. Identify variables relevant to the selected research area
- CO5. Summarize the findings of different research studies
- CO6. Write a thematic paper on any contemporary issue in the subject
- CO6. Present thematic paper

PAPER- IV: RESEARCH AND PUBLICATION ETHICS

Course Outcomes:

- CO1. Understand the basics of philosophy of science and ethics, research integrity, publication ethics.
- CO2. Identify research misconduct and predatory publications.
- CO3. Comprehend indexing and citations, open access publications, research metrics (citations, h-index, impact factor etc).
- CO4. Use plagiarism tools for a valid and ethical research report.

B.A. ECONOMICS

Program Outcomes:

- PO1: Develop critical thinking among students.
- PO2: Equip students for effective communication.
- PO3: Prepare students for social interaction to elicit views of others, mediate disagreements and help reach conclusions in group settings.
- PO4: Create awareness among students to demonstrate empathetic social concern and equity centered national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.
- PO5: Equip students to recognize different value systems including their own, understand the moral dimensions of their decisions, and accept responsibility for them.
- PO6: Making students understand the issues of environmental contexts and sustainable development.
- PO7: Provide students with the opportunity to pursue courses that emphasize quantitative and theoretical aspects of Economics.
- PO8: To provide students with the opportunity to focus on applied and policy issues in Economics.
- PO9: Provide students with basic training relating to econometric estimation of economic relationships using statistical software packages.
- PO10: Equip students with ability to think rationally, analyze situations and solve problems.

Program Specific Outcomes:

- PSO1: Enhancing ability to understand economic theories and functioning of basic microeconomic and macroeconomic systems.
- PSO2: Acquaint students with basic statistical and mathematical skills to solve real economic problems.
- PSO3: Delineate the developmental policies designed for developed and developing economics. The course also acquaints with the measurement of development with the help of theories along with the conceptual issues of poverty and inequalities.
- PSO4: This course emphasizes on environmental problems emerging from economic development.
- PSO5: Acquaint students with basic issues of Indian economy and learn the basic concept of monetary analysis and financial marketing in Indian financial markets. This course reviews major trends in economic indicators and policy debates in India in the post dependence period.

FIRST SEMESTER
CORE-I : INTRODUCTORY MICROECONOMICS
(6 CREDIT) (FM: 100)

Course Outcomes:

After reading this paper, students will be able to

- CO1. This will help to explain what economics is, why it is important, how economists use economic models. Also after studying the paper they are able to understand how production and consumption decisions are taken.
- CO2. It will help in understanding the behaviour of individuals and small organizations in making decisions on the allocation of limited resources.
- CO3. It will result in equipping the students in a rigorous and comprehensive manner with the various aspects of consumer behaviour and demand analysis, production theory and behaviour of costs, the theory of traditional markets and equilibrium of firm in modern non-profit maximizing framework.

CORE -II: MATHEMATICAL METHODS FOR ECONOMICS I
(6 CREDIT) (FM: 100)

Course Outcomes:

After reading this paper, students should:

- CO1. Have ability to understand the concepts of sets, functions, graphs, the number system, Continuous functions and their graphs.
- CO2. Have developed analytical ability of economic variables using differentiation method.
- CO3. Have enhanced knowledge on application of derivatives to elasticity and demand analysis.
- CO4. Be able to understand the detailed study of determinants and matrix algebra.
- CO5. Have enhanced ability to apply mathematical skills learnt earlier to build and test models in economics and related fields.

GE-I: INDIAN ECONOMY
(6 CREDIT) (FM: 100)

Course Outcomes:

After reading this paper, students should:

- CO1. Have insights into India 's economic development since colonial period, The era of planning under different regimes – achievements and failures, critical understanding of economic reforms, the resultant structural changes and regional variations.
- CO2. Be aware about India 's demographic issues, education and health.
- CO3. Be equipped with knowledge on trends in GDP, per capita GDP, poverty and inequality and their impact on growth and unemployment, Policy perspectives in growth and distribution.

- CO4. Be able to study the changes in sector composition of economic growth since independence.
- CO5. Be able to understand and analyse economic reforms in India.

SECOND SEMESTER

CORE –III : INTRODUCTORY MACROECONOMICS

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper, students should have:

- CO1. Develop an understanding of the interrelationships among the various macroeconomic variables and the way they impact upon the working of the economy as a whole, thereby determining the course of the economy.
- CO2. Explain the concepts of Macroeconomics and its interrelations with Microeconomics.
- CO3. Associate the current economic phenomenon with existing theory and put their views on contemporary economic issues.
- CO4. Apply the principle of Macroeconomics in explaining the behaviour of Macroeconomic variables at national as well as global level.
- CO5. Student would be able discuss scope and importance of Macroeconomics, Circular flow of aggregate income and expenditure, the measurement of national product, Short run economic fluctuations and The Keynesian Principle of Effective Demand.

CORE-IV : MATHEMATICAL METHODS FOR ECONOMICS II

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper, students should:

- CO1. Be able to understand input-output analysis and have the capacity to determine the equilibrium industry output.
- CO2. Have understood characterizations, properties and applications of convex sets and convex functions.
- CO3. Be able to solve optimization with equality and inequality constraints.
- CO4. Have knowledge on application of differential calculus and integration for studying economic relationships.
- CO5. Develop understanding of the general equilibrium through the mathematical framework of input-output analysis technique.

GE-II: INDIAN ECONOMY II
(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper, students should:

- CO1. This will help to explain the importance of external sector in India, nation's performance by evaluating export and import and the role of different international organisation in achieving the objective of growth and development.
- CO2. It may help to know the role and importance of financial markets, the policy of monetary institutions which will help to bring macroeconomic stability.
- CO3. This would help to know the role of public authority in a developing nation, and how the authority can bring more welfare by experiencing the trade-off between equity and efficiency.
- CO4. This will help to give a clear picture of contemporary issues that the economy is facing and the way forward.
- CO5. It will help in developing the conceptual framework of government policies and programmes.

THIRD SEMESTER
CORE-V : MICROECONOMICS I
(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper, students should:

- CO1. Ability to read and work with graphs.
- CO2. Knowledge on workings of the market economy.
- CO3. Basic understanding of individual consumer agents and their decision making behaviour.
- CO4. Basic understanding of producer behaviour, cost concepts, and optimum output.
- CO5. Basic ideas and tools of microeconomics which will be used throughout the other courses of the degree programme.

CORE-VI : MACROECONOMICS I
(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper, students should:

- CO1. This unit would help students in critically understanding various consumption and investment theories and their implication in economic policy making.
- CO2. This unit familiarizes students with various theoretical approaches to money demand. It also conceptually delineates various methods use in the estimation of money supply.

- CO3. This unit unravels major policy debates in macroeconomic policy making by providing both theoretical and conceptual understanding in determining the role of fiscal and monetary policies.
- CO4. It acquaints students with one of the pressing macroeconomic policy issues of time, i.e., trade-off between unemployment and inflation targeting by providing critical understanding of the existing theoretical and empirical debates.

CORE-VII : STATISTICAL METHODS FOR ECONOMICS

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper, students should:

- CO1. This course will help the students to understand the issues regarding data collection, processing organizing and presentation and the issues involved therein.
- CO2. Students will understand the basic concepts of descriptive and inferential statistics.
- CO3. It will help students to understand situations radically and solve them
- CO4. Students will be able to get a complete idea of any economic theory or principle with its analytical framework.
- CO5. Students will be able to enhance their ability to examine any existing fundamental theory through statistical methods.

FOURTH SEMESTER

CORE-VIII: MICROECONOMICS II

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper, students should:

- CO1. Be able to understand the principles of microeconomics, the decision making of firms and the functioning of the market.
- CO2. Be able to understand basic microeconomic analysis to study different market structures.
- CO3. Have knowledge of decision-making process of firms in different kinds of markets.
- CO4. Be able to understand various game theoretic models on Oligopoly such as Cournot, Bertrand, Stackelberg, Cartel and Price Leadership.
- CO5. Be able to understand the basic concepts of general equilibrium, efficiency and welfare.

CORE-IX: MACROECONOMICS-II

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper, students should:

- CO1. Provides a critical understanding of one of the most accepted economic growth models of our time – the Solow Model. It also extends the model by factoring in endogenous variables in explaining the ongoing growth trajectories across the world
- CO2. This unit familiarizes students with open economy macroeconomics and the policy debates therein. It critically deals with the various exchange rate regimes and the appropriateness of policy making in resolving the international balance of payment differences.
- CO3. This unit exposes students with major theoretical contestation in macroeconomics. It helps students to develop critical insights into the Classical and Keynesian debates on employment and output determination.
- CO4. Provides theoretical perspective into Monetarist School and New Classical School. It emphasises role of expectation in devising appropriate monetary policy frameworks for economic stabilisation.

CORE- C-X : RESEARCH METHODOLOGY

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper

- CO1. This would elaborate the meaning, scope of research, how quality research can be carried out and the possible outcome of research.
- CO2. This will help to find out what the research problem is, process to define research problem and how the problem can be addressed in a better way.
- CO3. This will help to define the techniques related to research and also explain the technical difficulties that a researcher may face throughout the research period.
- CO4. This would help to develop skills in qualitative and quantitative data analysis and Classical and Keynesian debates on employment and output determination.
- CO5. Provides theoretical perspective into Monetarist School and New Classical School. It emphasises role of expectation in devising appropriate monetary policy frameworks for economic stabilisation.

FIFTH SEMESTER

CORE-XI : INDIAN ECONOMY I

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper

- CO1. It will result in comprehensive understanding of Indian Economy. It will help in developing the conceptual framework of govt policies and programmes.
- CO2. It will acquaint students with latest data and will enhance analytical skills.

- CO3. The course will help in sharpening the analytical thinking of the student.
- CO4. After studying the structure aspects of Indian Economy, students will be exposed to economic reforms in India and problems of Indian economy.
- CO5. It will highlight an integrated approach to the functioning aspects of the Indian economy keeping in view the scope for alternative approaches.

CORE-XII : DEVELOPMENT ECONOMICS-I

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper

- CO1. This unit aims to provide a holistic perspective on the question of development by contrasting it to the conventional growth centric economics. It also familiarises students with various measurements that are used in assessing development outcomes.
- CO2. This unit informs students about historicity of development thinking. It helps to critically understand various theoretical advances – starting from the Classical to the Solow – in development economics and their strength in explaining current economic phenomenon.
- CO3. Critically engages students to help comprehending major policy debates on the question of poverty and inequality. This unit also provides a detailed understanding about the role of agricultural and industrial sectors in economic development.
- CO5. Helps students to appreciate the role of institutions, both formal and informal, in economic development. Critically, it delineates the role of culture, market and state explaining economic disparities across the nations.

DSE-I: ECONOMIC HISTORY OF INDIA (1857-1947)

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper

- CO1. Familiarises students with colonial history of India and how it shaped various economic indicators such as national income, population growth and occupational structure. This unit helps students in comprehend the colonial legacy of India.
- CO2. This unit critically deals with the agricultural sector in colonial India. It provides nuanced understanding of prevailing agrarian structure in the country – land relation, agricultural markets and institutions. It also discusses the reasons behind low agricultural productivity in India.
- CO3. Critically engages students with the de-industrialisation debate during the colonial rule in India. This unit provides students a comprehensive understanding about the evolution of industrial structure, especially, during inter-war period; and how it shaped the labour relation in India.
- CO4. Helps students to comprehend the political economy of imperialism and its impact on Indian economy at large. This unit discusses the role of imperialism on wealth, international trade, capital flows and fiscal policy in India.

DSE-I : PUBLIC ECONOMICS

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper

- CO1. It provides a wider scope to students for studying the implications of macroeconomic policies on the Economy.
- CO2. It will help to examine the rationale for government intervention in a market economy, the assessment of public policy, and the impact of government expenditures and taxation on the economy and the citizen.
- CO3. It provides a framework about the role of Government sector in providing public goods for welfare.
- CO4. It will create familiarity with the micro and macro aspects of public expenditure. An understanding of the mechanics of government budget. Familiarity with the different aspects of fiscal federalism, acquaintance with the technique of cost-benefit analysis for project appraisal, understanding of various aspects of fiscal policy and debt management.
- CO5. It will help in understanding and analysing the impact of public policy on the allocation of resources and the distribution of income in the economy and also analysis of public expenditures, taxation, budgetary procedures, stabilization instruments, debt issues.

DSE-II: INTRODUCTORY ECONOMETRICS

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper

- CO1. This course introduces students to the econometric methods used to conduct empirical analysis in Economics.
- CO2. Econometric methods will prove particularly useful for understanding the interrelationships in the economic variables.
- CO3. Students will learn the use of econometrics with greater precision and establishing such relationships.
- CO4. The course is designed to provide the students with the basic quantitative techniques needed to undertake applied research projects.
- CO5. Students will learn to estimate linear models using ordinary least squares and make inferences about population parameters.

DSE-II: ODISHA ECONOMY

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper, students should learn

- CO1. Increasing the ability of the students to understand the policies and issues of the Odisha Economy via establishing a linkage between theory and policy.

- CO2. Improving the thinking-based abilities of the students on various socio-economic problems of the state and to carry out effective research.
- CO3. Enabling the students to prepare for various competitive examinations based on the information of the state economy.
- CO4. Developing the understanding of the students about various concepts and dynamics of Odisha economy.
- CO5. Enhancing the moral, social and ethical values of the students in regard to identifying socio-economic issues for future research.

DSE-II: MONEY AND BANKING

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper

- CO1. Enhancing the ability of the students to establish the linkage between banking theory and practice.
- CO2. Improving the analytical skill of the students relating to the functioning of the money and banking system.
- CO3. Nurturing the research-oriented ability of the students relating to financial issues.
- CO4. Improving the understanding of the students about various concepts and dynamics of banking system.
- CO5. Enhancing the moral and ethical values of the students about banking structure and financial institutions.

SIXTH SEMESTER CORE-XIII : INDIAN ECONOMY II

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper

- CO1. Student will be able to understand the relevance of agriculture, industry and service sector in shaping Indian economy.
- CO2. This paper helps students to get knowledge about the factors which help in better performance of agriculture, industry and service sector; and the policies made for these three sectors.
- CO3. Students will learn about the role, composition and direction of foreign trade, Balance of Payments (BOPs) and Trade policies in India.
- CO4. This course is designed to provide the knowledge about the role of environment and climate change on Indian economy and the policies for the improvement of environment in India.
- CO5. Finally, it facilitates students to learn the development pattern adopted in India and evaluate its impact on economic development in India.

CORE COURSE- C-XIV: DEVELOPMENT ECONOMICS-II

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper

- CO1. Familiarises students with various concepts used in demography. It critically deliberates the issues surrounding population, migration and development.
- CO2. This unit critically deals with the various reasons behind international dualism in economic development. It evaluates the role of international exchanges on unequal development across centre and periphery.
- CO3. Critically engages students with the basic issues of environment and economic development. It also helps comprehend the critical role of sustainable development in enabling overall progress human civilisation.
- CO4. Helps students to comprehend the role of international trade in economic development. It provides critical insights into various trade policy debates. Moreover, it also sheds light upon the unabated role of financial capital in determining global economic development.

DSE III: ENVIRONMENTAL ECONOMICS

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper

- CO1. It would help to know the relevance of environmental economics for a developing nation, contemporary issues related to environment, and different environmental laws and protocols.
- CO2. It will explain how externalities, public goods etc. can cause a problem to the environment and how the society can tackle the major issues through different theoretical approaches.
- CO3. It would also help to assess different scientific methods used to measure the environmental damages.
- CO4. This will help the student to bring a logical views of command and market based economy.
- CO5. It will help to examine issues in the contemporary environmental discourse from an economists' point of view.

DSE-IV: HISTORY OF ECONOMIC THOUGHT

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper

- CO1. Familiarises students with the antecedent of economic thoughts in the world – beginning from the Mercantilism to Ricardian Theory. This unit helps students understand the contribution of Classical Political Economy to the development of economic theory.

- CO2. This unit critically exposes students to the major debates between Classical political economist and Marx's analysis of economic system. It provides an insight into Malthusian population theory, Marxian political economy and Mill's utilitarian approach to economic analysis.
- CO3. Critically engages students with the major economic contribution of Marginalist school starting from Jevons to Marshal. Moreover, students will be acquainted with the major theoretical differences between Keynesian Economics and Neo-Classical Economics on determination on income, employment and interest rate in the economic system.
- CO4. The last unit helps students acknowledge the major contribution of Indian economic thinkers to the economics science. The relevance of Kautilya's Arthasashtra is discussed along the modern economic thinkers such as Naroji and Gandhi. Moreover, it also helps students to critically compare Indian economic thoughts with the western economic thought.

DSE IV: INTERNATIONAL ECONOMICS

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper

- CO1. This will help to analyse the importance of international trade for an economy by illustrating different trade theories.
- CO2. This will help to analyse the economic relationships, issues, opportunities among different nations.
- CO3. It would help to enlarge the understanding of current trade policies of different international institutions/organisations and how they help to facilitate the objective of globalisation.
- CO4. This would help to know the meaning, construction of indices through which student can be able to evaluate financial position of different countries.
- CO5. This help students to enlarge the idea of various mechanics/approaches which would help to correct the poor financial position of a nation globally.

DSE-IV: AGRICULTURAL ECONOMICS

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper

- CO1. Increasing the ability of the students to understand the importance of agricultural economics via establish a linkage between theory, policy and practice.
- CO2. Developing the analytical thinking of the students on various issues and policy of agricultural economics.
- CO3. Prepare students for pursuing research and innovation in various contemporary issues of agricultural economics at national and international level.
- CO4. Improving the understanding of the students with ability to think rationally, analyse situations and solve problems adequately.

- CO5. Enhancing the moral, social and ethical values of the students in regard to identifying socio-economic issues for future research on agricultural economics.

DSE-IV: PROJECT/DISSERTATION

(6 CREDIT) (FM: 100)

Course Outcomes

After reading this paper

- CO1. Have knowledge and skills to plan, and engage in, an independent and sustained critical investigation and evaluation of a chosen research topic relevant to economy, environment and society.
- CO2. Have knowledge and skills to systematically identify relevant theory and concepts, relate these to appropriate methodologies and evidence, apply appropriate techniques and draw appropriate conclusions.
- CO3. Have knowledge and skills to appropriately apply qualitative and/or quantitative evaluation processes to original data.
- CO4. Have knowledge and skills to understand and apply ethical standards of conduct in the collection and evaluation of data and other resources.

AECC – I: ENVIRONMENTAL STUDIES AND DISASTER MANAGEMENT

(4 CREDIT) (FM: 100)

Course Outcomes

After completion of the course the students shall be able to:

- CO1. Students understand about problems of environmental pollution and Impact of pollution on human and ecosystem and control measures.
- CO2. Students will learn about increase in population growth and understand the issues of use of resources in proper manner leading to sustainable development.
- CO3. Learn about causes and impacts of Disasters and Case studies of National and Global disasters and risk reduction approaches of Disasters with safety issues in mitigating Industrial disasters.
- CO4. Basic idea about the mode of transmission and course of some communicable and Non-communicable diseases and knowledge on the Importance and methods of prevention of epidemics and pandemics

ABILITY ENHANCEMENT COMPULSORY COURSE (AECC)-II

(4 CREDIT) (FM: 100)

Course Outcomes

After reading this paper

- CO1. Students of all departments of the University can easily present their theoretical knowledge in Odia by studying Odia Grammar and Communication skills in the course

- CO2. Students of Science, Social Science and Humanities can fluently discuss their discipline specific learnings and ideas, research findings in their mother tongue (ODIA).
- CO3. Though we receive higher education in various subjects through various medium of instruction, it is always more convenient to express oneself in one's mother tongue ODIA.
- CO4. Odia language is essential for Professionals like a doctor, scientist or educator to become intelligible as well as amiable for others.

**ABILITY ENHANCEMENT COMPULSORY COURSE (AECC) II: MIL –
ALTERNATIVE ENGLISH
(4 CREDIT) (FM: 100)**

Course Outcomes

After reading this paper

- CO1. Demonstrate high-level proficiency in writing and speaking English
- CO2. Employ effectively the language of their discipline
- CO3. Develop skills in organizing and expressing ideas and viewpoints with clarity and coherence in writing and speech
- CO4. Formulate and defend original arguments
- CO5. Enumerate skills in narration, description, and argumentation
- CO6. Ascertain insight into different cultures
- CO7. Gain good knowledge that includes understanding recent developments in language and literature
- CO8. To develop an acumen for a better understanding of the diversity of human experiences
- CO9. Acquire an openness to new ideas, perspectives, and ways of thinking
- CO10. Enhance literary and critical thinking

**ABILITY ENHANCEMENT COMPULSORY COURSE (AECC) II: MIL – HINDI
(4 CREDIT) (FM: 100)**

Course Outcomes

After reading this paper

- CO1. Students of all departments of the University can easily present their theoretical knowledge in Hindi by studying Hindi Grammar and Communication skills in the course
- CO2. Students of Science, Social Science and Humanities can fluently discuss their discipline specific learnings and ideas, research findings in Hindi.
- CO3. Though we receive higher education in various subjects through various medium of instruction, it is always more convenient to express oneself in national language Hindi.

- CO4. Hindi language is essential for Professionals like a doctor, scientist or educator to become intelligible as well as amiable for others.

SKILL ENHANCEMENT COURSE (SEC-I): COMMUNICATIVE ENGLISH
(4 CREDIT) (FM: 100)

Course Outcomes

After reading this paper students will

- CO1. Enhance their ability to build and enrich their communication skills
- CO2. Be able to build up the four primary skills in students in the academic as well as in the wider domains of use like public offices.
- CO3. Acquire analytical and comprehension reading skills
- CO4. Identify basic principles of communication
- CO5. Build speaking and listening skills
- CO6. Learn beyond the conventional syllabus and be prepared to meet challenges while seeking a job
- CO7. Be able to synthesize knowledge and use it creatively to better understand and improvise themselves
- CO8. Be able to communicate effectively through written reports, presentations, and discussions
- CO9. Develop a neutral accent and improve general standard of pronunciation
- CO10. Speak globally intelligible English

Skill Enhancement Course (SEC-I):

**QUANTITATIVE APTITUDE, DATA INTERPRETATION &
LOGICAL REASONING**

(4 CREDIT) (FM: 100)

Course Outcomes

After completion of the course the students shall be able to:

- CO1. Detect errors of grammar and usage in a given sentence/text and rectify them by making appropriate changes.
- CO2. Solve questions based on critical reasoning.
- CO3. Analyse reading passages and quickly find out the correct responses to questions asked by
- CO4. Using reading skills like skimming, scanning, reading between the lines, etc.
- CO5. To use idiomatic expressions in writing and speaking and to solve questions based on them.

M.A. IN ECONOMICS

Program Outcomes

- PO1: Prepare students to develop critical thinking to carry out investigation about various socio- economic issues objectively while bridging the gap between theory and practice.
- PO2: Equip the student with skills to analyze problems, formulate a hypothesis, evaluate and validate results and draw reasonable conclusions thereof.
- PO3: Prepare students for pursuing research and innovation at national and international level.
- PO4: Prepare students to develop own thinking /opinion regarding current national or international policies and issues.
- PO5: Equip students with entrepreneurial capabilities.
- PO6: Enhancing students' employability through research and industry-oriented teaching and practical exposure.
- PO7: Enabling students with abilities to qualify various competitive examinations and national level fellowships such as NET/JRF.
- PO8: Imparting hands-on training in statistical software packages used in the field of research and industry such as Excel, EViews, STATA, R, etc. in order to enhance computational ability of students.
- PO9: Equip students with ethical, moral, and social values.

Program Specific Outcomes

- PSO1: Understanding the basic assumptions in various economic theories and enhance capabilities of developing ideas based on them.
- PSO2: Prepare and motivate students for research studies in Economics especially by developing questionnaire, collecting primary data through field surveys.
- PSO3: Provide knowledge of a wide range of econometric techniques using excel or other statistical software.
- PSO4: Motivate students to extract or utilize different websites for secondary data collection, generating concepts for various facets of economic studies and gather latest information provided by various Universities, UGC, or ICSSR.
- PSO5: Motivate students in preparing for various competitive examinations, NET, SET, Indian Economic Service etc., by developing or gaining value addition day by day by giving assignments, by following a routine or developing discipline / concentration

FIRST SEMESTER

HC-101: MICRO ECONOMICS I

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

On completion of this course, the students will be able to:

- CO1. Developing the analytical skill and ability of the students and bridging the gap between theory and practice.
- CO2. Preparing the students in Research and Innovation.
- CO3. Encouraging Analytical thinking and entrepreneurial capabilities.
- CO4. Enhancing the ability to qualify national level examinations with hands on training in statistical packages.
- CO5. Developing the moral, ethical and social values on various issues.

HC-102: MACRO ECONOMICS I

Course Outcomes (Cos)

CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

On completion of this course, the students will be able to:

- CO1. Familiarises students with the circular flows of income in an economy. The unit provides a nuance understanding of economic measurements that are used in national income accounting. Further, it also helps students understand frontier practices in BOP accounting, green accounting.
- CO2. This unit exposes students with major theoretical contestation in macroeconomics. It helps students to develop critical insights into the Classical and Keynesian debates on employment and output determination
- CO3. Provides a critical understanding on various consumption thesis – from Keynesian to New- Classical theory; what are the major determinants of household's consumption function and how it influences the policy arena.
- CO4. This unit exposes students to critically understand major thinking on investment decision making. It helps analyses various motives behind business investments and how these motives influence the macroeconomic policy making.
- CO5. Provides theoretical perspective on money market. It critically discusses various theoretical approaches to money – from Classical to New Keynesian and Post-Keynesian.

HC-103: STATISTICAL METHOD FOR ECONOMICS

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

On completion of this course, the students will be able to:

- CO1. This course will help the students to understand the issues regarding data collection, processing organizing and presentation and the issues involved therein.
- CO2. Students will be able to understand the basic concepts of descriptive and inferential statistics.
- CO3. Students will be able to enhance their ability to examine any existing fundamental theory through statistical methods.
- CO4. Students will be able to get a complete idea of any economic theory or principle with its analytical framework.
- CO5. It will help students understand situations radically and solve them

HC-104: FINANCIAL INSTITUTIONS AND MARKETS

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

On completion of this course, the students will be able to:

- CO1. Developing the skill based thinking analytics and bridging the gap between theory and practice.
- CO2. Preparing the students about various banking and finance related research issues and problems.
- CO3. Enhancing the understanding of the students about various financial issues, policies, institutions and markets.
- CO4. Encouraging the students to identify finance based research and innovation issues.
- CO5. Developing the moral, ethical and social values on issues relating to banking and financial structure of the economy.

AC-101: COMPUTER APPLICATIONS IN TEACHING LEARNING

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of the course, the students will be able to:

- CO1. Learn basis of Basics of MS Windows. (Remembering)
- CO2. Demonstrate basic understanding of computer applications with reference to MS Windows, MS excel and MS PowerPoint. (Applying)
- CO3. Generate spreadsheets, charts and presentations. (Creating)

- CO4. Design personal, academic and business documents using MS Office. (Creating)
- CO5. Model the modes of development of self-learning materials and prepare different types of instructional material. (Applying)
- CO6. Explain different OERs, MOOCs available for effective learning. (Understanding)
- CO7. Develop learners' e-portfolios. (Creating)
- CO8. Classify various e-resources for effective learning. (Analyzing)
- CO9. Describe the concept of artificial intelligence and its applications in teaching learning. (Understanding)
- CO10. Determine similarity index of the various documents like dissertations, theses etc through plagiarism testing software. (Evaluating)

SECOND SEMESTER

HC-201: MICRO ECONOMICS II

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students should have:

- CO1. Developing the analytical and applied skill of the students.
- CO2. To bridge the gap and establish linkage between micro theory policy and practice.
- CO3. Preparing the students in identifying research and innovation issues relating to micro theory and policy.
- CO4. Enhancing the fundamental understanding of the students to qualify national level examinations.
- CO5. Developing the moral, ethical and social values on contemporary issues & policies.

HC-202: MACRO ECONOMICS II

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students should have:

- CO1. Students are familiarised with various theoretical approaches to money supply. It further acquaints various measurement that are used in the analysis of money market. Students are also exposed to various methods deployed by the RBI for stabilisation policy.
- CO2. This unit helps to understand Neo-Classical & Keynesian views of interest rate determination by using IS-LM model. Further, it also critically helps in analysing the efficacy of monetary and fiscal policies under various circumstances.

- CO3. It acquaints students with one of the pressing macroeconomic policy issues of our time, i.e., trade-off between unemployment and inflation targeting by providing critical understanding of the existing theoretical and empirical debates.
- CO4. Provides various theoretical perspective to understand economic fluctuation and reason thereto. This unit critically discusses different theoretical arguments on Business Cycle.
- CO5. Acquaints students with new theoretical developments in macroeconomic policy making, especially, by emphasising on the role of expectation. Further, it also stresses the role of expectation in macroeconomic policy making.

HC-203: MATHEMATICAL METHODS FOR ECONOMICS

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students should have:

- CO1. Students learn the use of mathematical methods in economics.
- CO2. It helps students to model economic questions in mathematical framework.
- CO3. Students will be able to master the essential concept and techniques of optimisation, linear programming and its application in economic problems.
- CO4. Students also familiar with the concept and techniques of input output model and game theory.
- CO5. Students understand the essential mathematical assumptions made in economic modelling

HC-204: AGRICULTURAL ECONOMICS

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students should have

- CO1. Developing the ability of the students to understand the importance of agricultural economics via establish a linkage between theory, policy and practice.
- CO2. Improving the analytical thinking-based abilities of the students on various issues and policy of agricultural economics.
- CO3. Prepare students for pursuing research and innovation in various contemporary issues of agricultural economics at national and international level.
- CO4. Improving the understanding of the students with ability to think rationally, analyse situations and solve problems adequately.
- CO5. Enhancing the moral, social and ethical values of the students in regard to identifying socio-economic issues for future research on agricultural economics.

CE-201: BASIC ECONOMETRICS COURSE

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes (COS)

After reading this paper, students should:

- CO1. Understand the stochastic relation, randomness in empirical models and various types of data.
- CO2. Enhance knowledge on Classical Linear Regression Model, assumptions, and its properties
- CO3. Be able to estimate economic relations and draw inferences from them.
- CO4. Have knowledge on problems in estimation such as multicollinearity, heteroscedasticity and autocorrelation and its remedial measures.
- CO5. Be able to predict future values based on historical data and derive policy recommendations.

CE-201: BANKING THEORY & PRACTICE

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students should have:

- CO1. Enhancing the ability of the students to establish the linkage between banking theory and practice.
- CO2. Improving the analytical skill of the students relating to the functioning of the banking system.
- CO3. Nurturing the research-oriented ability of the students relating to financial issues.
- CO4. Improving the understanding of the students about various concepts and dynamics of banking system.
- CO5. Enhancing the moral and ethical values of the students about banking structure and financial institutions.

OE-201: ODISHA ECONOMIC PROBLEMS & POLICIES

(CREDITS:4) (End-Sem:50)

Course Outcomes

After reading this paper, students should have:

- CO1. Developing the ability of the students to understand the policies and issues of the Odisha Economy and thereby to establish a linkage between theory, policy and practice.
- CO2. Improving the thinking-based abilities of the students on various socio-economic problems of the state and to carry out effective research.
- CO3. Enabling the students to prepare for various competitive examinations based on the information of the state economy.

CO4. Improving the understanding of the students about various concepts and dynamics of Odisha economy.

CO5. Enhancing the moral, social and ethical values of the students in regard to identifying socio-economic issues for future research.

THIRD SEMESTER

HC-301: RESEARCH METHODOLOGY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes (Cos)

After reading this paper, students should have:

- CO1. Increasing the ability of the students to identify socio-economic issues for research.
- CO2. Improving the knowledge and understanding about various research skills, techniques and methods.
- CO3. Encouraging students for hands on practices in statistical packages like STATA, E- Views, SPSS, Excel and R etc.
- CO4. Developing the ability of the students for data collection, entry, analysis and interpretation.
- CO5. Enhancing the capability of the students to carryout innovative research based on socio- psychological and moral values.

HC-302: INTERNATIONAL ECONOMICS

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes (Cos)

After reading this paper, students should have:

- CO1. Students are familiarised with various theoretical approaches to international trade. Critically discusses the pure trade theories – beginning from the classical political economy to the modern neo-classical theory – under various circumstances.
- CO2. This unit raises some important political question on the efficacy of international trade when it comes to sharing gains between developed and developing countries out of the trade. It exposes students about the merits and shortcomings of various trade policies that are being increasingly advocated by the policy makers to improve the terms of trade.
- CO3. It acquaints students with the received theories on trade intervention and its economic effects on national income, output, employment and income distribution. The students are also critically informed about the political economy of the trade barrier and its possible welfare implication for the nation state.
- CO4. Provides critical insights into the various nuances of balance of payments, including the reasons behind its disequilibrium. The role of different exchange rate regime leads to different kind of adjustment in the BOP. Further, it also critically discusses the role of different policies used in the deficit correction.

- CO5. Students are acquainted with various available policy measures that are being used for achieving internal and external equilibrium, simultaneous under alternative exchange rate regimes. It further helps students critically understand the role of different exchange rate regime in shaping the economic fortune of developing countries.

CORE COURSE: HC-303:PUBLIC FINANCE THEORY AND PRACTICE

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students should have:

- CO1. Enhancing the ability of the students to establish the linkage between theory and practice.
- CO2. Improving the analysing and innovative skill of the students.
- CO3. Raising the research-oriented ability of the students to public policy issues.
- CO4. Enhancing the moral, social and ethical values of the students about public policies and public institutions.
- CO5. Improving the understanding of the students about various concepts and dynamics of public finance issues.

CE-301: MATHEMATICAL ECONOMICS

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students should have:

- CO1. Enhancing the skill and ability of the students to make an objective analysis of economic concept and issues.
- CO2. Developing the idea and understanding of the students about mathematical tools and techniques.
- CO3. Enabling the students to do mathematical applications in economic issues of research.
- CO4. Preparing the students for national level competitive examinations.
- CO5. Developing the base of making analytical and applied understanding of various concepts and aspects in economics.

CE-301: INDIAN ECONOMIC PROBLEMS AND POLICIES

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students should have:

- CO1. Develop critical thinking among students regarding various economic issues of India.
- CO2. Improving the analytical and communicative skill of the students via establishing the Interlinkage between theory and practice.

- CO3. Nurturing the research-oriented ability of the students relating to various contemporary issues Indian economy.
- CO4. Encouraging students with the opportunity to focus on applied and policy issues in Indian Economy.
- CO5. Enhancing the moral and ethical values of the students with ability to think rationally, analyze situations and solve problems adequately.

CE-302: ADVANCED ECONOMETRICS

CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students should:

- CO1. Be able to develop analytical skills to design and evaluate critically any econometrics research projects.
- CO2. Be able to develop technical skills which would enable them to understand and apply highly sophisticated econometric tools.
- CO3. Have enhanced ability in computer programming skills in order to be able to implement their technical knowledge in practice.
- CO4. Be able to explain core concepts and techniques in dummy dependent variable models, causality and cointegration approaches, simultaneous equation models, principal component analysis, and time-series econometrics
- CO5. Have capacity to conduct research with secondary data using econometric and statistical software and critically evaluate the research output and make conclusions thereof.

CE-302: ECONOMICS OF GENDER

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students should have

- CO1. This course helps students to get basic understanding of the gender and its relations with economic discipline.
- CO2. It helps to improve student's knowledge about policy and practical development of gender economics field.
- CO3. It helps students to get aware about gender equality in education, health and income and the need for women empowerment.
- CO4. Students get knowledge about role of gender in gender budgeting and sustainable economic development.
- CO5. It gives knowledge to students to critically examine and assess economic theories and policies from gender perspective.

CE-302: INDUSTRIAL ECONOMICS
(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students should have:

- CO1. It helps students to get basic idea about the performance of industrial sector in post liberalisation.
- CO2. It helps the students to understand the organizational form i.e., individual ownership, partnership and joint stock companies of industrial sector.
- CO3. Students learn industrial sector growth and productivity; and how it helps in long run economic phenomena like economic growth and national productivity
- CO4. Finally, it helps students to understand the need of industrial finance and the obstacles of financing industrial sector.
- CO5. At the end, it provides the knowledge about the role of World Trade Organisation in Indian industries.

FI-301: FIELD INTERNSHIP
(CREDITS:3) (End-Sem:50)

Course Outcomes

After reading this paper, students should:

- CO1. Have capacity to explore career opportunities prior to completion of graduation.
- CO2. Have hands on experience on the nexus between theory and practice. Also, assess interests and abilities in their field of study.
- CO3. Develop work habits and attitudes necessary for professional excellence and build a record of work experience.
- CO4. Develop communication, interpersonal and other critical skills to prepare for the job interview process.
- CO5. Acquire employment contacts leading directly to a full-time job following graduation from college.

FOURTH SEMESTER
CORE COURSE- HC-401:
DEVELOPMENT ECONOMICS
(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students should have:

- CO1. This unit aims to provide a holistic perspective on the question of development“ by contrasting it to the conventional growth centric economics. It also familiarises students with various measurements that are used in assessing development outcomes by the international agencies.

- CO2. This unit informs students about historicity of development thinking – starting from the classical theory to the modern understanding of development. Moreover, it help students to develop critical understanding on the way development is understood in the modern time.
- CO3. This unit informs students about different growth models that are being propagated over the time. It helps to critically understand various theoretical advances – starting from the Harrod-Domar Exogenous growth model to the Romer’s Endogenous growth model – in growth economics and their strength in explaining current economic growth across the world
- CO4. This unit furthers the arguments placed in the previous unit by taking into account the most recent developments in the growth theories. It helps students critically understand the role of human capital and technology for the sustainable economic growth.
- CO5. Acquaints students with new conceptual development in the measurement of economic growth. It provides an insight into the role of capital, human resources, natural resources and technological innovation in economic development. Further, the role of state is critically assessed.

CORE COURSE- HC-402:

ECONOMICS OF ENVIRONMENT

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes (Cos)

After reading this paper, students should have:

- CO1. This will help to explain the emergence of environmental economics, its development and goals.
- CO2. It will define the basic environmental issues that an economy may face due to the theory of externalities, public goods etc.
- CO3. It may develop the idea of various approaches to compute major economic resources where market fails.
- CO4. It would help to know the existence, availability, importance and sustainability of naturalresources which influence the growth and developmental aspects.

CORE COURSE- HC-403

DISSERTATION

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students should:

- CO1. Have knowledge and skills to plan, and engage in, an independent and sustained critical investigation and evaluation of a chosen research topic relevant to economy, environment and society.
- CO2. Have knowledge and skills to systematically identify relevant theory and concepts, relate these to appropriate methodologies and evidence, apply appropriate techniques and draw appropriate conclusions.

- CO3. Have knowledge and skills to appropriately apply qualitative and/or quantitative

CORE ELECTIVE-CE-401

INTERNATIONAL FINANCE

(CREDITS:5) (INT :20+10 END-SEM:70)

Course Outcomes (Cos)

After reading this paper, students should have:

- CO1. Preparing students to develop critical thinking to carry out investigation about various global financial issues while bridging the gap between theory and practice.
- CO2. Encouraging students for pursuing higher studies and research at national and international level in various issues of International Finance.
- CO3. Enhancing the understanding of the students about various international financial issues and policies.
- CO4. Enhancing students' employability through research by encouraging them to identify finance based research and innovation issues.
- CO5. Developing the moral, ethical and social values on issues relating international Finance and its importance for developing economy like India.

CE-401 ECONOMICS OF SOCIAL SECTOR

(CREDITS:5) (INT :20+10 END-SEM:70)

Course Outcomes

After reading this paper, students should have:

- CO1. The prime objective of the course is to expose the students to the issues and concerns of various social sectors in India.
- CO2. The course aims to acquaint and familiarize students with the Economics of social sector and to provide a theoretical exposition and meaningful insights into Social Sector Issues.
- CO3. It provides an analysis of issues at the theoretical level and also with regard to specificity of issues prevailing in the Indian context.
- CO4. The Course acquaints with pertinent issues concerning education and Health in India.
- CO5. This course is meant to provide insights into Policy Perspectives of Social Sector in

ALLIED ELLECTIVE-AE-401- THEORY: WOMEN AND SOCIETY

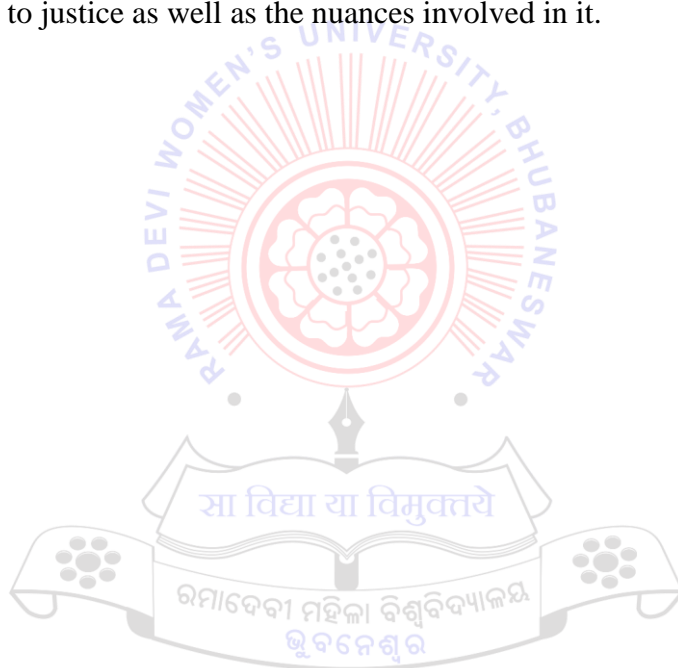
(CREDITS:5)

(INT :20+10 END-SEM:70)

Course Outcomes

After completion of Course students will be able to:

- CO1. Familiarize with the women lead environmental movements and women's participation in the climate resilience natural resources management.
- CO2. Acquire knowledge on the differential impact of climate change disasters.
- CO3. Be familiar with the role of technology and how has ICT brought about a change in on women's everyday lives and livelihoods.
- CO4. It will enhance students' critical thinking in the use and management of technology in different productive sectors across different category of women.
- CO5. Gain an insight into the women and law from rights and equality of opportunity in the access to justice as well as the nuances involved in it.



Ph.D. IN ECONOMICS

Program Outcomes

- PO1: Creation of trained human resources for research in Theoretical and Empirical Modeling in Economics, and in diverse issues relating to Development Economics, through the induction of doctoral students in appropriate research areas.
- PO2: Creation of trained human resources for regional economic research in Odisha and India.
- PO3: Capability enhancement of the doctoral students at the University to undertake funded research projects for external development agencies.
- PO4: Academically exploring and understanding the needs for regional economic development through a continuous dialogue with regional development agencies.
- PO5: Developing economic research on policy issues in the region by instituting a collaborative mechanism.
- PO6: Enhancing the role of Rama Devi Women's University as a major stakeholder within the regional development process.
- PO7: Prepare research scholars to develop critical thinking to carry out investigation about various socio-economic issues objectively while bridging the gap between theory and practice.
- PO8: Enhancing research scholars' employability through research and industry-oriented practical exposure.
- PO9: Imparting hands-on training in statistical software packages used in the field of research and industry such as Excel, EViews, STATA, R, etc. in order to enhance computational ability of research scholars.
- PO10: Equip research scholars with ethical, moral, and social values.

Program Specific Outcomes

- PSO1: Understanding the basic and advanced concepts of microeconomics and macroeconomics for different sectors of the economy.
- PSO2: Understanding the basic assumptions in various economic theories and enhance capabilities of developing ideas based on them.
- PSO3: Derivation of tools and techniques helping empirical determination/estimation of demand, supply, output, money supply, inflation, employment, poverty, GDP, BOP and optimum inputs usage. Distribution of resources for maximum welfare and identifying causes of market failure and its consequences.
- PSO4: Doctoral research tries to deepen specialization in a particular professional direction.
- PSO5: Doctoral research helps in shaping the future of specialist by individual cognitive activities aimed at obtaining new knowledge, solving theoretical and practical problems.

PAPER 01- RESEARCH METHODOLOGY AND COMPUTER APPLICATIONS COURSE OUTCOMES (COS):

Course Outcomes

After reading this paper, students should have the ability

- CO1. To develop the analytical and applied skill of doing research on contemporary issues.
- CO2. To enhance the ability of fundamental research.
- CO3. To improve the knowledge of research methodologies.
- CO4. To enable the use and application of statistical and econometric methods.
- CO5. To develop the moral, ethical and social values of conducting research

PAPER 02- APPLIED MATHEMATICS AND STATISTICS

Course Outcomes

After reading this paper, students should have the ability

- CO1. To enhance the mathematical and statistical understanding of doing research on relevant issues.
- CO2. To improve the ability of making quantitative analysis of research issues.
- CO3. To improve the basic knowledge of mathematics and statistics.
- CO4. To enable the use and application of statistical and mathematical methods in research.
- CO5. To develop new techniques of doing social science research

PAPER 03- REVIEW OF RELATED LITERATURE

Course Outcomes

This paper aims to:

- CO1. Preparing the students to select a problem on which they have to do intensive review of related studies
- CO2. Developing the skill based thinking analytics and bridging the gap between theory and practice.
- CO3. Encouraging the students to identify research gap, research questions and objective of the new research topic.
- CO4. Nurturing the research-oriented ability of the students relating to contemporary issues.
- CO5. Developing the moral, ethical and social values among the students

PAPER 04- RESEARCH AND PUBLICATION ETHICS

Course Outcomes

On completion of this course, the students will be able to:

- CO1. Preparing the students about various fundamental knowledge of basics of philosophy of science and ethics, research integrity, publication ethics.
- CO2. Nurturing the research-oriented ability of the students relating to identification of research problem, research gap, Identify research misconduct and predatory publications.
- CO3. Developing the understanding of the students about Comprehend indexing and citations, open access publications, research metrics (citations, h-index, Impact Factor etc).
- CO4. Create awareness among researchers about publication ethics and publication misconducts and use plagiarism tools for a valid and ethical research report.
- CO5. Developing the moral, ethical and social values on various research-oriented issues.



B.A. EDUCATION

Programme Outcomes

On completion of the programme, the students will be able to:

- PO1: Holistic development of students to create responsible citizenry through social, moral, Cultural, ethical and professional code of conduct.
- PO2: Pursue tech-pedagogical skills by applying critical thinking and analytical power in the field of education.
- PO3: Develop managerial, analytical, communicative, creative, employability and strategic skills to meet the ever changing challenges of the global scenario.
- PO4: Demonstrate advanced knowledge and awareness in the field of education.
- PO5: Review educational research critically and apply in day-to-day life.
- PO6: Evaluate the policies in socio-cultural context of education in India and global perspectives.
- PO7: Understand the learning models, evaluation techniques and implementation strategy in education.
- PO8: Develop essential skills to analyse and interpret data from qualitative and quantitative perspectives.
- PO9: acquired and apply the skills of academic writing for variety of audiences including peers, researchers, teachers and larger professional community.
- PO10: Learn to develop a sense of inclusive education practices.

Programme Specific Outcomes

On completion of the programme, the students will be able to:

- PSO1: Students can go further professional and advanced courses like B.Ed., B.P.Ed., M.A., MBA, Distance education, Adult education and Population education etc.
- PSO2: Acquired passion for interdisciplinary research perspectives like Sociology, Psychology, Philosophy, History, Economics and Political Science etc.
- PSO3: Acquired practical knowledge and skills from various field works, internship, research projects, Community activities, formal and non-formal interactive sessions.
- PSO4: Understand and develop new dimensions of knowledge by opting different open electives to meet the needs of the present society.

FIRST SEMESTER

C-I: EDUCATIONAL PHILOSOPHY

(4 CREDITS)

(FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Understand the concept of education with both narrow and broader meaning of education.
- CO2: Establish relationship between Philosophy and education.

- CO3: Understand common characteristics of Indian Philosophy and western schools of philosophy.
- CO4: Describe the Indian schools of philosophy with its branches and contemporary theories of education.
- CO5: Appreciate the contribution of great thinkers to the field of education at national, international and local levels.

FIRST SEMESTER

C-II: EDUCATIONAL PSYCHOLOGY

(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Establish relationship between education and psychology.
- CO2: Understand common characteristics and scope of Educational Psychology.
- CO3: Describe the different methods used in Educational Psychology.
- CO4: Appreciate the contribution of Educational Psychology to teachers, students and the entire teaching-learning process.
- CO5: Explain the relationship between growth and development and the basic principles of growth and development.

SECOND SEMESTER

C-III: EDUCATIONAL SOCIOLOGY

(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Establish relationship of education with sociology, politics and economics.
- CO2: Understand common characteristics of educational sociology with dynamic scope, as a process of socialization.
- CO3: Describe the importance, role and functions of different agencies of education and Socialization.
- CO4: Appreciate the contribution of education on social change, factors of social change and Social control.
- CO5: Explain the relationship of education with modernization and globalization.

SECOND SEMESTER

C-IV: CHANGING PEDAGOGICAL PERSPECTIVE

(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Establish relationship between teaching and learning with reference to their variables, phases and levels.
- CO2: Understand common characteristics of teaching and learning in actual classroom setting by developing lesson plans on different models.
- CO3: Describe the concept, nature and different theories of teaching in details.
- CO4: Appreciate the contribution of psychological principles of teaching, general principles of teaching and maxims of teaching.
- CO5: Explain the core teaching skills used in the real classroom setting.

THIRD SEMESTER

C-V: EDUCATIONAL ASSESSMENT AND EVALUATION

(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Understand the concept and purposes of assessment, test, measurement and evaluation.
- CO2: Describe the scales of measurement, types of tests, approaches and types of evaluation in light of continuous and comprehensive evaluation.
- CO3: Explore the taxonomy of instructional objectives, criteria for selecting both specific and general instructional learning objectives.
- CO4: Explain the principles, steps and types of test construction.
- CO5: Critically reflect upon different characteristics of a good test; reliability, validity, objectivity and usability.

THIRD SEMESTER

C-VI: EDUCATIONAL RESEARCH

(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Establish relationship between Research and education with reference to concept, types, approaches of educational research.
- CO2: Understand all the steps involved in research study and research proposal.
- CO3: Describe the concept, nature and steps of different research methods used in educational research.

CO4: Critically reflect upon the report writing steps and academic ethics with reference to APA Style.

CO5: Understand all the steps involved in Action Research

THIRD SEMESTER
C-VII: STATISTICS IN EDUCATION
(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Establish relationship between education and statistics.
- CO2: Understand common characteristics, concept, nature and scope of educational statistics.
- CO3: Describe the procedures of data organization and graphical representation of data through different methods.
- CO4: Appreciate the contribution of measure of central tendency in education along with concept, importance, usage and computation.
- CO5: Explain the use of correlation statistical methods in educational setting.

FOURTH SEMESTER
C-VIII: HISTORY OF EDUCATION IN INDIA
(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Understand the features of ancient learning systems; Vedic and Buddhist system with reference to aims of education, curriculum, and methods of teaching and role of teacher.
- CO2: Describe the education system in Medieval India and the relevance of Islamic education.
- CO3: Explore the development of education during Pre-independence India and British rule.
- CO4: Explain the development of education during post-independence era through different Commissions and reports.
- CO5: Explore the development of education recommended by different committee and commissions.

FOURTH SEMESTER
C-IX: CURRICULUM DEVELOPMENT
(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Establish relationship among curriculum, syllabus, and courses of study and text books.
- CO2: Understand the bases, components and design of curriculum.
- CO3: Describe the importance and application of different types of curriculum at school setting.
- CO4: Appreciate the contribution of curriculum construction and organization at different levels of education.
- CO5: Explain the guiding principles of National Curriculum Framework-2005.

FOURTH SEMESTER
C-X: GUIDANCE AND COUNSELLING
(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Establish relationship between Guidance and Education.
- CO2: Understand common characteristics, concept, scope and bases of guidance.
- CO3: Describe the need, importance, purpose and scope of educational and vocational guidance.
- CO4: Appreciate the contribution of guidance programmes at school level for students.
- CO5: Explain the relationship between guidance and counseling and the concept, nature, types, steps, techniques and scope of counselling.

FIFTH SEMESTER
C-XI: DEVELOPMENT OF EDUCATION IN ODISHA
(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Explain the overall status of elementary education in Odisha; history, UEE, NPEGEL and challenges of UEE.
- CO2: Understand current status of secondary and higher secondary education in Odisha; intervening programmes, role and functions of different agencies, issues and challenges.

- CO3: Describe the present status of higher education in Odisha; intervening programmes, role and functions of different agencies, issues and challenges.
- CO4: Explain the status, history, challenges, pre-service and in-service teacher education in Odisha.
- CO5: explain the role of various state and district level institutions in education.

FIFTH SEMESTER

C-XII: INFORMATION AND COMMUNICATION TECHNOLOGY IN EDUCATION

(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Establish relationship between technology and education.
- CO2: Understand the concept, nature, scope, approaches, innovations and importance of educational technology.
- CO3: Describe the concept, nature, scope, relevance, content, pedagogy of ICT in education.
- CO4: Explain the application of software and ICT assessment tools in education.
- CO5: Critically reflect upon different ways to connect with the entire world through ICT both academically and other aspects of life.

FIFTH SEMESTER

DSE-I. A.PEDAGOGY OF LANGUAGE (ENGLISH)

(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course, the students will be able to:

- CO1: Explain the place of English language in school curriculum.
- CO2: Analyze various policy perspectives with regard to English language teaching in India.
- CO3: Describe various pedagogical approaches to English language teaching.
- CO4: Understand different language skills in teaching-learning process.
- CO5: Prepare subject specific lesson plan for improvement of language skills.

FIFTH SEMESTER
DSE-I : PEDAGOGY OF LANGUAGE (ODIA)
(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course, the students will be able to:

- CO1: Explain the concept of Mother Tongue.
- CO2: Justify the importance of teaching Mother Tongue (Odia) at different stages.
- CO3: Describe various pedagogical approaches of language teaching.
- CO4: Prepare subject specific lesson plan for improvement of language skills.
- CO5: Plan and construct test to assess various language skills.

FIFTH SEMESTER
DSE-II: PEDAGOGY OF SOCIAL SCIENCES
(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course, the students will be able to:

- CO1: Explain the place of Social Science in school curriculum.
- CO2: Acquaint themselves with different methods, approaches, and techniques of teaching learning in Social Science.
- CO3: Prepare subject specific lesson plan for Social Science.
- CO4: Prepare and use various teaching aids for effective teaching-learning in Social Science.

FIFTH SEMESTER
DSE-II: B. PEDAGOGY OF MATHEMATICS
(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Establish relationship between education and study of mathematics.
- CO2: Understand the concept, learning objectives, and values of teaching mathematics at different levels of education with reference to NCF-2005.
- CO3: Describe the different methods and approaches to teaching-learning of mathematics.
- CO4: Describe the importance of pedagogical approaches to teaching-learning mathematics.
- CO5: Explain the necessary curricular activities in mathematics in terms of pedagogic analysis, content analysis, methods and strategies and preparation of lesson plans based on different models.

SIXTH SEMESTER

C-XIII: CONTEMPORARY TRENDS AND ISSUES IN INDIAN EDUCATION

(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Explain the concept, nature, scope, issues and challenges of ECCE.
- CO2: Understand concept, intervening programmes, challenges, equity and equality concerns of UEE and community school.
- CO3: Describe the Indian schools of philosophy with its branches and contemporary theories of education.
- CO4: Explain the present status of secondary and higher secondary education; issues and challenges, intervening programmes, role of SMDC, examination reforms, learner based education and vocationalization issues.
- CO5: Critically reflect upon the higher education and teacher education with reference to issues and challenges, intervening programmes, and NCF for 2009.
- CO6: understand the recent emerging trends in education and with the challenges in examinations reform at higher level.

SIXTH SEMESTER

C-XIV EDUCATIONAL MANAGEMENT AND LEADERSHIP

(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Establish relationship between education and management.
- CO2: Understand the concept, nature, scope, principles and types management in education, especially in Odisha.
- CO3: Describe the overall aspects of management in education at different levels; human, material and financial.
- CO4: understand the concept, nature, scope, functions, skills, theories and styles of leadership in education.
- CO5: Explain the concept, nature, scope, importance, principles and planning of total quality management.

SIXTH SEMESTER

DSE-III

A. POLICY AND PRACTICES IN SCHOOL EDUCATION IN INDIA

(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Explain the policies and practices of school education with intervening programmes and challenges.
- CO2: Understand the policies and practices of secondary and higher secondary education with intervening programmes and challenges.
- CO3: Describe the policies and practices of vocational education at different levels along with issues and challenges.
- CO4: Appreciate the introduction of inclusive education, issues and challenges and concerned policies for progress.
- CO5: Critically reflect upon the policies of access and equity concerns in education of different vulnerable and subaltern groups of society.

SIXTH SEMESTER

DSE-III

B. POLICY AND PRACTICES IN HIGHER EDUCATION IN INDIA

(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Establish relationship between Policy practices and education.
- CO2: Understand the policies and practices in higher education with reference to different bodies of reform.
- CO3: Describe the future of higher education in terms of different intervening programmes, progress, autonomy.
- CO4: Appreciate the curriculum and assessment practices in higher education for quality assurance.
- CO5: Critically reflect upon the educational management systems in higher education.

SIXTH SEMESTER

DSE-IV: INCLUSIVE EDUCATION (THEORY)

(4 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Establish relationship between education and inclusive education.

- CO2: Understand meaning, genesis and scope of inclusive education.
- CO3: Describe the different policies and frameworks for the improvement of inclusive education.
- CO4: Understand the support needs of students with disabilities.
- CO5: Critically reflect upon different frameworks, support and collaboration for the achievement of inclusive education.

SIXTH SEMESTER

DSE–IV: DISSERTATIONRESEARCH PROJECT

(4 CREDITS)

(FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Understand the concept of education with both narrow and broader meaning of education.
- CO2: Establish relationship between Philosophy and education.
- CO3: Understand common characteristics of Indian Philosophy and western schools of philosophy.
- CO4: Describe the Indian schools of philosophy with its branches and contemporary theories of education.
- CO5: Appreciate the contribution of great thinkers to the field of education at national, international and local levels.



M.A. IN EDUCATION

Programme Outcomes

On completion of the programme, the students will be able to:

- PO1: Holistic development of students to create responsible citizenry through social, moral, cultural, ethical and professional code of conduct.
- PO2: Pursue advanced research by applying critical thinking and analytical reasoning in the field of education.
- PO3: Develop managerial, analytical, communicative, creative, employability and strategic skills to meet the ever changing challenges of the global scenario.
- PO4: Produce students as global citizenship through quality education.
- PO5: Application of ICT and digital tools in the field of education.
- PO6: Familiarise students with dynamic organizational culture, managerial skills and leadership qualities.
- PO7: Proficiency with the ability to qualify personal, professional, life skill and competitive examinations.
- PO8: Describe and differentiate the process and different models of curriculum development.
- PO9: Enumerate the importance of higher education and analyse various problems and issues for ensuring quality in higher education.
- PO10: Plan appropriate pedagogical treatment of the prescribed contents for effective classroom transactions.

Programme Specific Outcomes

On completion of the programme, the students will be able to:

- PSO1: Students can go further professional courses like B.Ed., M.Ed., B.P.Ed., M.P.Ed., Ph.D., Distance education, Adult education and Population education etc.
- PSO2: Acquired passion for multidisciplinary research in the field of Sociology, Psychology, Philosophy, History, Economics and Political Science etc.
- PSO3: Acquired practical knowledge and skills from various field works, internship, research projects, community activities, formal and non-formal interactive sessions.
- PSO4: Develop new dimensions of knowledge by opting different open and discipline specific electives to meet the needs of the present society.

FIRST SEMESTER
HC-101 PHILOSOPHICAL AND SOCIOLOGICAL PERSPECTIVES OF
EDUCATION
(5 CREDITS) (FM:100)

Course Outcomes

On completion of the course, the students will be able to:

- CO1: Establish relationship between Philosophy and education.
- CO2: Understand common characteristics of Indian Philosophy and western schools of philosophy.
- CO3: Describe the Indian schools of philosophy with its branches and contemporary theories of education.
- CO4: Appreciate the contribution of great thinkers to the field of education at national, international and local levels.
- CO5: Explain the relationship between sociology and education and the role of education in socialization process.

FIRST SEMESTER
HC-102 ADVANCED EDUCATIONAL PSYCHOLOGY
(5 CREDITS) (FM:100)

Course Outcomes

On the completion of the course, the students will be able to:

- CO1: Understand the concept and key principles of different schools of psychology.
- CO2: Describe the contribution of different schools of psychology to education.
- CO3: Develop critical ideas on various theories of learning and processes of learning with their educational implications.
- CO4: Explain the concept and theories of motivation.
- CO5: Develop insight into the theories and measurement of intelligence and creativity.

FIRST SEMESTER
HC-103 EMERGING TRENDS AND ISSUES IN EDUCATION
(5 CREDITS) (FM:100)

Course Outcomes

On the completion of the course the students will be able to;

- CO1: Understand the trends and issues in ECCE and Elementary school education.
- CO2: Analyze the roles of various Government sponsored initiatives in secondary education.
- CO3: Reflect upon scope and problems of Vocationalisation of secondary education.

- CO4: Develop critical ideas on different current policies and practices in higher education.
- CO5: Examine role and functions of various bodies for ensuring quality higher education

FIRST SEMESTER

HC-103 EMERGING TRENDS AND ISSUES IN EDUCATION

(5 CREDITS)

(FM:100)

Course Outcomes

At the end of the course, the students will be able to:

- CO1: Construct different psychological tests and their purpose of application.
- CO2: Develop skills for the administration and interpretation of psychological tools.
- CO3: Conduct case studies and surveys on various areas of education, various programs, practices and community resources.
- CO4: Organise and participate in community awareness programmes and activities.
- CO5: Explore opportunities for bringing improvement among special children

FIRST SEMESTER

AC-101 COMPUTER APPLICATIONS IN TEACHING LEARNING

(5 CREDITS)

(FM:100)

Course Outcomes

At the end of the course, the students will be able to:

- CO1: Learn basis of Basics of MS Windows. (Remembering)
- CO2: Demonstrate basic understanding of computer applications with reference to MS Windows, MS excel and MS PowerPoint. (Applying)
- CO3: Generate spreadsheets, charts and presentations. (Creating)
- CO4: Design personal, academic and business documents using MS Office. (Creating)
- CO5: Model the modes of development of self-learning materials and prepare different types of instructional material. (Applying)

SECOND SEMESTER

HC-201 EDUCATIONAL RESEARCH: QUANTITATIVE PERSPECTIVE AND STATISTICS

(5 CREDITS)

(FM:100)

Course Outcomes

On completion of the course, the students will be able to:

- CO1: Describe the concept, nature and scope of educational research.
- CO2: Differentiate basic, applied and action research.
- CO3: Conduct a literature search and develop a research proposal

- CO4: Formulate hypotheses for their studies.
- CO5: Explain various research designs for educational research.

SECOND SEMESTER
HC-202 CURRICULUM DEVELOPMENT
(5 CREDITS) (FM:100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Explain the concept and bases of curriculum development.
- CO2: Critically examine role of different bodies for curriculum development.
- CO3: Analyze the principles of curriculum development.
- CO4: Describe types of curriculum designs and CBCS.
- CO5: Differentiate models and changes of curriculum development.

SECOND SEMESTER
HC-203 ASSESSMENT AND EVALUATION IN EDUCATION
(5 CREDITS) (FM:100)

Course Outcomes

On completion of the course, the students will be able to:

- CO1: Describe the paradigm shift approaches of assessment from behaviouristic to constructivist approach.
- CO2: Distinguish among measurement, assessment and evaluation.
- CO3: Explain different characteristics of tests.
- CO4: Use wide range of assessment tools, and techniques and construct these appropriately.
- CO5: Calculate item difficulty and discrimination of a test item.

SECOND SEMESTER
HC-204 ACADEMIC TECHNICAL WRITING AND SEMINAR PRESENTATION
(5 CREDITS) (FM:100)

Course Outcomes

On completion of the course, the students will be able to:

- CO1: Describe the meaning, nature and importance of academic writing.
- CO2: Develop the skill of review of books, articles etc.
- CO3: Experience the process of writing and publication
- CO4: Understand process of citation, Impact factor and h-index calculation.
- CO5: Develop skill of writing original manuscripts free from plagiarism.

SECOND SEMESTER
CE-204 PEDAGOGY OF ENGLISH
(5 CREDITS) (FM:100)

Course Outcomes

On completion of the course, the students will be able to:

- CO1: Explain the place of English language in school curriculum.
- CO2: Analyze various policy perspectives with regard to English language teaching in India.
- CO3: Describe various pedagogical approaches to English language teaching.
- CO4: Understand different language skills in teaching-learning process.
- CO5: Prepare subject specific lesson plan for improvement of language skills.

SECOND SEMESTER
CE-204 PEDAGOGY OF ODIA
(5 CREDITS) (FM:100)

Course Outcomes

On completion of the course, the students will be able to:

- CO1: Explain the concept of Mother Tongue.
- CO2: Justify the importance of teaching Mother Tongue (Odia) at different stages.
- CO3: Describe various pedagogical approaches of language teaching.
- CO4: Prepare subject specific lesson plan for improvement of language skills.
- CO5: Plan and construct test to assess various language skills.

SECOND SEMESTER
OE-201 PEDAGOGICAL PERSPECTIVES IN EDUCATION
(5 CREDITS) (FM:100)

Course Outcomes

On the completion of the course, the students will be able to;

- CO1: Explore the pedagogical skills in teaching and assessment techniques.
- CO2: Understand the principles and levels of teaching.
- CO3: Analyze various classroom management techniques.
- CO4: Execute skills of teaching in classroom.

THIRD SEMESTER
HC-301 EDUCATIONAL RESEARCH: QUALITATIVE PERSPECTIVE
(5 CREDITS) (FM: 100)

Course Outcomes

On completion of the course, the students will be able to:

- CO1: Explain importance of qualitative research in education.
- CO2: Conceptualize the nature of different types of Researches in Education.
- CO3: Situate them in a research perspective(s).
- CO4: Select the suitable problem for qualitative research.
- CO5: Explore the basic issues that confront qualitative researchers.

THIRD SEMESTER
HC-302 ICT IN EDUCATION
(5 CREDITS) (FM:100)

Course Outcomes

On the completion of the course the students will be able to:

- CO1: Explain the nature, scope and importance of Educational Technology and ICT.
- CO2: Reflect upon various models of teaching along with their educational implications.
- CO3: Develop e-content and MOOCs in education.
- CO4: Understand the application of computers in education.
- CO5: Use e- learning tools in teaching learning and research.

THIRD SEMESTER
HC-303 RESEARCH PROPOSAL, REVIEW OF RELATED LITERATURE AND TOOLS
(5 CREDITS) (FM:100)

Course Outcomes

At the end of the course, the students will be able to:

- CO1: Select a suitable research problem in an emerging area of education.
- CO2: Review the related literature in the topic of research.
- CO3: Find out a research gap from after conducting review of related literature.
- CO4: Prepare a research proposal on the topic of research.
- CO5: Develop tools like questionnaire, interview schedule, rating scale, Guidelines for FGD etc. for collection of data.

THIRD SEMESTER
CE (A)-301 INCLUSIVE EDUCATION
(5 CREDITS) (FM: 100)

Course Outcomes

On the completion of the course, the students will be able to:

- CO1: Identify the assumptions of disability underlying current general and special education practices.
- CO2: Analyse the policy perspectives for disable children at national and international level.
- CO3: Understand the educational needs of learners with disabilities.
- CO4: Explore and utilize pedagogical approaches that can support students with a variety of learning profiles in respectful ways.
- CO5: Examine various support services and collaboration for inclusive education.

THIRD SEMESTER
CE (B)-301 EARLY CHILDHOOD CARE AND EDUCATION
(5 CREDITS) (FM: 100)

Course Outcomes

On the completion of the course, the students will be able to:

- CO1: Understand the need and significance of early childhood care and education.
- CO2: Explain the contribution of thinkers of education to ECCE.
- CO3: Critically analyse the policy perspectives on ECCE in India and world
- CO4: Reflect upon the scope and problems of quality dimensions in ECCE.
- CO5: Examine the socio-emotional dimensions of curriculum at early stages of education.

THIRD SEMESTER
CE(C)-301 WOMEN EDUCATION
(5 CREDITS) (FM: 100)

Course Outcomes

On the completion of the course the students will be able to:

CO1: Conceptualize the socio-cultural aspects of women education

CO2: Understand the historical development of women education through the ages.

CO3: Critically analyse the current status of women in society.

CO4: Carry out plans for women empowerment.

CO5: Reflect upon various problems and issues of girls and women in society

THIRD SEMESTER
CE-302(A)- EDUCATIONAL MANAGEMENT
(5 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Understand the concept and scope of educational management
- CO2: Explore the concept and styles of leadership, administration process and approaches to it
- CO3: Critically examine the concept of quality management with both national and international perspectives through the ways of quality gurus
- CO4: Explain the concept of educational planning, process and approaches
- CO5: Analyse the management of state agencies of education with quality assurance

THIRD SEMESTER
CE-302(B) TEACHER EDUCATION
(5 CREDITS) (FM: 100)

Course Outcomes

On completion of the course, the students will be able to;

- CO1: Explain concept, aims and objectives of teacher education at different levels.
- CO2: Narrate pre-service and in-service teacher education program at different stage
- CO3: Describe the functions of the institutions and agencies of teacher education
- CO4: Describe the approaches to teacher education and teacher's capacity building professionally.
- CO5: Justify teaching as a profession and code of professional ethics of teachers and teacher educators.

THIRD SEMESTER
CE-302(C) OPEN AND DISTANCE LEARNING
(5 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Explain the concept, epistemology and theories of distance education
- CO2: Discuss the historical perspective and status of distance education.
- CO3: Narrate the concept of distance learners, process and pedagogy of distance learning with challenges in quality assurance in it.
- CO4: Critically examine the instructional process in distance learning.
- CO5: Identify the concept, need, barriers and communication process of counselling in distance education.

THIRD SEMESTER
FI-201- FIELD INTERNSHIP IN EDUCATION
(5 CREDITS) (FM: 100)

Course Outcomes

At the end of the course, the students will be able to:

- CO1: Critically analyse the administrative activities of secondary teacher education program/Secondary school practices/Higher secondary school practices.
- CO2: Discuss the process of curriculum designing and development.
- CO3: Explain evaluation of training processes in in-service centres.
- CO4: Assess the outcomes of training programs.
- CO5: Practice innovative teaching techniques and evaluation in secondary teacher education program/Secondary school practices/Higher secondary school practices

FOURTH SEMESTER
HC-401 - HISTORICAL BASES OF EDUCATION
(5 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Critically examine the ancient system of education.
- CO2: Analyze the impact of ancient educational system on the present educational system.
- CO3: Understand the educational development in medieval India.
- CO4: Evaluate the impact of British educational system on Indian education system.
- CO5: Acquaint them the reports of different commissions on educational improvement in the country.

FOURTH SEMESTER
HC-402 - SELF DEVELOPMENT
(5 CREDITS) (FM: 100)

Course Outcomes

On completion of the course, students will be able to;

- CO1: Identify personality traits, values, skills and interests.
- CO2: Gain self-awareness and emotional awareness.
- CO3: Manage time effectively.
- CO4: Exhibit the qualities of a professional teacher.
- CO5: Develop sensitivity towards socio-cultural issues

FOURTH SEMESTER

HC-403 DISSERTATION (5 CREDITS) (FM: 100)

Course Outcomes

Conducting Research and Writing Report

Course Activities:

- CO1. Each student has to conduct research on a relevant and duly approved educational topic under the supervision of a faculty member of the P.G. Department of Education.
- CO2. The dissertation must be submitted along with a plagiarism free test certificate as per the date notified.
- CO3. The dissertation shall be evaluated jointly by an External Examiner and Internal Examiner (supervisor is the internal examiner) on the basis of relevance of the topic, quality of research input, quality of report and presentation.
- CO4. There shall be an open viva-voice test where all the students of the P.G. and Ph.D. students of the Department will remain present and participate in the discussion of the presentation.
- CO5. The student will be evaluated on the basis of her knowledge of the topic, research methodology followed, style of presentation and clarification of doubts raised by examiners or any other aspect of the research work that the examiners would consider suitable

FOURTH SEMESTER

CE-401(A) - COMPARATIVE EDUCATION (5 CREDITS) (FM: 100)

Course Outcomes

On completion of the course, the students will be able to:

- CO1: Develop understanding about comparative education, its conceptual framework and relevance.
- CO2: Critically examine the different approaches in comparative education.
- CO3: Acquire knowledge to examine the education systems in relation to other countries and international standards.
- CO4: Comprehend the system of education in India and other countries like USA, South Korea in particular.
- CO5: Improve the skills necessary for working with international databases, to critically reflect and to analyse the educational systems from a comparative perspective.

FOURTH SEMESTER

CE-401 (B) PEACE AND HUMAN RIGHTS EDUCATION

(5 CREDITS) (FM: 100)

Course Outcomes

On the completion of the course, the students will be able to;

- CO1: Understand the need of peace education in life and role of education for the establishment of world peace.
- CO2: Critically examine the aspects of conflicts management, results of conflicts and role of world community.
- CO3: Explain the importance of human rights and education at different level of education.
- CO4: Locate the most vulnerable human rights violation places nearby and visit to gain direct experience.
- CO5: Discuss the reports of different commissions and role of eminent personalities for the establishment of world peace.

FOURTH SEMESTER

CE-401 (C) GUIDANCE AND COUNSELLING IN EDUCATION

(5 CREDITS) (FM: 100)

Course Outcomes

On completion of the course the students will be able to:

- CO1: Describe the concept, nature and purpose of guidance and counselling.
- CO2: Understand the techniques and theories of counselling.
- CO3: Identify the concept and technique of group and individual guidance.
- CO4: Develop skills for guidance and counselling in secondary schools

FOURTH SEMESTER

AC-401 WOMEN AND SOCIETY (5 CREDITS) (FM: 100)

Course Outcomes

After completion of Course students will be able to:

- CO1.Familiarize with the women lead environmental movements and women's participation in the climate resilience natural resources management.
- CO2. Acquire knowledge on the differential impact of climate change disasters.
- CO3.Be familiar with the role of technology and how has ICT brought about a change in on women's everyday lives and livelihoods.
- CO4.It will enhance students' critical thinking in the use and management of technology in different productive sectors across different category of women.
- CO5.Gain an insight into the women and law from rights and equality of opportunity in the access to justice as well as the nuances involved in it.

Ph.D. IN EDUCATION

Programme Outcomes

- PO1. Comprehend concept of quantitative, qualitative and mixed method research methodology
- PO2. Select and explain an appropriate method for a research study and conduct review of related literature
- PO3. Formulate hypothesis or pose research questions based on the objectives of the study.
- PO4. Learn how to prepare research proposal and write research report
- PO5. Understand and apply various quantitative and qualitative techniques of data collection, analysis and interpretation
- PO6. Explain and use various pedagogical skills, technological skills and communication skills in professional career
- PO7. Understand concept types of assessment such as assessment for, of and as learning
- PO8. Learn concept of educational management and TQM
- PO9. Identify research gap and write the review in a synchronized manner
- PO10. Write and summarize the findings of different research studies

Programme Specific Outcomes

- PSO1: Students can go further professional courses like, D.Litt. Distance education, Adult education and Population education etc.
- PSO2: Acquired passion for multidisciplinary research in the field of Sociology, Psychology, Philosophy, History, Economics and Political Science etc.
- PSO3: Acquired practical knowledge and skills from various field works, internship, research projects, community activities, formal and non-formal interactive sessions.
- PSO4: Develop new dimensions of knowledge by opting different open and discipline specific electives to meet the needs of the present society.

PAPER- I RESEARCH METHODOLOGY AND COMPUTER APPLICATION

(4 CREDITS)

(FM: 100)

Course Outcomes

- CO1: Comprehend concept of quantitative, qualitative and mixed research methodology.
- CO2: Select and explain an appropriate method for a research study and conduct review of related literature.
- CO3: Formulate hypotheses or pose research questions based on the objectives of the study.

- CO4: Learn how to prepare research proposal and write research report. Select and develop appropriate research tools for the collection of data.
- CO5: Understand and apply various quantitative and qualitative techniques of data collection, analysis and interpretation.

PAPER-II: CURRICULUM, PEDAGOGY AND EDUCATIONAL STATISTICS

(4 CREDITS) (FM: 100)

Course Outcomes

- CO1: Explain and use various pedagogical Skills, technological Skills, and communication skills in professional career.
- CO2: Understand concept and types of assessment such as: Assessment for, of and as learning.
- CO3: Apply various alternative Assessment techniques such as rubrics, portfolio, competency-based assessment and learning outcome
- CO4: Learn concept of educational management and TQM.
- CO5: Explain the use of normal probability of curve in analyzing educational data.

PAPER- III: REVIEW OF RELATED LITERATURE

(4 CREDITS) (FM: 100)

Course Outcomes

- CO1: Identify the research gap and write the review in a synchronized manner
- CO2: Select a research area of their interest
- CO3: Identify variables relevant to the selected research area
- CO4: Summarize the findings of different research studies
- CO5: Write a thematic paper on any contemporary issue in the subject

PAPER- IV: RESEARCH AND PUBLICATION ETHICS

(4 CREDITS) (FM: 100)

Course Outcomes

- CO1: Understand the basics of philosophy of science and ethics, research integrity, publication ethics.
- CO2: Identify research misconduct and predatory publications.
- CO3: Comprehend indexing and citations, open access publications, research metrics (citations, h-index, impact factor etc).
- CO4: Use plagiarism tools for a valid and ethical research report.

B.A. ENGLISH

Programme Outcomes

After reading this Program, students will be able

- PO1. To demonstrate a comprehensive understanding of English literature
- PO2. To familiar with various literary movements that existed in different ages and locations
- PO3. To exhibit an appropriate level of expertise in the history of English literature, different schools of literary theory, and rhetoric
- PO4. Employ critical debates and positionality while analysing primary and secondary reading materials
- PO5. Improve aesthetic sensibility; creativity, and critical and analytical skills
- PO6. Improve skills in organizing and expressing ideas and viewpoints with clarity and coherence both in writing and speaking
- PO7. Question, organize, and express with precision and coherence – both in writing and oral modes
- PO8. Acquire knowledge of world literatures
- PO9. Develop an insight into English language and literature
- PO10. Understand the importance of the experiences of a diverse range of people as expressed in philosophical, literary or other texts.

Programme Specific Outcomes

After reading this Program, students will be able

- PSO1. Respect diverse viewpoints about the meanings and values of human experience.
- PSO2. Get sensitized with the critical tools used in reading of literature.
- PSO3. To rise above the parochial world views to celebrate the stiff-life.
- PSO4. To feel connected with The world via the universal appeal of literature.

FIRST SEMESTER

Core-I : BRITISH POETRY AND DRAMA: 14TH TO 17TH CENTURIES

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To introduce the students to British Poetry and Drama from the 14th to 17th century.
- CO2. To help students to evaluate major texts from the early modern period of British Literature.
- CO3. To cover the genesis of Modern English Poetry through Ben Jonson, Shakespeare and Donne.

- CO4. To explore the glorious phases of British Drama.

Core-II :BRITISH POETRY AND DRAMA: 17TH AND 18TH CENTURY

(6 CREDITS)

(FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To interpolate the features and characteristics of the Jacobean Period and the 18th century British Literature.
- CO2. To make students understand the nature of satiric poetry and the relevance of using comedy of manners.
- CO3. To introduce them about the 17th century English Revolution (1640-60) and its impact on Literature.
- CO4. To mark the first period of the 18th century as the period of 'acid satire and comedy of humorous' and the second period as the period of 'supreme satiric poetry and the comedy of manners.

Generic Elective –I : ACADEMIC WRITING AND COMPOSITION

(6 CREDITS)

(FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To train the students in the basic writing required for writing competently in the academic context.
- CO2. To introduce the writing process with a focus on Academic Writing.
- CO3. To help students generate critical thinking in writing, editing, analysing and evaluating Academic writing/texts.
- CO4. To initiate the students in citing resources with the help of book and media review.

AECC –I : ENVIRONMENTAL STUDIES AND DISASTER MANAGEMENT

(4CREDITS)

(FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. Students understand about problems of environmental pollution and impacts of pollution on human ecosystem and control measures.
- CO2. Students will learn about the increase in population growth and understand the issues of use of resources in proper manner leading to sustainable development.
- CO3. Learn about causes and impacts of Disaster and Case Studies of National and Global Disasters and risk reduction approaches of Disaster with safety issues in mitigating industrial disaster.
- CO4. Basic idea about the mode of transmission and course or some communicable and non-communicable diseases and knowledge on the importance and methods of prevention of epidemic and pandemics.

SECOND SEMESTER

Core-III : BRITISH PROSE: 18TH CENTURY

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To acquaint the students with the newly evolved form of Literature, the Essay.
- CO2. To acknowledge the shift from Reason to Emotion in the 18th century prose.
- CO3. To demonstrate the rights and the duties of mankind in relation to Mary Wollstonecraft's A Vindication to Rights of Women.
- CO4. To discuss Addison as an essayist.
- CO5. To explore the basic language, style and tone that Johnson mostly used in his works.

Core- IV : INDIAN WRITING IN ENGLISH

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To give an overview on Indian Writing in English and it's fastest growing branch in English Literature.
- CO2. To analyze the key points of the arrival of EIC in India.
- CO3. To impart the knowledge through representative poems, novels and plays of IWE.
- CO4. To promote Indian's first war of Independence and the establishment of colleges to assist western education and the evolution of IWE in the 20th century.

Generic Elective-II : GENDER AND HUMAN RIGHTS

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To bring into notice the class struggles in India through the work of Dr. Babasaheb Ambedkar's "Caste in India".
- CO2. To showcase the issues of inequality and focusing feminism as the core idea in Chimamanda Ngozi Adichie's "We should All Be Feminists."
- CO3. To bring into account the differences between men and women in all aspects of Research.
- CO4. To create awareness among students on the areas of women's education and freedom by the text, Sultan's dream as prescribed in the syllabus.

THIRD SEMESTER
AECC-II PAPER MIL (ALTERNATIVE ENGLISH)
(4 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To focus on developing fundamental skills of language learning and reading.
- CO2. To help and make students aware of evaluating a comprehension and answering questions of it.
- CO3. To boost learner's competence expressive and comprehensive skills.
- CO4. To enhance upon the knowledge of vocabulary, its usage and grammar by the help of short Stories and prose as mentioned in the syllabus.

Core-V : BRITISH ROMANTIC LITERATURE
(6CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To familiarize the students with the romantic period and some of its representative writers.
- CO2. To provide an expression to the notable ideas of the period such as- 'Return to Nature', 'Subjectivity', 'Desire for Personal Freedom' and 'the Defiance of Classicism Imposed Restrictions'.
- CO3. To appraise the students with the Romantic Revival and its impact on Literature.
- CO4. To make them understand about the variance of Romanticism and Classicism.

Core Paper VI BRITISH LITERATURE 19TH CENTURY
(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To introduce students with 19th century British Literature and the Romantic Movement.
- CO2. To enlighten students with major socio-political developments like industrialization and technological advancements.
- CO3. To present the large-scale mobilization of people from rural to urban centres.
- CO4. To provide an overview on the status of Victorian Women in the 19th century with relation to the mentioned texts.

Core-VII : BRITISH LITERATURE: EARLY 20TH CENTURY

(6 CREDITS)

(FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To acquaint the students with the 20th century British Literature focusing on the modernist canon in poetry, novel and literary criticism.
- CO2. To highlight the development in society and economy in the early 20th century.
- CO3. To project Marx's concept of class struggle and Freud's theory of Unconsciousness
- CO4. To discuss the technique of the Stream of Consciousness through the prescribed text, Mrs.Dalloway.

SECC-I Option 1 : ENGLISH COMMUNICATION

(4 CREDITS)

(FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1.To make students understand the meaning of communication. Its types, uses and emergence.
- CO2. To familiarize students with the grammatical and composition skills for better understanding in language.

CO3. To help students in writing précis, reports and note taking.

CO4. To incorporate students, understand how to write job applications, letters to the editors, social appeal and in making representations for an overall knowledge in written communication.

FOURTH SEMESTER

Core-VIII : AMERICAN LITERATURE

(6 CREDITS)

(FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To give an account of the canonical writers from American Literature in established genres.
- CO2. To furnish the defining myths of American Literature- City on the Hill, The Frontier Spirit, American Dream, Manifest Destiny and E- Pluribus Unum.
- CO3. To demonstrate the concept of the American Dream through the text- The Death of a Salesman by Arthur Miller.
- CO4. To embellish the ideas of feminist perspectives and the philosophical ideas of nature through selected American Poets.

Core-IX : EUROPEAN CLASSICAL LITERATURE

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To familiarize students the features and characteristics of European Literature.
- CO2. To showcase the decline of Roman Empire in the 15th century A.D
- CO3. To make the students conversant with the canonical texts of European Literature.
- CO4. To appraise the students with the history of ancient Greek Literature through the works of Homer, Sophocles and Aristotle.

Core-X: WOMEN'S WRITING

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To enlighten the students with the works of women writers from different cultures and nations in various genres.
- CO2. To make students critically aware of the issues relating to workings of patriarchy, issues of gender and relations of desire and power.
- CO3. To display the Diaspora concepts such as quest for self-identity and Indian philosophical outlooks through the readings of Shanta Acharya.
- CO4. To focus on the literary representation of the confessional women writers.

Generic Elective Paper IV LANGUAGE AND LINGUISTICS

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To acquaint students with the fundamental knowledge in Linguistics.
- CO2. To provide students the basic knowledge of English Language Teaching (ELT).
- CO3. To familiarize the students the variation in English that people come in contact within contemporary times.
- CO4. To showcase in difference in language of English spoken in Asia specially in India and in Europe.

FIFTH SEMESTER

Core-XI : MODERN EUROPEAN DRAMA

(6 CREDITS)

(FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To accustom the students with the best of experimental and innovative dramatic literature of Modern Europe.
- CO2. To introduce the fundamental ideas of the theatre of absurd, tragedy and heroism in Modern European Drama.
- CO3. To make students aware of the concepts of the realism, naturalism and existentialism.
- CO4. To display the emergence of theatre, texts and performance through the mentioned texts.

Core-XII : INDIAN CLASSICAL LITERATURE

(6 CREDITS)

(FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To create awareness among the students about the rich and diverse literary culture of ancient India.
- CO2. To project the history and genesis of Indian Classical Literature through the prescribed texts.
- CO3. To acquaint the students with the concepts of Rasa and its relevance in the Indian Classical Literature.
- CO4. To make students aware of unique Indian philosophical and spiritual aspects.

DSE-I : LITERARY THEORY

(6 CREDITS)

(FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. Familiarize the students with the literary premises and intellectual background pertinent to important eras of the literary and critical theory.
- CO2. Explore possible applications of critical theory to various literary texts.
- CO3. Develop students' knowledge of the terms used in the criticism of literature.
- CO4. Demonstrate in-depth knowledge of foundational critical texts.

DSE-II : WORLD LITERATURE

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To introduce the students to world literature.
- CO2. To analyze a text from within a cultural and literary context
- CO3. To understand foundational concepts and methods and interpret relationship between individual and society.
- CO4. To analyze and interpret the historical and cultural context for from different times and varied cultures in both western and non-western traditions.

SIXTH SEMESTER

Core-XIII : POST COLONIAL LITERATURES

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To introduce the students to the postcolonial literature
- CO2. It aims to provide the students with the opportunity to think through the layered response- compliance, resistance, mimicry and subversion.
- CO3. To give an overview of leading postcolonial thinkers.
- CO4. It will discuss about the movements and theories against Empire.

Core Paper XIV POPULAR LITERATURE

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To interpolate students about the popular literature.
- CO2. To make students understand about other subgenres of popular literature such as 'children's literature, 'detective fiction' and 'campus fiction'.
- CO3. To provide them a better understanding of the popular and the folk root of literature.
- CO4. To make them know about the debate between genre fiction and literary fiction.

DSE- III : PARTITION LITERATURE

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To know about worst man-made calamities of the 20th century.

- CO2. To understand how geo-politics affects human lives and thus shapes these narratives across the globe.
- CO3. To understand how the issues of gender, class, religion, ethnicity etc are interlinked and contribute to human suffering.
- CO4. To see a pattern in narratives of vulnerable groups and bring to limelight tales of hope and comparison.

DSE– IV :WRITING FOR MASS MEDIA

(6 CREDITS)

(FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To introduce the students to the history of English in India, history of Journalism and status of English in India.
- CO2. To expound the format of writing for the print media: News, stories, features and editorials.
- CO3. To present the process of writing for the electronic media, advertisement caption writing and Taglines (print and electronic)
- CO4. To bring forth the importance of Email, Blog, Social Networking, Internet Journalism in writing for mass media.

DSE –IV: Dissertation/Research Project

(6 CREDITS)

(FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. To make students understand what is Research by providing in depth knowledge of research process and methods.
- CO2. To encourage students in creating an original research work by involving them in practical activity.
- CO3. To motivate students to work and think independently, take initiative to solve problems on their own rather than relying on experts.
- CO4. To formulate ideas on research process before undertaking their projects.

M.A. IN ENGLISH

Program Outcomes

- PO1: Choose appropriate methods to formulate critically significant arguments and apply them effectively for writing research papers, conference presentations, etc.
- PO2: Demonstrate expertise in theories and methods of English studies pertinent to the field of further research and teaching.
- PO3: Develop an openness to new ideas, perspectives, and ways of thinking.
- PO 4: Conduct theory-based evaluation and analysis of various literary texts
- PO5: Improvise skills to investigate, analyze, and synthesize information, concepts, and theories
- PO6: Apply the acquired linguistic and critical skills to better understand the diversity of human experiences
- PO7: Assess new ideas, perspectives, and ways of thinking from reading texts from different literary genres
- PO8: Identify, design, and construct an independent approach to analyze and investigate varied social structures and power structures within and beyond the field of English studies
- PO9: Acquire knowledge skills and inspiration to qualify for higher education programs like Ph. D. or aspire for teaching careers at UG and PG level
- PO10: Analyze the ways in which ideas and values depicted in literary works with or contrast with those of Indian culture

Programme Specific Outcomes

- PSO 1: The students identify, find, and use information appropriate for discussion of literature.
- PSO 2: The students will be capable of interpreting and exploring relationships from the points of view of different people
- PSO 3: Appreciate Indian Literature in English and explore its uniqueness and its place among literatures in English.
- PSO 4: Become thorough with readings with theoretical basis. PSO 5: Qualify NET in the subject of English

FIRST SEMESTER

Hard Core 101:British Poetry

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students will be able

- CO1. Comprehend varied techniques and forms of poetry
- CO2. Appreciate the poem based on its rhythmic pattern and metrics
- CO3. Apply the principles of literary appreciation/criticism
- CO4. Analyse the poetry based on various elements of poetry
- CO5. Develop their own creative/poetic skill

HC 102: British Drama

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students will be able

- CO1. Comprehend effectively different imageries and situations
- CO2. Understand the varied attitudes, values and ideas transmitted and dramatized in oral form
- CO3. Comprehend body language and facial expressions better
- CO4. Make critical and rational judgements
- CO5. Communicate with and understand others

HC 103: Fiction

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students will be able

- CO1. Apply critical and theoretical approaches to the reading
- CO2. Identify, interpret, describe and analyse the critical ideas and themes that appear in literary and cultural texts
- CO3. Perform research, and critically analyse the texts from different historical periods and genres
- CO4. Demonstrate a broad understanding as to how different ideas and values inform and impact culture and society
- CO5. Evaluate and synthesize information from a variety of written and electronic sources

Hard Core 104 : British NON-FICTION / PROSE

HC 103:Fiction

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students will be able

- CO1. Think and express critically skills like – narrative skills, analytical skills, expository skills and argumentative skills
- CO2. Interpret literary text and understand the significant development in the history of English Literature through prose writers.
- CO3. State facts in plain and precise manner
- CO4. Develop their story's theme using supporting references and factual details in a convincing manner
- CO5. Learn to share their ideas and new learnings with reading partners

SECOND SEMESTER

Hard Core 201: Criticism and Literary Theory

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students will be able

- CO1. Locate the changing trends in Literary Criticism and Literary Theory
- CO2. Compare/contrast the differences in different schools literary criticism
- CO3. Analyse and describe the critical ideas, values and themes
- CO4. Apply the various theoretical elements on my given literary text
- CO5. Construct a critical write up on any given text

Hard Core 202:Literature and Gender

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students will be able

- CO1. Describe how women's lives have been shaped in various geographical settings
- CO2. Demonstrate an understanding of the effect of socio-historical and contemporary powerdynamics on women's life and evaluate gender to be a social construct
- CO3. Develop the concepts of class, race and gender as social construct and interpret the thoughts of women lives
- CO4. Comprehend the plurality of female experience in relation to gender.
- CO5. Determine biases in the construction of gender and patriarchal

HC 203 :MIGRATION LITERATURE

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students will be able

CO1. Put on the leitmotifs of the suggested texts to explore the conscientiousness of association between the 'homeland' and the 'diaspora'

- CO2. Understand the contemporary relevance of migration literature
- CO3. Realize homeland from a diverse prism through the eyes of writers who have lived in a composite culture.
- CO4. Appreciate the relevance of migration literature
- CO5. Locate and compare varied perspectives of migration

HC 204:LIFE WRITING

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students will be able

- CO1. Identify the form and characteristics of biography and autobiography and other forms of life writing.
- CO2. Compare the strategy used by the writers to narrate his/her life narrative
- CO3. Have an insight into how successful people face multiple challenges and the process that create their identity.
- CO4. Appreciate the genre for its complexities and intricacies.
- CO5. Measure and appraise the selected texts vis -a - vis their context and socio political and cultural background.
- CO6. Give a first-hand account into the life of the famous personalities to have a better insight into how their experiences have shaped them as a person. (understanding)

CORE ELECTIVE 201

(CREDITS:5) (Int :20+10 End-Sem:70)

(A) - AMERICAN LITERATURE –I

Course Outcomes

After reading this paper, students will be able

- CO1. The concerned teacher would provide a reading list at the beginning of the semester.
- CO2. Understand the culture and history of America through major literary works.
- CO3. Discover how American Literature make sense of the world through their works.

- CO4. American dream to be an evolving mythology

CO5. Demonstrate the concept of the American dream of 19th and 20th century

(B) - INDIAN WRITING IN ENGLISH- I

Course Outcomes

After reading this paper, students will be able

CO1. Demonstrate the various features of Indian Writing in English

- CO2. Defend the pluralistic aspect of Indian culture and society.
- CO3. Associate Indian culture via the English Language
- CO4. Quote the work of significant Indian writers of poetry and Drama
- CO5. Design in order to demonstrate different Literary cultures in relation to Dharma

(C)-POSTCOLONIAL LITERATURE – I

Course Outcomes

After reading this paper, students will be able

- CO1. Understand how colonial power operated to construct spaces of governance and subjects to govern
- CO2. Get a more detailed knowledge of colonialism.
- CO3. Share the analysis of colonial process of knowledge-making to contemporary situations.
- CO4. Critically analyse the text and relate to other spaces and time periods.
- CO5. Have a wide and thorough understanding of colonialism 19th and 20th century

OPEN ELECTIVE: SCIENCE AND DETECTIVE FICTION

(CREDITS:4)

(End-Sem:50)

Course Outcomes

After reading this paper, students will be able

- CO1. Correlate to concepts in science and Literature to address complex environmental issues
- CO2. Understand the elements of detective fiction as a literary genre
- CO3. Understand the elements of Science fiction as a literary genre
- CO4. Analyse how science and humanities are correlated
- CO5. Conceptualize the concepts of time travel and dystopia

THIRD SEMESTER

HARD CORE 301: INTRODUCTION TO LINGUISTICS AND ELT

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students will be able

- CO1. Stimulate intellectual curiosity in the theories of linguistics.

- CO2. Comprehend the complexity of language as a communication system
- CO3. Recapitulate the concepts, theories and methodologies used by linguistics.
- CO4. Compose freely and independently in speech and writing
- CO5. Develop the linguistic aptitude that enables them to be conscious of the cultural and social issues

HARD CORE 302:A ODISA NOVELS IN ENGLISH TRANSLATION

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students will be able

- CO1. Read best fiction of Odia in Literature (Understand)
- CO2. Generate a broadwise vision of life through Odia Literary text. (Apply)
- CO3. Appreciate the rich cultural heritage of Odisha
- CO4. Appreciate the literary tradition of Odisha
- CO5. To broaden their vision of the self and the Other

HARD CORE – 303: A LITERATURE FOR CHILDREN

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After reading this paper, students will be able

- CO1. Acquaint with children literature as a specific genre
- CO2. Interpret literature from a child's point of view and appreciate psychology of a child
- CO3. Familiarise with intercultural and international issues of children across the globe
- CO4. Understand the cognitive, social emotional and aesthetic development of a child with Mergenceof children's literature through ages
- CO5. Differentiate values of the adult world and those of the children's world

CORE ELECTIVE 301

(CREDITS: 5) (Int :20+10 End-Sem:70)

(A) - AMERICAN LITERATURE –II

Course Outcomes:

After reading this paper, students will be able

- CO1. Demonstrate the concept of the American dream of 19th and 20th century
- CO2. Understand the culture and history of America through major literary works.
- CO3. Discover how American Literature make sense of the world through their works.
- CO4. Develop an understanding of American dream to be an evolving mythology

- CO5. Respect the cultural differences among nations and widen a broader perspective towards the world as a whole

(B) - Indian Writing in English- II

Course Outcomes

After reading this paper, students will be able

- CO1. Demonstrate the various features of Indian Writing in English.
- CO2. Defend the pluralistic aspect of Indian culture and society.
- CO3. Associate Indian culture via the English Language
- CO4. Quote the work of significant Indian writers of poetry and Drama
- CO5. Design in order to demonstrate different Literary cultures in relation to Drama

(C)-Postcolonial Literature –II

Course Outcomes

After reading this paper, students will be able

- CO1. Thoroughly understand how colonial power operated to construct spaces of governance and subjects to govern.
- CO2. To achieve a detailed knowledge of colonialism
- CO3. Share the analysis of colonial process of knowledge-making to contemporary situations.
- CO4. Critically analyse the text and relate to other spaces and time periods.
- CO5. Have a wide and thorough understanding of colonialism 19th and 20th century.

CORE ELECTIVE CE 302

(CREDITS:5) (Int :20+10 End-Sem:70)

(A)- AMERICAN LITERATURE – III

Course Outcomes

After reading this paper, students will be able

- CO1. Comprehend the totality of the American experience
- CO2. Understand the culture and history of America through major literary works
- CO3. Discover how the works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts
- CO4. Develop an understanding of the American dream to be an evolving
- CO5. Respect the cultural differences among nations and widen a broader perspective towards the world as a whole

(B)-INDIAN WRITING IN ENGLISH – III

Course Outcomes

After reading this paper, students will be able

- CO1. Demonstrate the various features of Indian Writing in English.

- CO2. Defend the pluralistic aspect of Indian culture and society.
- CO3. Associate Indian culture via the English Language
- CO4. Quote the work of significant Indian writers of poetry and Drama
- CO5. Design in order to demonstrate different Literary cultures in relation to

(C)-POSTCOLONIAL LITERATURE- III

Course Outcomes

After reading this paper, students will be able

- CO1. Thoroughly understand how colonial power operated to construct spaces of governance and subjects to govern.
- CO2. To achieve a detailed knowledge of colonialism
- CO3. Analysis of colonial process of knowledge-making to contemporary situations.
- CO4. Critically analyse the text, and relate to other spaces and time periods.
- CO5. Have a wide and thorough understanding of colonialism 19th and 20th century

FOURTH SEMESTER

HARD CORE 401:A WRITING AT WORK

(CREDITS:5) (Int: 20+10 End-Sem: 70)

Course Outcomes

After reading this paper, students will be able

- CO1. Understand the value of effective communication in organisational context
- CO2. Equip them with skills of relationship and team building through the tools of communication
- CO3. Reach out to potential employees through preparation of resume and business letters.
- CO4. Critically engage with aspects of popular media through review of films and books
- CO5. Perform workplace writing in networked environments for management contexts

HARD CORE 402:DALIT LITERATURE

(CREDITS:5) (Int: 20+10 End-Sem: 70)

Course Outcomes

After reading this paper, students will be able

- CO1. Interpret the socio-political and historical context in which Dalit literature evolved
- CO2. Demonstrate the contemporariness and relevance of Dalit literature
- CO3. Illustrate Dalit aesthetics and involve in critical engagement
- CO4. Compare and contrast the challenges of Dalit literature with the mainstream literary conventions

- CO5. Comprehend gender and marginalisation colour and add meaning to personal narratives of Dalits

HARD CORE 403:DISSERTATION

(CREDITS:5)

(Int: 20+10 End-Sem: 70)

Course Outcomes

After reading this paper, students will be able

- CO1. Defend different literary works in order to defend their dissertation
- CO2. Outline their thoughts to writing
- CO3. Demonstrate the convention of academic writing correctly
- CO4. Illustrate data collected from different sources
- CO5. Formulate research questions correctly

Core Elective 401:

(CREDITS:5)

(Int: 20+10 End-Sem: 70)

A.AMERICAN LITERATURE (AL)

Course Outcomes

After reading this paper, students will be able to

- CO1. Understand the culture and history of America through major literary works.
- CO2. Discover how American Literature make sense of the world through their works.
- CO3. Comprehend the multicultural aspect of America
- CO4. Develop an understanding of the American ethnicity
- CO5. Respect the cultural differences among nations and widen a broader perspective towards the world as a whole

B.INDIAN WRITING IN ENGLISH

Course Outcomes

After reading this paper, students will be able to

- CO1. Demonstrate the various features of Indian Writing in English
- CO2. Defend the pluralistic aspect of Indian culture and society.
- CO3. Associate Indian culture via the English Language
- CO4. Quote the work of significant Indian writers of poetry and Drama (Remember
- CO5. Design in order to demonstrate different Literary cultures in relation to Drama(Create)

C. POST COLONIAL LITERATURES IN ENGLISH

Course Outcomes

After reading this paper, students will be able to

- CO1. Understand how colonial power operated to construct spaces of governance and subjects to govern.
- CO2. Acquire a more detailed knowledge of colonialism.
- CO3. Share the analysis of colonial process of knowledge-making to contemporary situations
- CO4. Critically analyse the text and relate to other spaces and time periods.
- CO5. Have a wide and thorough understanding of colonialism 19th and 20th century.



Ph.D. IN ENGLISH

Program Outcomes

- PO1. To develop the ability to engage in critical thinking
- PO2. To develop the ability to engage in interdisciplinary research
- PO3. To apply their knowledge and skills to generate new ideas
- PO4. To promote inquiry and inquisitiveness about new areas of literary research
- PO5. To demonstrate a comprehensive knowledge of research tools and techniques
- PO6. To critically and creatively explore contemporary issues of literary research
- PO7. To develop the ability to conduct ethical research
- PO8. To develop their written and oral communication skills
- PO9. To advance their research careers beyond a doctoral degree into industry experience and teaching
- PO10. To summarize major findings in their research area of specialization

Programme Specific Outcomes

- PSO1. To encourage a systematic pursuit of knowledge.
- PSO2. To focus on particular areas of interest and gain expertise in that field.
- PSO3. To be exposed to latest trends in literary criticism, theory and research.
- PSO4. To develop an objective, rationale and scientific attitude towards research and scholarship.

Paper I :RESEARCH METHODOLOGY

Course Outcomes

After reading this paper, students will be able to

- CO1. To demonstrate the ability to choose appropriate research methods
- CO2. To understand the limitations of research
- CO3. To develop advanced critical thinking skills
- CO4. To demonstrate enhanced writing skills

PAPER II :INTRODUCTION TO CONTEMPORARY LITERARY THEORY

Course Outcomes

After reading this paper, students will be able to

- CO1. To appreciate representative writers of important approaches of literary criticism
- CO2. To understand different approaches of literary criticism required for research
- CO3. To promote knowledge of world literature and Indian literature
- CO4. To develop critical ability and writing skills

Paper III: REVIEW OF RELATED LITERATURE

Course Outcomes

After reading this paper, students will be able to

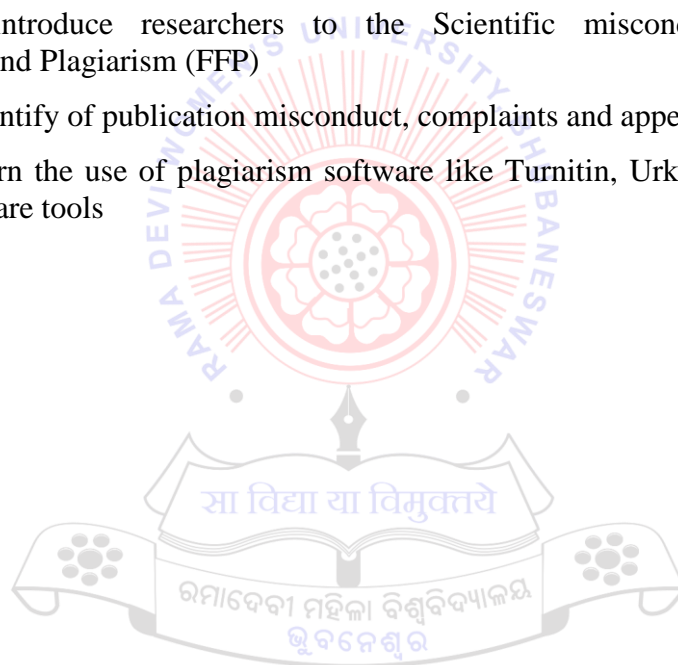
- CO1. To learn how to select a topic and find out a research gap.
- CO2. To formulate a research question
- CO3. To arrive at a hypothesis
- CO4. To raise arguments to defend the hypothesis

PAPER- IV : RESEARCH AND PUBLICATION ETHICS

Course Outcomes

After reading this paper, students will be able to

- CO1. To learn basic rules of research publication ethics.
- CO2. To introduce researchers to the Scientific misconduct: Falsification, Fabrication, and Plagiarism (FFP)
- CO3. To identify of publication misconduct, complaints and appeals.
- CO4. To learn the use of plagiarism software like Turnitin, Urkund and other open source software tools



M.A. IN GENDER STUDIES

Programme Outcomes

- PO1: Gender based Knowledge: Define gender concepts, feminist theories and research methodology to understand contemporary gender issues through the individual lives experiences are shaped by existing social structure, interaction and group relations.
- PO2: Planning abilities: Learn and demonstrate skills related to time and resource management, organization of activities and leadership for effective execution of tasks with individual and teamwork efforts.
- PO3: Problem analysis from Gender Perspectives.: Think critically, reason logically and apply scientific methodology in the analysis of empirical social reality from gender perspective to resolve issues emerging from multi-cultural, global, ethnic, and racial inequalities.
- PO4: Modern tool usage: Apply various approaches and feminist research methodology including new computer-based tools and technology particularly soft wares for qualitative and quantitative research.
- PO5: Leadership skills: Understand and think about change in social structure and cultural values from gender dimensions while fulfilling personal, professional, and social responsibilities; play an active and leading role as members of civil society.
- PO6: Professional Identity: Prepare for undertaking successful careers by acquiring knowledge and skills in public and private sectors with appropriate gender norms.
- PO7: Gender Ethics: Consider social values with gender norms and professional ethics in personal and professional sphere as an individual and as a member of society.
- PO8: Communication: Effectively communicate gender concepts and their application.
- PO9: Environment and sustainability and Gender: Understand the role of women in environmental issues; contribute in protecting environment through generating awareness and participating in creating green and clean society; formulate policies of national and international level to promote and implement sustainable development practices.
- PO10: Life- long learning: Develop sensitivity towards cultural values and norms; become self-motivated, generous, adapting social beings; strive for establishing harmonious social order based on the principles of equality, liberty, and fraternity.

Programme Specific Outcomes

- PSO1: The students can build up their career both in public & private sphere with appropriate gender norms.
- PSO2: Acquired passion for sensitizing the members of the society to establish gender equality as a feminist.
- PSO3: Acquired practical learning from internship, field visit & feminist research.
- PSO4: Understand and develop new dimension of knowledge through open elective to cater to the need of society.

FIRST SEMESTER

HC-101: CONCEPTUALIZING GENDER STUDIES

(4 CREDITS) (FM:100)

Course Outcomes

After completing the course students will be able to:

- CO 1. To understand the basic concepts of Gender Studies
- CO 2. Familiarize with key concepts, issues, and debates in Gender Studies
- CO 3. They will gather information on specific purposes and perspectives of Gender Studies
- CO 4. Be aware of the Women's exclusion from knowledge and need for Gender Studies as an academic discipline.
- CO 5. Deliberate on the prevailing strategies of the growth of Women's Studies in India and abroad.

FIRST SEMESTER

HC-102: GENDER AND DEVELOPMENT: PRINCIPLE AND CONCEPTS

(4 CREDITS) (FM: 100)

Course Outcomes

After reading this paper, students should have:

- CO 1. To understand the principles and concept of Gender as a multidisciplinary cross-cultural subject aiming for the advancement of gender equality and equity-based socio-economic change.
- CO 2. To acquire knowledge on the effects of gender equity related policies and program interventions and its implication on reducing gender gaps.
- CO 3. To explore about the uneasy negotiations between theory, policy and practices that are often evident within the realm of gender.
- CO 4. To develop awareness about the gender relations, issues, and challenges from a cross cultural perspective.
- CO 5. Students will learn to use gender analysis framework in Policy planning and evaluate different decentralization strategies of the Government, corporates and at global level.

FIRST SEMESTER

HC-103: THEORIES OF FEMINISM

(4 CREDITS) (FM: 100)

Course Outcomes:

After reading this paper, students will be able:

- CO 1. To enhance the understanding of theories of feminism, deliberate and apply discussions on various women issues.
- CO 2. To acquaint them with various dimensions of feminism and its application in the present-day society.

- CO 3. To give the ideas regarding different types of feminism and their contribution for bringing reformation in the society
- CO 4. To sensitize them about development of feminism in India and Western Countries
- CO 5. To update their knowledge about recent development in feminist thinking

FIRST SEMESTER

HC-104: CULTURE, SOCIETY AND GENDER

(4 CREDITS) (FM: 100)

Course Outcomes

After reading this paper, students should have:

- CO 1. To understand the cultural construction of gender, social structure, and institutions in perpetuation of patriarchy and gender.
- CO 2. To understand major social institutions such as families and workplaces sustain dominant gender norms but also offer opportunities resistance, negotiation and change.
- CO 3. To provide insight on gender disparities within the family, education, access to natural resources, livelihood, political and legal systems in tribal societies.
- CO 4. Acquaint with the intersections of race, class, gender, ability, age and so forth as they intersect with the family, education systems, workplaces and friendships and apply sociological theories of gender to artifacts and events in the social world.
- CO 5. Students will develop an insight into the various tribal cultural variations and how gender roles differ in different cultural and social context.

SECOND SEMESTER

HC-201: GENDER, WORK AND ECONOMY

(4 CREDITS) (FM: 100)

Course Outcomes:

After reading this paper, students will be able:

- CO 1. To understand the concept and meaning of work and the importance of productive and reproductive work carried out by women.
- CO 2. To know the position of men and women in the labour market, the trends of female labour force participation.
- CO 3. To make them aware about the opportunities and challenges faced by women in self-employment and entrepreneurship and institutional mechanisms which are working for gender justice at workforce.
- CO 4. To get clear-cut impression about the gendered character of workforce and labour force participation.
- CO 5. To accumulate knowledge to safeguard the women at workplace from exploitation and to stop the gradual defeminization of workforce.

SECOND SEMESTER
HC-202: GENDER AND EDUCATION
(4 CREDITS) (FM: 100)

Course Outcomes:

After reading this paper, students should have:

- CO 1. To understand the relationship between gender and education.
- CO 2. Get overall idea on educational policies which have incorporated gender.
- CO 3. Familiarize students with feminist perspective on education, educational content, and pedagogy.
- CO 4. Students will be able to understand and comprehend the inter-linkages between gender and education.
- CO 5. Students will be able to critically evaluate how these inter-linkages operate towards discrimination and exclusion of women.

SECOND SEMESTER
HC-203: CULTURE, HUMAN RIGHTS AND LAW
(4 CREDITS) (FM: 100)

Course Outcomes

After reading this paper, students should have:

- CO 1. To understand the constitutional, legal and Human rights.
- CO 2. To sensitize and create better understanding about equality of opportunity in the access to justice according to different parameters such as gender, age, diversity of background etc.
- CO 3. To acquaint with the Legal framework applicable to women from human rights perspectives.
- CO 4. To enhance understanding and sensitivity towards issues related to violence.
- CO 5. Students will gain an insight into the workings of the field as well as the nuances involved in it.

SECOND SEMESTER
HC-204: GENDER AND HEALTH
(4 CREDITS) (FM: 100)

Course Outcomes

At the end of the course, the students will be able to:

- CO 1. To understand the concept of health and the various components which together ensure health and well-being of an individual.
- CO 2. To make them aware about the significance of linkages between health and gender that determine the health status of women.
- CO 3. To have knowledge on mental health issues and various policies and programs for improvement of health status across gender.

- CO 4. To sensitize the about the feministic perspectives of health.
- CO 5. To enable the students to analyse and understand need for gender sensitive health care services.

SECOND SEMESTER

CE-201: GENDER ISSUES IN AGRICULTURE

(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1. To critically reflect the consequences of gender relations in agriculture, farm mechanization, green revolution, technologies, e-governance, and skill development.
- CO 2. To acquaint with the policies and programs aiming for the advancement of gender equality-based sustainable agricultural policies and governance system.
- CO 3. To advance gender mainstreaming tools and methodologies which facilitate intervention efforts of Government through local governance initiatives, NGOs, corporate and MFIs.
- CO 4. Explain and analyse the gender questions in the agrarian society. Identify of consequences of a proposed policy planning to address negative outcomes and redirect towards relevant formulation of agriculture policies and budget allocation.
- CO 5. Use gender framework analysis in Policy planning and evaluating different decentralization strategies and policies of the Govt. of India for gender equality in agricultural development.

SECOND SEMESTER

CE-201: GENDER AND HUMAN RESOURCE MANAGEMENT

(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1. This course has been developed to address the needs of students in management roles or students who aspire to become managers.
- CO 2. The course will introduce core skills such as project management, strategic management, financial management and human resource management.
- CO 3. It will critically investigate the barriers to women achieving their full potential in management and how these may be overcome.
- CO 4. By offering a broad-based education in management skills and helping to think critically and communicate effectively in a variety of contexts
- CO 5. The course will provide the key elements which employers look for in their managers and will therefore enhance career prospects, particularly within the public sector.

SECOND SEMESTER
OE-201: WOMEN IN ODISHA
(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1. To understand the status of women from pre to post independence period
- CO 2. To familiarize the students with the major historical developments of women's movements in their onward march to freedom and equality.
- CO 3. To sensitize women towards the current social issues confronting them.
- CO 4. Bring to the classroom contingent as well as long term discussions on violence, from within the women's movement, and more generally the work of feminist scholars.
- CO 5. Students will have an in- depth understanding of the need and efficacies of the various programs and policies initiated by the center and state Government to improve the conditions of women in India.

THIRD SEMESTER
HC-301: RESEARCH METHODOLOGY
(4 CREDITS) (FM: 100)

Course Outcomes

After completing the course students will be able to:

- CO 1. Acquaint themselves with the scientific ways of studying social phenomena.
- CO 2. Gain research insight that will enable them to capture the most relevant data in an objective manner.
- CO 3. To give an understanding of the nature of scientific methods, nature of social phenomena, steps involved in scientific research and the way of attaining value neutrality.
- CO 4. To develop an insight into the need and types of research design and the use of sampling method for attending objectivity and scientific study
- CO 5. To gather knowledge about the methods and tools used in scientific methods.

THIRD SEMESTER
HC-302: GENDER BUDGETING AND PLANNING
(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1. To understand the gender budgeting strategies: planning, approving, executing, monitoring, analyzing and auditing budgets in a gender-sensitive way.
- CO 2. To get the knowledge on the impact of gender budgeting to drive the financial inclusion models towards gender equality and inclusive growth in the case of a developing economy like India.

- CO 3. They will be involved in the analysis of actual expenditure and revenue (usually of governments) on women and girls as compared to expenditures on men and boys.
- CO 4. Acquire knowledge on how gender budgeting promotes accountability and transparency in fiscal planning;
- CO 5. Increase gender responsive participation in the budget process.

THIRD SEMESTER

HC-303: WOMEN'S MOVEMENT

(5 CREDITS) (FM: 100)

Course Outcomes

- CO 1. To sensitize on various organized efforts by women themselves and others to improve the conditions of women
- CO 2. To ameliorate various gender based social inequalities and social evils in India and abroad.
- CO 3. To raise awareness of students on women's participation and perspectives on other social issues
- CO 4. To visualize a broad outline with regard to the nature and growth of women's movement in the early age and modern age, covering a range of issues pertinent to women's emancipation, dignity and status.
- CO 5. To familiarize themselves with the major historical developments of women's movement in their onward march to freedom and equality

THIRD SEMESTER

CE-301: GENDER, CLIMATE CHANGE AND DISASTER MANAGEMENT

(5 CREDITS) (FM: 100)

Course Outcomes

- CO 1. To understand the role of gender in protection of environment.
- CO 2. To sensitize about ecofeminist movements in India and abroad.
- CO 3. To discuss the gendered and differential impact of disasters on women and men
- CO 4. Students will have an in depth understanding of the differential impact of disasters on women and men.
- CO 5. Students will familiarize with the concepts, terminologies and developments in the field of Disaster Management

THIRD SEMESTER

CE-301: GENDER AND SEXUALITY (5 CREDITS) (FM: 100)

Course Outcomes

At the end of the course, the students will be able to:

- CO 1. Locate the representation of gender bodies differently in religion and myth;
- CO 2. Discuss and analyse sexuality across time period, culture and society with reference to class, status and politics
- CO 3. Understand the meanings of androgyny;
- CO 4. Understand disability in the context of sexuality and motherhood;
- CO 5. Explore how a female body is objectified and commodified in a sexist society

THIRD SEMESTER

CE-302: PSYCHOLOGY OF GENDER (5 CREDITS) (FM: 100)

Course Outcomes

- CO 1. To understand the myths and stereotypes associated with different gender groups in our society.
- CO 2. To assess critically the social and psychological differences that have been identified in gender research.
- CO 3. An overview of research and theory on gender in psychology.
- CO 4. To recognize and demonstrate how gender shapes our every-day lives and experiences.
- CO 5. To systematically understand the purpose, scope, types, and approaches to counselling with a focus on gender-based counselling.

THIRD SEMESTER

CE-302: GENDER, CIVIL SOCIETY AND SOCIAL WORK

(5 CREDITS) (FM: 100)

Course Outcomes

- CO 1. To develop the key competencies and capabilities on NGOs working for gender and development.
- CO 2. To critically apply the knowledge, skills and competences acquired to deal with real problems related to the social innovation and gender equity.
- CO 3. To familiarize themselves with the methods and techniques that can be applied to the different stages of sustainable development.
- CO 4. To familiarize with strategies and ideologies of innovative non- government organizations models for community engagement in gender and development
- CO 5. To collaborate for facilitating and intermediating various government schemes, projects and measuring results in business environment for promotions and sustainable gender development.

FOURTH SEMESTER

HC-401: GENDER AND ENTREPRENURSHIP

(5 CREDITS) (FM: 100)

Course Outcomes:

- CO 1. To understand the field of entrepreneurship and the gender related opportunities, challenges, and issues facing by the men and women self-employed and entrepreneurs
- CO 2. To interact with leading gender sensitive entrepreneurs who are using business skills to address complex gender issues and develop a business plan for a social venture.
- CO 3. To develop a gender sensitive entrepreneurship plan.
- CO 4. To conceptualize stages, strategies and ideologies of innovation for a gender sensitive producer's company and promotion of SHGs,
- CO 5. To understand the self-employment through the ppp. model of collaboration to facilitate and intermediate various government schemes, projects and measuring results for sustainable entrepreneurship.

FOURTH SEMESTER

HC-402: GENDER AND POLITICAL PARTICIPATION

(5 CREDITS) (FM: 100)

Course Outcomes:

- CO 1. To Understand Women Participation in politics.
- CO 2. To aware about concept of leadership, women in leadership roles, human rights of women and the way they are infringed upon.
- CO 3. To sensitize them regarding the reservation policies, Gender discrepancies and political participation.
- CO 4. To provide a snapshot on women's role in political leadership at local self-government, state level and national level politics
- CO 5. To create an impression among them how to overcome the barriers to bring women to the forefront of politics.

FOURTH SEMESTER

CE-401: GENDER AND TECHNOLOGY

(5 CREDITS) (FM: 100)

Course Outcomes

At the end of the course, the students will be able to:

- CO 1. To understand the meaning and concept of technology, its origin, development, and its gender implications.
- CO 2. To know how technology affects women's lives; examine how technology influences the nature and extent of women's participation in agriculture and industry
- CO 3. To familiarise with the role of technology in everyday life.

- CO 4. To sensitize themselves regarding the role of modern technology from changing human perspectives.
- CO 5. To understand impact of technology on both gender as well as different sectors such as health care and education.

FOURTH SEMESTER

CE-401: GENDER AND SUSTAINABLE RURAL LIVELIHOOD

(5 CREDITS) (FM: 100)

Course Outcomes

- CO 1. To understand the strategies and ideologies of organizations (private organizations, cooperatives, producer's company, SHGs, working for farmers business in the rural areas) models for rural agrarian development
- CO 2. To familiarize with various government schemes, projects and measuring results in business environment for rural agricultural promotions and sustainable agribusiness.
- CO 3. To sensitize the key competencies and capabilities on NGOs working for agrarian communities.
- CO 4. To critically apply the knowledge, skills and competences acquired to deal with real problems related to the planning and agri-business management in the rural areas.
- CO 5. To make them aware with the methods and techniques that can be applied to the different stages of sustainable agribusiness in rural areas.



Ph.D. IN GENDER STUDIES

Programme Outcomes

- PO1: Read thoroughly, understand, and explain the content of articles and studies that mobilize the concept of gender.
- PO2: Formulate a research question by mobilizing the concept of gender.
- PO3: Choose a method for collecting the data needed to carry out your research and anticipate the risks Associated with not considering gender.
- PO4: Identify relevant literature (bibliography), select concepts, and justify their relationship to gender theories.
- PO5: Identify the challenges raised by the subject/methods chosen in relation to feminist epistemology and clarify your posture vis-à-vis these challenges.
- PO6: Formulation of hypothesis or address questions, use of gender analytical research framework to design research, sample size and research questions.
- PO7: Learn to apply gender sensitive quantitative and qualitative research methodologies to address negative outcomes of the gender relations and critically reflect upon constructive strategies towards
- PO8. Mainstreaming gender in public policies and develop academic reports for improving capacities of women and men in the given context.

Programme Specific Outcomes

- PSO1: The students can build up their career both in public & private sector with appropriate gender norms.
- PSO2: Acquired passion for sensitizing the members of the society to establish gender equality as a feminist.
- PSO3: Acquired practical learning from field visit & feminist research.
- PSO4: Understand and develop new gender dimensions of knowledge to cater the needs of the society.

PAPER-01: RESEARCH METHODOLOGY AND COMPUTER APPLICATION

(4 CREDITS)

(FM: 100)

Course Outcomes:

- CO 1.Acquaint themselves with the scientific ways of studying social phenomena.
- CO 2.Gain research insight that will enable them to capture the most relevant detail in an objective manner.
- CO 3.To give an understanding of the nature of scientific methods, nature of social phenomena, steps involved in scientific research and the way of attaining value neutrality.
- CO 4.To develop an insight into the need and types of research design and the use of sampling method for attending objectivity and scientific study.
- CO 5.To gather knowledge about the methods and tools used in scientific methods.

PAPER-02: GENDER AND DEVELOPMENT: PRINCIPLES AND CONCEPTS

(4 CREDITS) (FM: 100)

Course Outcomes:

- PO 1: To understand the principles and concept of Gender as a multidisciplinary cross-cultural subject aiming for the advancement of gender equality and equity-based socioeconomic change.
- PO 2: To acquire knowledge on the effects of gender equity related policies and program interventions and its implication on reducing gender gaps.
- PO 3: To explore about the uneasy negotiations between theory, policy and practices that are often evident within the realm of gender.
- PO 4: To develop awareness about the gender relations, issues, and challenges from a cross cultural perspective.
- PO 5: To use gender analysis framework in Policy planning and evaluate different decentralization strategies of the Government, corporates and at global level

PAPER- 03: REVIEW OF RELATED LITERATURE

(4 CREDITS) (FM: 100)

Course Outcomes:

- CO 1. Identify the research gap and write the review in a synchronized manner.
- CO 2. Select a research area of their interest.
- CO 3. Identify variables relevant to the selected research area and present thematic paper.
- CO 4. Summarize the findings of different research studies and write a thematic paper on any contemporary issue in the subject.

PAPER-04: RESEARCH AND PUBLICATION ETHICS

(4 CREDITS) (FM: 100)

LEARNING OUTCOMES:

- CO 1. On completion of the course, the scholars will be able to:
- CO 2. Understand the basics of philosophy of science and ethics, research integrity, publication ethics.
- CO 3. Identify research misconduct and predatory publications.
- CO 4. Comprehend indexing and citations, open access publications, research metrics (citations, h-index, impact factor etc).
- CO 5. Use plagiarism tools for a valid and ethical research report.

B.A. HINDI

Programme Outcomes

- PO 1. Able to get a complete overview of Hindi literature.
- PO 2. Enhancement of proficiency in Hindi literature and develop literary skill.
- PO 3. Become eligible for professional course/training such as B.Ed. Translation course etc.
- PO 4. Can learn about different poetic forms and other Literary forms.
- PO 5. Develop analytic capability in prose and poetry. Also develop analytical and reasoning skill.
- PO 6. Learn different forms of Hindi language such as Rajbhasa, Rastrabhasa and linguistic.
- PO 7. Get knowledge of history of Hindi literature from Ancient to modern period.
- PO 8. Proficiency to qualify competitive professional Exam.
- PO 9. Develop knowledge in feminism and dalit, tribal Discourse, Environment and disaster management
- PO 10. Get knowledge of computer application and official language Hindi.

Programme specific outcomes

- PSO1: They can become freelancer translator
- PSO2: They can become writer.
- PSO3: They can become hindi DTP publisher.
- PSO4: They can become freelance content writer.

FIRST SEMESTER

C-1-HINDI SAHITYA KA ITIHAS

(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1. Get the knowledge on prominent books of history of Hindi Literature.
- CO 2. Get the knowledge of ancient period of Hindi Literature, prominent poets and trends.
- CO 3. Get to know about the bhakti period and its trends.
- CO 4. Learn about the background of Ritikaal and its poets and trends.

FIRST SEMESTER

C-II-BHAKTI KALINA HINDI KABITA

(4 CREDITS) (FM: 100)

Course Outcomes

After reading this paper, student should have.

- CO 1. Learn about the bhakti poetry.

- CO 2. They can learn about Kabeer poetry.
- CO 3. They can learn about the Sufi poetry.
- CO 4. Can learn poetry Bharat Mahima.

FIRST SEMESTER

G-1-MADHYA KALINA ITIHAS OR BHAKTI KABITA

(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1. Learn about the bhakti movement and its trends.
- CO 2. Learn about the Nirgun and Sagun bhakti stream of poetry.
- CO 3. they can learn about the poetry of Kabeer, Jayasi and Surdas.
- CO 4. Learn the meaning of poetry Bharat Mahima.

FIRST SEMESTER

G-1-MADHYA KALINA ITIHAS OR BHAKTI KABITA

(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1. Students will understand the scope and importance of environmental science. This will inculcate their interest in nature with its myriad living forms.
- CO 2. Students will sensitivity for the natural, physical and human resources in the immediate environment. This will help them point out or raise issues related to environmental pollution and disaster management.
- CO 3. Students are able to acquire knowledge, competent professionals with strong foundation of environmental science and application to be suitable for vital positions in the academia, industry and government and non-government institution as skilled manpower.
- CO 4. The learners will be able to become effective scientific communicators or collaborators in multi-disciplinary teams providing technical leadership to engage with challenging environmental problems of local, national and global nature.

SECOND SEMESTER

CORE COURSE-III-

(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1. Know about the social cultural and political back ground of modern period and development of khadibolihindi.
- CO 2. Know about the trends of Bhartendu and Dwibedi period poetry and chhayawadi poetry.
- CO 3. Know about the development of Novel and short story.
- CO 4. Know about the origin and development of Drama,one act play, and essay as well as various discourse -feminism,dalit and tribal.

SECOND SEMESTER
CORE COURSE-IV-
(4 CREDITS) FM: 100)

Course Outcomes

- CO 1. Know about the Krishna Bhakti Poetry and it's prominent poet.
- CO 2. Know about the poetry of Raskhan.
- CO 3. Know about the poetry of Bihari.
- CO 4. Know about the poetry of Ghananand.

SECOND SEMESTER
GENERIC ELECTIVE-II
(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1. Know about the romanticism and Expressionism.
- CO 2. Know about the Marxism and Existentialism.
- CO 3. Know about the post modernism.
- CO 4. Know about the myths and symbol.

SECOND SEMESTER
AECC-II (MIL HINDI)
(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1. Gain knowledge on Hindi poets and their poems and understand the variations in ancient, medieval and modern poetry.
- CO 2. Acquire knowledge on different perspectives of writers through their prose.
- CO 3. Gain understanding of basic structure of Hindi sentence and grammar.
- CO 4. Develop a skill of essay writing.

THIRD SEMESTER
Core course - V
(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1 know about the translation and its field.
- CO 2 know about the translation process.
- CO 3 know about the type of translation
- CO 4 do the practically translation from Hindi to English and vice-versa.

THIRD SEMESTER

Core course – VI

(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1. know about the novel of Premchand
- CO 2. know about the woman novel writer and feminism.
- CO 3. Get the comprehensive knowledge of Novel Gaban.
- CO 4. Get the extensive knowledge of AapkaBanty

THIRD SEMESTER

Core course – VII

(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1. Know about short stories of Chandradhar Sharma Guleri, Premchand and Prasad.
- CO 2. Know about short stories of BhagwatiCharanVerma, UshaPriyamwada and RajendraYadav.
- CO 3. know about short stories of Kamleshwar,Harishankarparsai and Manu Bhandari.
- CO 4. Know about short stories of ShaileshmMtiyani, Renu and NirmalVerma.

THIRD SEMESTER

Core course – VII

(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1. Get to know about the Journalism and prominent journalist.
- CO 2. Learn about the development of Hindi journalism.
- CO 3. Extensive knowledge on prominent journals like Hans, Alochana, SahityaAmrit, NayaGyanodya etc.
- CO 4. Get to know editorial and feature writing.

FOURTH SEMESTER

Core course VIII

(4 CREDITS) (FM: 100)

Course Outcome:

- CO 1. Comprehensive knowledge of Hindi biography.
- CO 2. Comprehensive knowledge of Hindi autobiography.
- CO 3. know about the sketch Rajiya and Rama.

- CO 4. Get knowledge of various Hindi writer's essay.

FOURTH SEMESTER

Core course –IX

(4 CREDITS) (FM: 100)

Course Outcome:

- CO 1. Get to learn about the poetries of MaithilisharanGupt.
- CO 2. Study and learn about the poetries of Jayshankar Prasad.
- CO 3. Study and learn about the poetries of Nirala.
- CO 4. Study and learn about the poetries of MahadeviVerma.

FOURTH SEMESTER

Core Course –X

(4 CREDITS) (FM: 100)

Course Outcomes:

- CO 1. Study and learn about the language and various aspects of script.
- CO 2. Study and learn about the connection between language and other streams of knowledge.
- CO 3. Study the origin and development of Hindi as a form of literally language.
- CO 4. Get to know various forms of Hindi such as official,national, communicative and contact language.

FOURTH SEMESTER

GE –IV

(4 CREDITS) (FM: 100)

Course Outcome:

- CO 1. get to know the origin and development of cinema.
- CO 2. get to know about the Pre-Independence Hindi cinema and contemporary Hindi writers and national spirit.
- CO 3. Get to know interlink between literature and cinema.
- CO 4. Role of Hindi Cinema in the audio-visual mean.

FIFTH SEMESTER

Core course –XI

(4 CREDITS) (FM: 100)

Course Outcome:

- CO 1. Get to know the Hindi drama and stage.
- CO 2. Get extensive knowledge of play AasadKaEk din.
- CO 3. Get the extensive knowledge on play Madhvi.
- CO 4. Get to know the various one act plays.

FIFTH SEMESTER

Core course –XII

(4 CREDITS) (FM: 100)

Course Outcome:

- CO 1. Get to know about the Indian poetics.
- CO 2. Get to know Rasa Sidhant in Indian poetics.
- CO 3. Get to know RitiShidant in Indian poetics.
- CO 4. Get to know about the various kind of figure of speeches and metre/verse.

FIFTH SEMESTER

DSE-I

(4 CREDITS) (FM: 100)

Course Outcome:

- CO 1. Know about the poet Tulsidas and legacy of Ram kabya.
- CO 2. Know about the poetries of Tulsidas and his thoughts.
- CO 3. Study and get knowledge on Ramcharitamanas.
- CO 4. Study and get knowledge on Vinayapatrika.

FIFTH SEMESTER

DSE-II

(4 CREDITS) (FM: 100)

Course Outcome:

- CO 1. Get to know about the writer Premchand and Indian freedom movement.
- CO 2. Get to know about the novel Sevasadhan.
- CO 3. Can get the knowledge of various short stories of Premchand.
- CO 4. Get the knowledge on approach of Premchand on aim of literature, national language Hindi and its problem.

SIXTH SEMESTER

Core course-XIII

(4 CREDITS) (FM: 100)

Course Outcome:

- CO 1. Study and learn poetries of Dinkar and Bachhan.
- CO 2. Study and learn poetries of Agyen and Bhawani Prasad Mishra.
- CO 3. Study and learn poetries of DharamveerBharti and Nagarjun.
- CO 4. Study and learn poetries of Dhumil, RaghuveerSahay and Samsheerbahadhur Singh.

SIXTH SEMESTER

Core course –XIV

(4 CREDITS) (FM: 100)

Course Outcome:

- CO 1. Get the knowledge about the approach of Plato on western poetics.
- CO 2. Get the knowledge about the approach of Longinus and William Wordsworth on poetry.
- CO 3. Get the knowledge about Mathew Arnold's thought on poetry in human life and society.
- CO 4. Get the knowledge about Romanticism, Marxicism, Imaginism and Symbolism.

SIXTH SEMESTER

DSE-III

(4 CREDITS) (FM: 100)

Course Outcome:

- CO 1. Get the knowledge about constitutional provisions of official language Hindi.
- CO 2. Get the knowledge of noting, drafting, abstract writing and letter writing.
- CO 3. Get the knowledge about application of computer in Hindi language.
- CO 4. Get to know about administrative terminology.

SIXTH SEMESTER

DSE-IV

(4 CREDITS) (FM: 100)

Course Outcome:

- CO 1. Get to know about the extensive meaning of advertisement and its significance.
- CO 2. Get the knowledge about the various medium of advertisement.
- CO 3. Get to know about the language of advertisements well as Hindi Advertisements.
- CO 4. Get the knowledge on making of advertisement.

SIXTH SEMESTER

DSE-V

(4 CREDITS) (FM: 100)

Course Outcome:

- CO 1. Get the knowledge of translation by doing it practically.
- CO 2. Get the knowledge of Hindi more accurately.

M.A. IN HINDI

Programme Outcomes:

- PO1. Understand the concepts of literary trends, special dialects of Early and Medieval literature and its socio-cultural background
- PO2. Understanding the relation between the society and literature and analyse the role played by Hindi literature in past and present.
- PO3. Acquire knowledge about the various aspects of prose forms, stylistic features of eminent modern essayists, novelists and other prose writers with their contribution to overall development of Hindi prose. Comprehend different concepts, origin and perspectives of Hindi Fiction.
- PO4. Understand the History of Hindi Language through language classifications as well as stages of script development and acquire a thorough coverage of the origin, source and development of the language. Usage of various forms of Hindi language.
- PO5. Familiarize with the Indian and western literary thoughts of Literature.
- PO6. Understand the concepts of literary trends of Modern Hindi Literature. Familiarize with the development of modern poetry- the different trends & styles of modern poetry.
- PO7. Sensitize about latest trends and discourses in Hindi literature like Dalit Discourse, Adivasi discourse, Gender discourse etc. Understands and evaluates different discourses in modern Hindi literature.
- PO8. Familiarize with the linguistics of Hindi language and understands its basic theories. Enumerates DwaniVigyan, RoopVigyan, VakyaVigyan and ArthVigyan
- PO9. Provide comprehensive knowledge about official language Hindi. Developing skills for writing official letters in Functional Hindi. Enable the students capable in translation.
- PO10. Understands the craft of comparative literature. Comprehend different perspectives of comparative literature and acquire skill of comparative study.

Programme Specific Outcomes

- PSO1: To prepare and motivate students for research studies in Hindi language and literature and related fields.
- PSO2: To provide advanced knowledge of different theories of Hindi language and literature and empowering the students to pursue higher degrees/research at reputed academic institutions.
- PSO3: To nurture analytical qualities or skills, thinking power, creativity through assignments & project works.
- PSO4: To assist students in preparing (personal guidance, books) for competitive exams. E.g. NET/SET, Staff Selection Commission, Banking sector/Govt. of India undertakings (Rajbhasha Sahayak o Hindi Officer/ Hindi Translator), School Service Commission etc.
- PSO5: To encourage the students for original thinking/thought /decision making.
- PSO6: To imbibe the effective communication in both mediums of expression (oral and writing)

FIRST SEMESTER

HC-101: PRACHEENAU NIRGUN BHAKTI KAVYA

(5 CREDITS) (FM: 100)

Course Outcomes

- CO1. Gain knowledge of the features of ancient eminent Hindi writers of the period with special reference to Vidyapati and his work „VasantKhand“. Access the poetry of Vidyapati- LaukikSahitya depicting the life of the common folk and will be able to perceive a detailed description.
- CO2. Imbibe the style of „Raso“ poetry through „Raso“ literature that expresses the brave deeds of the provincial kings and their romantic expressions that later marked its influence in the Ritikaleen poetry.
- CO3. Imbibe social, cultural consciousness, critical insight and understand and appreciate poetry as a literary art form. Pervade their strong idea on the poetic contents of Kabirdas.
- CO4. Gain the insight into the major issues related to the socio-cultural contexts of India in this era. Achieve ideas about the inclusion of the folk aspects, various stylistic aspects, and other features in the poetry of Prem Margi poets with special reference to Jayasi and his work Padmavat
- CO5. Understanding the relation between Society and Literature and the role played by the poets of ancient and medieval period in Hindi literature and society. Derive a rigid knowledge about the various branches of „Sant“ poetry through the eminent Hindi writers of their period.

FIRST SEMESTER

HC-102 SAGUN BHAKTI AUR RITIKAVYA

(5 CREDITS) (FM:100)

Course Outcomes

- CO1. Understanding the krishnaleela poetry of Soordas by relating it with his philosophy of his life
- CO2. Understanding the Rama Bhakti poetry of Tulsidas along with the philosophy of Bhakti cult.
- CO3. Achieve ideas about the inclusion of the folk aspects, various stylistic aspects, and other features in the poetry of Ritikaleen poets like Kesavdas
- CO4. Understanding the content and the skill of writings of Bihari in context of the socio cultural condition of his period and his contribution in Ritikavya.
- CO5. Acquire deep knowledge about Ritikal literary works socio-cultural context, Main Trends of Ritikal: Ritimukth, Ritisidh, Ritibadh Poetry with special reference to Ghananand and his works.

FIRST SEMESTER
HC-103 Adhunik Hindi Kavya
(5 CREDITS) (FM:100)

Course Outcomes

- CO1. Acquire a new perspective about woman and knowledge about the accepted prominent writers of Dwivediyug like Maithilisarangupt,
- CO2. Acquire knowledge on the emergence of Romanticism in Hindi poetry and about the four strong romantic pillars of the era – Prasad, Pant, Nirala, MahadeviVerma. Understand the significant work of major poet Jayashankar Prasad
- CO3. Gain knowledge about various features of Nirala"s poetic works. Understand the features of Hindi poetry during its transition towards the progressive era through the works of the prominent writer Nirala.
- CO4. Achieve complete outlook Of RamdharisinghDinkar and his work Urvashi
- CO5. Understand the features of NayiKavita as a literary movement. To know about the Fantasy and its elements in Hindi poetry with special reference to Muktibodh. Gain deep knowledge about the major poets and poems of NayiKavita. Understand the concept of Prayogavad and the significant role of Agey in its development. To be familiar with the major works of other poets of Prayogavad.

FIRST SEMESTER
HC-104 HINDI SAHITYAKAITIHAAS BHAAG-1
(5 CREDITS) (FM:100)

Course Outcomes

- CO1. Understanding the prominent techniques of writing of History of Hindi Literature and major books of history of hindi literature.
- CO2. Understanding the importance and the basis of the names given to each period of Hindi Literature. Understand the relevance of Bhaktikal and Origin of Bhakti Movement that have influenced medieval Hindi poetry
- CO3. Understand the trends, milestones and literary works of SiddhSahitya, Nath Sahitya and RasoSahitya.
- CO4. Familiar with the concepts of Nirgun Bhakti Lierature.
- CO5. Familiar with the concepts of Sagun Bhakti Lierature.

SECOND SEMESTER
HC-201 HINDI SAHITYAKAITIHAAS BHAAG-2
(5 CREDITS) (FM:100)

Course Outcomes

- CO1. Acquire deep understanding of the major traditions and values of reetikaleen poetry. Comprehend the features of Ritikal and understand the social, political, cultural contexts thatexplicit the development of ritikaleen poetry and also will be able to know more about the sources and trends of Ritikal and about the Ritikaleen poets

- CO2. Understand the Modern period – Development of Hindi Literature. Acquire a deep comprehension of the period entering the post modern era
- CO3. Contributions made by Mahavir Prasad Dwivedi and the role of saraswati magazine in development of hindi language and literature.
- CO4. Imbibe the development of various prose forms and prominent writers – their contribution to the modern writing. Acquire knowledge on the developments pertaining to various streams of prose forms and the contributions extended by the writers in the field of Hindiprose.
- CO5. Understanding the poetic trends of Adhunikkal

SECOND SEMESTER

HC-202 GADYASAHITYA

(5 CREDITS) (FM:100)

Course Outcomes

- CO1. Analyze various elements of prose of eminent essayists so that to gain the ability to interpret and appreciate the different form of prose in the socio-cultural context and imbibe the peculiarities of its historical development. Acquire a detailed study of the important essayists of Hindi Literature- Balkrishna Bhatt, Chandradhar Sharma Guleri, Ramvilas Sharma.
- CO2. Acquire deep understanding of eminent writers of Bio-sketch and their prominent works-form and style of writing.
- CO3. Understand the origin of writing of Biographies with special reference to Vishnu Prabhakra and the biography written by him - „AwaraMasiha“.
- CO4. Gain the knowledge about Autobiography writing with special study of „Anya se ananya“ written by PrabhaKhetan.
- CO5. Imbibe the knowledge of travelogue writing and analyse the work of Rahul Sankrityayan and his work „Kinnardeshmein“.

SECOND SEMESTER

HC-203 BHARATIYAKAVYACHINTAN

(5 CREDITS) (FM:100)

Course Outcome

- CO1. Familiarise the Indian literary thoughts and understand the various theories of aesthetic pleasures- theory of Rasa and gain deep knowledge on definition, function, classification. Understand in detail the multidimensional aspects of poetry.
- CO2. Familiarise the Indian literary thoughts and understand the various theories of aesthetic pleasures- theory of Alankara and gain deep knowledge on definition, function, classification. Understand in detail the multidimensional aspects of poetry.
- CO3. Familiarise the Indian literary thoughts and understand the various theories of aesthetic pleasures- theory of Riti and gain deep knowledge on definition, function, classification. Understand in detail the multidimensional aspects of poetry.

- CO4. Familiarise the Indian literary thoughts and understand the various theories of aesthetic pleasures- theory of Dhvani and gain deep knowledge on definition, function, classification. Understand in detail the multidimensional aspects of poetry.
- CO5. Familiarise the Indian literary thoughts and understand the various theories of aesthetic pleasures- theory of Vakrokti and gain deep knowledge on definition, function, classification. Understand in detail the multidimensional aspects of poetry.

SECOND SEMESTER

HC-204 ADHUNIK HINDI SAHITYA MEIN STREE VIMARSH

(5 CREDITS)

(FM:100)

Course Outcomes

- CO1. Gain a vivid knowledge of Major women writers through history of hindi literature, their themes and concerns, contemporary writers.
- CO2. Analyse the novel „Zindagi Nama“ written by Krishna Sobti and her contributions to Hindi literature.
- CO3. Analyse the novel „Pachpan Khambe Lal Deewar“ written by Usha Priyambada and her contributions to Hindi literature.
- CO4. Analyse various short stories written by women writers and issues raised by them
- CO5. Analyse various short stories written by women writers and their contributions to short story writings.

SECOND SEMESTER

CE-201 DALIT SAHITYA

(5 CREDITS)

(FM:100)

Course Outcomes:

- CO1. Acquire awareness of the literary representations from Dalit section of the society. understand the major social concerns and issues prevalent in our society. Understanding the vision of Dr.B.R.Ambedkar, Gautam Buddha and Hindu philosophy in this context.
- CO2. Gain the insight into the major issues related to the Dalit life of India in this era through analytical study of „Dharti Dhan Na apna“ written by Jagdish Chandra Mathur.
- CO3. Gain the insight into the major issues related to the Dalit life of India in this era through analytical study of „Joothan“ written by Om Prakash Valmiki.
- CO4. Understanding the narratives of Dalit discourse through short stories.
- CO5. Understanding the narratives of Dalit discourse through short stories.

SECOND SEMESTER
CE-201 HINDI PATRAKARITAAUR MEDIA LEKHAN
(5 CREDITS) (FM:100)

Course Outcomes:

- CO1. Understand the role of Hindi language in media and journalism and gain knowledge about prominent hindi newspapers and journalists.
- CO2. Acquire knowledge regarding the theories associated with media writing and its different forms.
- CO3. Understand the process of communication and role of hindi language in this process.
- CO4. Analyse the various modern techniques of communication.
- CO5. Achieve the ideas about advertisement writing and its forms advantages.

SECOND SEMESTER
OE-201 PRAYOJANMULAK HINDI
(5 CREDITS) (FM:100)

Course Outcome

- CO1. Comprehend the Different forms of Hindi like Creative Language- Language of Media and Communication and Understand the spread of the Mughal period Style of Khadiboli to its present form through its use in the contemporary period and able to identify its concepts and functional applicability in administration.
- CO2. Analyse the role and scopes of Hindi language in various sectors such as banking, insurance and market. Understand the Technical terminology in Hindi and understand the sources and principles of coining the technical terms
- CO3. Achieve a theoretical training in Secretarial Practice regarding the Official procedures in administration like Registration, noting, drafting etc and develop the efficiency in the official procedures and execution of technical terms in English-Hindi and viceversa through practice is aimed.
- CO4. Gaining practical knowledge of Translation (English-Hindi-English)

THIRD SEMESTER
HC-301 SHODHPRAVIDHI
(5 CREDITS) (FM:100)

Course Outcome

- CO1. Understand the importance and meaning of research and its challenges
- CO2. Gain a knowledge of fundamentals of research ,its process and types
- CO3. Acquire understanding of methods of material collection, formulation of problem and analysis of research materials.
- CO4. Acquire skill of writing a synopsis, content and introduction of a thesis.

- CO5. Learn about formulation hypothesis and conclusion.

THIRD SEMESTER
HC-302PASCHATYASAHITYACHINTAN
(5 CREDITS) (FM:100)

Course Outcome

- CO1. Gain better understanding of Plato and Aristotle and their concepts of art, reality and emotion concepts of drama plot, character and their inter relation and structure of plot in relation to tragedy, concept of tragic character. Able to sharpen their analysis of poetic thoughts through the detailed interpretation of poetic theories by western critics.
- CO2. Familiarizing with the Poetic dictions of Longinus, Coleridge, Wordsworth. Comprehend various scholarly critical approaches pertaining to the study of literature and able to set their point of view critically.
- CO3. Familiarizing with the Poetic dictions of Croche, Richards. Comprehend various scholarly critical approaches pertaining to the study of literature and able to set their point of view critically.
- CO4. Familiarizing with the Poetic dictions of Arnold and Eliot. Comprehend various scholarly critical approaches pertaining to the study of literature and able to set their point of view critically.
- CO5. Able to achieve an outlook of Indian perspectives and and develop a schematic analysis on various western critical approaches like Marxism, Modernism, Psychological Analysis, Existentialism.

THIRD SEMESTER
HC-303 BHASHAVIGYAN
(5 CREDITS) (FM:100)

Course Outcome

- CO1. Gain a deep knowledge on definition and meaning of language and its development .
- CO2. Understand the Meaning and definition of linguistics its nature and various aspects.
- CO3. Acquire a thorough knowledge about the distribution and acoustic qualities of the speech sounds through their physiological manner and understand about syllabic structure and phonetic transcription.
- CO4. Understands Syntax –structure,nature and its various parts.
- CO5. Able to understand and analyse ArthVigyaan and the relation between word and Meaning

THIRD SEMESTER
CE-301 ALOCHAKAURALOCHNA
(5 CREDITS) (FM:100)

Course Outcome

- CO1. Understand art of criticism writing and gain a deep knowledge of hindi criticism and the role of RamchandraShukla in development of criticism writing.
- CO2. Gain a deep knowledge about Hazarai Prasad Dwivedi and his insight of History of hindi literature.
- CO3. Thorough knowledge of ideas of Nagendra in context of Ritikavya
- CO4. Understand the ideas of Ramvilas Sharma in context of Premchand.
- CO5. Understand the ideas of Namvar Singh in context of development of Hindi literature.

THIRD SEMESTER
CE-301 TULSIDAS
(5 CREDITS) (FM:100)

Course Outcome

- CO1. Analyse Tulsidas as a prominent poet of Bhakti cult and his major work Ramcharitmanas.
- CO2. Understand the form of devotion and literary style of Tulsidas depicted in Vinay Patrika.
- CO3. Analyse the form of poetic style of Tulsidas through his work Kavitavali.
- CO4. Analyse the form of poetic style of Tulsidas through his work Gitavali.
- CO5. Analyse the form of poetic style of Tulsidas through his work Dohavali.

THIRD SEMESTER
CE-302 PREMCHAND
(5 CREDITS) (FM:100)

Course Outcome

- CO1. Understand the emergence and development in in Hindi Nobel writing. Gain a deep knowledge about eminent novelist Premchand and his work „karmabhoomi“.
- CO2. Analysing various elements of a novel along with deep study of „Rang Bhoomi“ and issues raised in it.
- CO3. Acquire and knowledge of Premchand’s vision to ask Indian society and his concerns through detailed study of his work „premashram“.
- CO4. Understand the narratives and of Premchand in context of Indian society and culture as well as economic condition through short stories.
- CO5. Understand the narratives and of Premchand in context of Indian society and culture as well as economic condition through short stories.

THIRD SEMESTER
CE-302 ANUVAAD SIDDHANT AUR PRAYOG
(5 CREDITS) (FM:100)

Course Outcome

- CO1. Understanding the definition characteristics and importance of translation.
- CO2. Acquire idea on various aspects of translation such as it's process and technique as well as emergence and development.
- CO3. Analyse various types of translation by keeping in view is limitationions and scopes.
- CO4. Gain a practical knowledge of translation from English to Hindi.
- CO5. Analyse the need of translation in context of national importance.

THIRD SEMESTER
CE-302 HINDI BHASHA
(5 CREDITS) (FM:100)

Course Outcomes

- CO1. Gain knowledge of ancient Indian languages- Vaidik Sanskrit and Laukik Sanskrit and their transition to modern Indian languages
- CO2. Understand different types of Indian languages in medieval period and their special characteristics.
- CO3. Gain Knowledge and modern Indian languages and its various divisions.
- CO4. Geographical areas of Hindi language and its dialects
- CO5. Analyse the development of DevnagriLipi ,its standardisation and characteristics.

THIRD SEMESTER
FI- 301 SHAIKSHANIKBHRAMAN
(5 CREDITS) (FM:100)

Course Outcome

- CO1. Gain a skill of observation and derivation of ideas through visit to a place of relevance.
- CO2. Acquire a skill of analysing the required facts and framing a conclusion.
- CO3. Gain a practical knowledge of writing a report based on research and observation
- CO4. Using the acquired theoretical knowledge of Hindi literature or language in analysing the present situation.
- CO5. Skill of writing.

FOURTH SEMESTER
HC-401 HINDI NATAKAUREKANKI
(5 CREDIT) (FM:100)

Course Outcome

- CO1. Attain a strong idea about the Father of modern Hindi literature Bharatendu Harischandra, who the pioneer of Hindi drama evoked consciousness in people rather than aiming mere entertainment.
- CO2. Develop an assessment strategy on Hindi drama in view of JayasankarPrasad's historical and social plays that played a significant role in moulding a new stage craft, plot construction of Hindi drama and theatre and understand the impact of various aspects of his drama in the Hindi dramatic field and implication of these new trends in modern drama.
- CO3. Understand the Contribution of Mohan Rakesh in Hindi Drama through the Analysis and evaluation of the works and contributions of the eminent dramatist and playwright Mohan Rakesh who triumphantly depicted deep human emotions in his dramas thus enabling the directors to expose the feelings and emotions inherent in his dramatic script.
- CO4. Acquire a deep idea on One act plays and understand the features and forms of one act plays through its origin and development and also achieve a good idea on the contributions of eminent playwrights.
- CO5. Acquire a deep idea on one act plays and understand the features and forms of one act plays through its origin and development and also achieve a good idea on the contributions of eminent playwrights.

FOURTH SEMESTER
HC-402 TULNATMAKSAHITYA
(5 CREDITS) (FM:100)

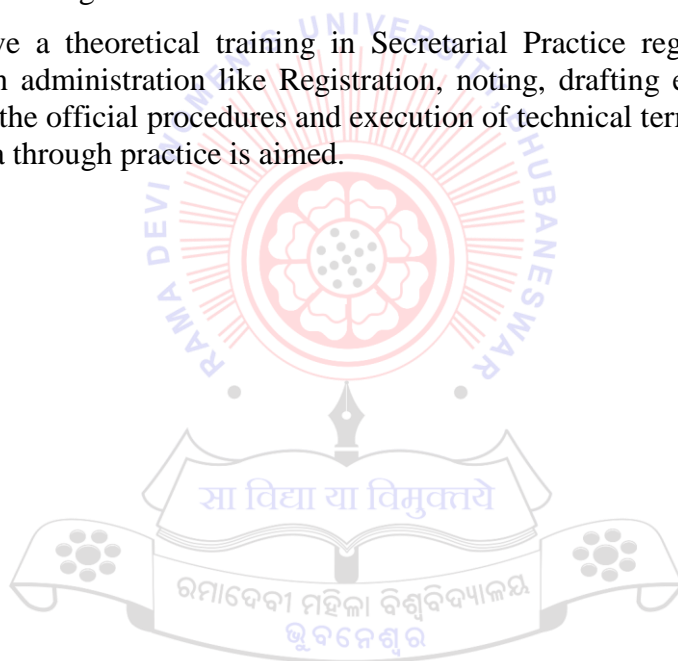
Course Outcome

- CO1. Understanding the definition scopes and limitations of comparative literature and its importance in today's world consisting of people of different languages, culture, historical importance etc
- CO2. Analysing various ideology related to comparative study of literature with special reference to Indian context
- CO3. Acquiring knowledge about various characteristics of comparative study of literature
- CO4. Importance of comparative study in National scenario as well as global prospective and its interrelation and importance for mankind
- CO5. Gaining practical knowledge of comparative study of Hindi and Odia literature

FOURTH SEMESTER
CE-401 RAJBHASHA PRASHIKSHAN
(5 CREDITS) (FM:100)

Course Outcome

- CO1. Acquire knowledge about Official Language-Hindi. Understanding the Official Language Acts of 1963, 1968 and 1976.
- CO2. Develop knowledge in Hindi Computing through the Language Technology. Acquaint with various Hindi software packages and about the online learning and technological aspects of language development.
- CO3. Understand and get imbued with the specialties and different forms of Functional Hindi applied in sectors like trade, commerce, banking and insurance.
- CO4. Understand the Technical terminology in Hindi and understand the sources and principles of coining the technical terms.
- CO5. Achieve a theoretical training in Secretarial Practice regarding the Official procedures in administration like Registration, noting, drafting etc and develop the efficiency in the official procedures and execution of technical terms in English-Hindi and viceversa through practice is aimed.



Ph.D. IN HINDI

Programme Outcomes

- PO 1. Proficient in Research Methodology theoretically and practically.
- PO 2. They will learn about the comparative study of literature and different ideologies.
- PO 3. Become competent to do research work.
- PO 4. Competent in write different kind of research paper related to Hindi literature.
- PO 5. Familiar with basic computer knowledge.

Programme specific outcomes

- PSO1: They can register for research work in any university.
- PSO2: They will understand and develop new dimension of language in research field.
- PSO3: They can become creative writer.

PAPER – I

(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1. Get to know history and development of Research.
- CO 2. Know about the Research process.
- CO 3. Gain knowledge of thesis writing.
- CO 4. Know practical knowledge of computer application

PAPER –II

(4 CREDITS) (FM: 100)

Course Outcome

- CO 1. Get to know Ideological ism related to Hindi literature.
- CO 2. Get to know various discourses – Dalit, Tribal, and Feminism.
- CO 3. Know about medieval literature.
- CO 4. Get to know Indian comparative literature

PAPER –III

(4 CREDITS) (FM: 100)

Course Outcome

- CO 1. Learn and do the review of literature of proposed topic
- CO 2. Will learn and practically do the power point presentation.

PAPER –IV

(4 CREDITS)

(FM: 100)

Course Outcome

- CO 1. Learn philosophy and ethics.
- CO 2. Learn scientific conduct.
- CO 3. Get to know publication ethics
- CO 4. Get to know about the open access publishing.
- CO 5. Know about publication misconduct.
- CO 6. Learn databases and research metrics.



B.A. HISTORY

Program Outcomes

- PO1. The student would be in the position to attend various competitive exams in pursuit of job opportunities.
- PO2. Expand the knowledge and understanding of the past, and reflect on the diversity of past human experiences.
- PO3. With the program's completion, the student would grasp the different paradigms of history, its need, and prospects for the future.
- PO4. The divergent courses taught in history would help the student community to revisit their past glory and to preserve it for generations to come.
- PO5. Understand the evolution of human history and the interconnectedness of various cultures and civilizations.
- PO6. Cultivate a broad range of skills that are highly valued by employers, such as the ability to think critically, assess evidence of many kinds, and express ideas with precision. These skills can be transferred to many different careers or provide a grounding for further academic study.
- PO7. The courses on the contemporary history of India and the world help the students to understand global relations and perspectives.
- PO8. They will be able to analyze and evaluate the evidence in its historical and cultural context and use that evidence to build and support an argument.
- PO9. Explain distinctions between different historical periods, places, actors, events, and forces by using disciplinary categories of analysis and academic language.
- PO10. The courses in historiography and historical methods are intended to familiarize the students with approaches to historical studies with a focus on prominent historians and on the development of historical writing in modern India.

Program Specific Outcomes

- PSO1. Understand factual and conceptual aspects of historical changes in multiple areas of the world.
- PSO2. Think contextually and critically about the past to understand human experiences.
- PSO3. Analyze why and how historical events take place based on the verification of pieces of evidence and arguments.
- PSO4. Design and write research papers based on primary and secondary sources.
- PSO5. Make logical oral presentations of factual and theoretical knowledge of historical events and changes.
- PSO6. Develop rational, humanitarian, democratic, and secular outlooks based on historical knowledge and contemporary societal, economic and political issues.

FIRST SEMESTER

C-1: HISTORY OF INDIA-I

(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Student will have a brief idea about the different sources and changing interpretations of Ancient Indian History.
- CO 2. Student will have a fair knowledge about the Pre-History.
- CO 3. Student will have a ideas about the Harappan Civilization.
- CO 4. Student will have a fair knowledge about the Early Vedic Age and Later Vedic Age.

FIRST SEMESTER

C-2: SOCIAL FORMATION AND CULTURAL PATTERNS OF ANCIENT WORLD

(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Student will have an idea of evolution of man and its surroundings.
- CO 2. Student will have an idea of the early practice of agriculture and domestication of animals.
- CO 3. Student will have an idea of the contemporary of Indian civilisation to world civilisation.
- CO 4. Student will have an idea of the administration and culture of ancient Greece.

FIRST SEMESTER

AECC-1: ENVIRONMENTAL STUDIES AND DISASTER MANAGEMENT

(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Students understand about problems of environmental pollution and Impact of pollution on human and ecosystem and control measures.
- CO 2. Students will learn about increase in population growth and understand the issues of use of resources in proper manner leading to sustainable development.
- CO 3. Learn about causes and impacts of Disasters and Case studies of National and Global disasters and risk reduction approaches of Disasters with safety issues in mitigating Industrial disasters.
- CO 4. Basic idea about the mode of transmission and course of some communicable and noncommunicable diseases and knowledge on the Importance and methods of prevention of epidemics and pandemics

FIRST SEMESTER

GE-1: HISTORY OF INDIA-I (EARLY TIMES TO 1750 AD)

(4 CREDITS)

(FM:100)

Course Outcomes

- CO 1. Student will have an idea about the different sources and changing interpretations of Ancient Indian History, and Culture.
- CO 2. Student will have an idea about the administration of Harsha, Maurya and Gupta.
- CO 3. Student will have an idea about the early medieval society, culture and economy.
- CO 4. Student will have an idea about the advent of the Mughals.

SECOND SEMESTER

C-3 HISTORY OF INDIA-II (300 BCE TO 750 CE)

(4 CREDITS)

(FM:100)

Course Outcomes

- CO 1. Student will have an idea about the Society and Economy of the Ancient India.
- CO 2. Student will have an idea about the changing of Political Formations.
- CO 3. Student will have an idea about the early medieval India.
- CO 4. Student will have an idea about the Religion, Culture, Philosophy and Socie

SECOND SEMESTER

C- 4: SOCIAL FORMATION AND CULTURAL PATTERNS OF MEDIEVAL WORLD

(4 CREDITS)

(FM:100)

Course Outcomes

- CO 1. Student will have an idea about the Polity and Economy of Ancient Rome.
- CO 2. Student will have an idea about the economic developments in Europe from 7th to 14th centuries.
- CO 3. Student will have an idea about the religion and culture in Medieval Europe.
- CO 4. Student will have an idea about the societies in central Islamic lands.

SECOND SEMESTER

AECC-II: MIL – ALTERNATIVE ENGLISH, ODIA, HINDI

(4 CREDITS)

(FM:100)

Course Outcomes

- CO 1. Demonstrate high-level proficiency in writing and speaking English.
- CO 2. Employ effectively the language of their discipline.
- CO 3. Develop skills in organizing and expressing ideas and viewpoints with clarity and coherence in writing and speech.

- CO 4. Formulate and defend original arguments.
- CO 5. Enumerate skills in narration, description, and argumentation.
- CO 6. Ascertain insight into different cultures.
- CO 7. Gain good knowledge that includes understanding recent developments in language and literature.
- CO 8. To develop an acumen for a better understanding of the diversity of human experiences.
- CO 9. Acquire an openness to new ideas, perspectives, and ways of thinking.
- CO 10. Enhance literary and critical thinking.

SECOND SEMESTER

GE-II: HISTORY OF INDIA-II (1750 AD TO 1950)

(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Student will have an idea about the foundation and expansion of British rule in India.
- CO 2. Student will have an idea about the consolidation of British rule and the response of the Indians towards the rule.
- CO 3. Student will have an idea about the social and cultural policy.
- CO 4. Student will have an idea about the Indian national movements.

THIRD SEMESTER

C 5: HISTORY OF INDIA-III (750 AD TO 1206 AD)

(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Student will have a brief idea about the political structure of early medieval India.
- CO 2. Student will have a fair knowledge about the agrarian structure and social changes in early medieval period.
- CO 3. Student will have an idea about the trade and commerce of early medieval society.
- CO 4. Students will have a fair knowledge about early medieval India's religious and cultural development dia.

THIRD SEMESTER

C 6: RISE OF THE MODERN WEST-I

(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Student will have a brief idea about the transition from feudalism to capitalism.
- CO 2. Student will have a fair knowledge about the expansion of early colonies.

- CO 3. Student will have a ideas about the renaissance and reformation.
- CO 4. Student will have a fair knowledge about the economic development of the sixteenth century.

THIRD SEMESTER

C 7: HISTORY OF INDIA-IV (1206 AD TO 1526 AD

(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Student will have an idea of the political structure of the sultanate period.
- CO 2. Student will have an idea of the emergence of the regional powers and kingdoms.
- CO 3. Student will have an idea of the society and economy of the sultanate period.
- CO 4. Student will have an idea of religion, society and culture of the sultanate period.

THIRD SEMESTER

SEC-I: COMMUNICATIVE ENGLISH

(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Enhance their ability to build and enrich their communication skills
- CO 2. be able to build up the four primary skills in students in the academic as well as in the wider domains of use like public offices.
- CO 3. Acquire analytical and comprehension reading skills
- CO 4. Identify basic principles of communication
- CO 5. Build speaking and listening skills
- CO 6. Learn beyond the conventional syllabus and be prepared to meet challenges while seeking a job
- CO 7. be able to synthesize knowledge and use it creatively to better understand and improvise themselves
- CO 8. be able to communicate effectively through written reports, presentations, and discussions
- CO 10. Develop a neutral accent and improve general standard of pronunciation
- CO 11. Speak globally intelligible English

THIRD SEMESTER
GE-III: RISE OF THE MODERN WEST-I
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Student will have a brief idea about the transition from feudalism to capitalism.
- CO 2. Student will have a fair knowledge about the expansion of early colonies.
- CO 3. Student will have a ideas about the renaissance and reformation.
- CO 4. Student will have a fair knowledge about the economic development of the sixteenth century.

FOURTH SEMESTER
C 8: RISE OF THE MODERN WEST-II
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Student will have an idea about the English revolution and European politics in the 18th century.
- CO 2. Student will have an idea about the development of modern sciences.
- CO 3. Student will have an idea about the mercantilism and European economy.
- CO 4. Student will have an idea about the American revolution.

FOURTH SEMESTER
C 9: HISTORY OF INDIA-V (1526 AD TO 1750 AD)
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Student will have a brief idea about the establishment of Mughal rule in India.
- CO 2. Student will have a fair knowledge about the consolidation of Mughal rule.
- CO 3. Student will have an idea about the Society and economy.
- CO 4. Student will have a fair knowledge about the cultural ideals.

FOURTH SEMESTER
C 10: HISTORICAL THEORIES AND METHODS
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Student will have an idea about the meaning and scope of history.
- CO 2. Student will have an idea about the tradition of historical writings.
- CO 3. Student will have an idea about the history as an interdisciplinary practice.
- CO 4. Student will have an idea about the historical methods adopted for historical writings.

FOURTH SEMESTER

C 10: HISTORICAL THEORIES AND METHODS

(4 CREDITS)

(FM:100)

Course Outcomes

I. QUANTITATIVE APTITUDE & DATA INTERPRETATION

- CO 1. Use their logical thinking and analytical abilities to solve Quantitative aptitude questions from company specific and other competitive tests.
- CO 2. Solve questions related to Time and distance and time and work etc. from company specific and other competitive tests.
- CO 3. Understand and solve puzzle related questions from specific and other competitive tests.
- CO 4. Solve questions related to permutation & combinations and probabilities from company specific and other competitive tests.

II. LOGICAL REASONING

- CO 1. Detect errors of grammar and usage in a given sentence/text and rectify them by making appropriate changes.
- CO 2. Solve questions based on critical reasoning.
- CO 3. Analyze reading passages and quickly find out the correct responses to questions asked by using reading skills like skimming, scanning, reading between the lines, etc.
- CO 4. To use idiomatic expressions in writing and speaking and to solve questions based on them.

III. ETHICS AND VALUES

- CO1: have changes in their perceptions and practices towards women and develop proper attitude towards women and value their work and contribution
- CO2: come forward to challenge the unethical treatments against women
- CO3: end gender-based hierarchy and hegemony, remove the feeling that women are counter to men and bring about a complementarity among the hitherto existing gender binary
- CO4: pioneer in creating a gender equal society where the well-being, happiness and security of the women will be well protected & contributing towards a better and happier society.

FOURTH SEMESTER

GE-IV: RISE OF THE MODERN WEST-II

(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Student will have an idea about the English revolution and European politics in the 18th century.
- CO 2. Student will have an idea about the development of modern sciences.

- CO 3. Student will have an idea about the mercantilism and European economy.
- CO 4. Student will have an idea about the American revolution.

FIFTH SEMESTER

C 11: HISTORY OF MODERN EUROPE-I (1780 AD TO 1880 AD)

(4 CREDITS)

(FM:100)

Course Outcomes

- CO 1. Student will have a brief idea about the French revolution.
- CO 2. Student will have a fair knowledge about the revolution and its European repercussions.
- CO 3. Student will have a ideas about the restoration and revolution c. 1815-1848.
- CO 4. Student will have a fair knowledge about the socio-economic transformation and remaking of states in late 18th and 19th century.

FIFTH SEMESTER

C 12: HISTORY OF INDIA-VII (1750 AD TO 1857 AD)

(4 CREDITS)

(FM:100)

Course Outcomes

- CO 1. Student will have an idea of expansion and consolidation of colonial powers.
- CO 2. Student will have an idea of the colonial states and ideologies.
- CO 3. Student will have an idea of society and economy during the expansion of colonial power.
- CO 4. Student will have an idea of the resistance movement to colonial power.

FIFTH SEMESTER

DSE-I: HISTORY AND CULTURE OF ODISHA-I

(4 CREDITS)

(FM:100)

Course Outcomes

- CO 1. Student will have an idea about the Kalinga War, Historical Geography and Kharavela.
- CO 2. Student will have an idea about the emerging dynasties during the 4th century BC.
- CO 3. Student will have an idea about the Gangas and gajapatis.
- CO 4. Student will have an idea about the cultural life of early and medieval odisha.

FIFTH SEMESTER
DSE-II: HISTORY AND CULTURE OF ODISHA-II
(4 CREDITS) (FM:100)

Course Outcomes

On Completion of this course;

- CO 1. Student will have an idea about the Mughal and British conquest of Odisha.
- CO 2. Student will have an idea about the resistance movement and famine in odisha.
- CO 3. Student will have an idea about the growth of nationalism in odisha.
- CO 4. Student will have an idea about nationalistic politics and quit India movement in Odisha.

SIXTH SEMESTER
C 13: HISTORY OF INDIA-VIII (1857 AD TO 1950 AD)
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Student will have an idea about the cultural changes, socio-religious, and reformation movement in India.
- CO 2. Student will have an idea about the nationalism trends up to 1919.
- CO 3. Student will have an idea about the Gandhian era.
- CO 4. Student will have an idea about the partition.

SIXTH SEMESTER
C 14: HISTORY OF MODERN EUROPE-II (1880 AD TO 1939 AD)
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Student will have an idea about the liberal democracy, working class movement and socialism in 19th and 20th century.
- CO 2. Student will have an idea about the crisis of feudalism in Russia and experiments in socialism.
- CO 3. Student will have an idea about the imperialism, wars and crisis c. 1880-1939
- CO 4. Student will have an idea about the major intellectual developments c. 1850.

SIXTH SEMESTER
DSE-III: HISTORY AND CULTURE OF ODISHA-III
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Student will have an idea about the religious movements in odisha.

- CO 2. Student will have an idea about the religious movements and growth of odia literature.
- CO 3. Student will have an idea about the art and architecture of odisha.
- CO 4. Student will have an idea about the impact of reformation movements in odisha.

SIXTH SEMESTER

DSE-IV/ PROJECT: HISTORY OF CONTEMPORARY ODISHA (1947 TO 1980)

(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Student will have an idea about the political developments in odisha.
- CO 2. Student will have an idea about the united political initiatives in odisha.
- CO 3. Student will have an idea about the economic developments in odisha.
- CO 4. Student will have an idea about the social developments and problems in odisha.
- CO 5. Student will have an idea about the preparation of a report.
- CO 6. Student will have an idea about the research methods.
- CO 7. Student will have an idea about the subjective analysis.
- CO 8. Student will have an idea about the field visit for study.



B.SC. HOME SCIENCE

Programme Outcomes

- PO1:-Entrepreneurial Skills- Enable the students to become an entrepreneur through in depth knowledge of Nutrition Science, Human Development, Public Health, Personal Finance, Extension Communication and Resource Management.
- PO2:- Contemporary Building- The students are able to develop competency in the field of Diet planning, project development, budget planning, financial management, decision making and fashion designing.
- PO3:-Effective Communication- Demonstrate the proficiency in communications skill, competency in interpersonal skills, presentation skills, formal and informal communications in group and organization and public communication.
- PO4:-Lifelong Learning- Acquire the skills to become lifelong learner of new dimensions of knowledge, promoting continuous development and implementation of knowledge and also inculcate skills needed for employment.
- PO5:-Social interaction- Foster the social skills to enable the holistic development of society and create responsible citizens as human resource to build up a socially inclusive society.
- PO6:-Applicability- Apply the knowledge and skill in re-shaping the society for professional contributions and serve at need based service sections.
- PO7:- Explore- To enrich the research the research database by conducting pertinent research in the contemporary social issues, challenges and opportunities.

Programme Specific Outcomes

- PSO1:-Enrich with the skills entrepreneurship, responsible citizen and ethical researcher.
- PSO2:-Develop ability to become a successful dietician, fashion designer, family counsellors and extension specialists.
- 5 PSO3:-Understand the meaning and process of research in social sciences and meaning and process of research in social science.
- PSO4:-Know the relationship between society, economy, environment and create awareness among people regarding constraints in economic environment and its consequences.

FIRST SEMESTER

C-1 – HUMAN DEVELOPMENT 1: THE CHILDHOOD YEARS

(4 CREDITS) (FM: 100)

Course Outcomes

- CO1: The students will gain an insight on scientific methods of studies on Human Development.
- CO2: The students will be aware about the stages of prenatal Development and factors affecting prenatal development.
- CO3: The students will understand the developmental pattern of infancy and preschool years (0-5 years).
- CO4: The students will learn about developmental pattern of Late childhood years (6-10 years).

FIRST SEMESTER

C-2: FOOD AND NUTRITION

(4 CREDITS) (FM: 100)

Course Outcomes

- CO1: The students will learn the basic concepts in food and nutrition.
- CO2: The students will gain an insight on the classification, functions, dietary sources and daily requirements of various nutrients.
- CO3: The students will understand the nutritional contribution and changes during cooking of the various food groups.
- CO4: The students will be aware of different methods of cooking and enhancing the nutritional quality of foods.

SECOND SEMESTER

C-3: EXTENSION EDUCATION

(4 CREDITS) (FM: 100)

Course Outcomes

- CO1: The students will be enriched about the principle and behavioural changes brought about by extension education. "
- CO2: The students will understand the role of extension education in community development.
- CO3: The students will be aware of the methods of teaching in extension education.
- CO4: The students will learn about the principles and steps in teaching learning process.

SECOND SEMESTER
C-4 Family Resource Management
(4 CREDITS) (FM: 100)

Course Outcomes

- CO1: The students will understand family resource management and its application.
- CO2: The students will be aware of classification and characteristics of family resources.
- CO3: The students will gain an insight on the availability and management of specific resources by an individual or family.
- CO4: The students will enrich about energy, work simplification techniques and event management.

THIRD SEMESTER
C-5 TEXTILES
(4 CREDITS) (FM: 100)

Course Outcomes

- CO1: The students will learn about classification, usage and production of textile fibres.
- CO2: The students will know the manufacturing process and yarn construction techniques.
- CO3: The students will gain an insight on techniques of fabric construction, dyeing and printing.
- CO4: The students will be enriched about different types of finishing and dyeing techniques.

THIRD SEMESTER
C-6: DYNAMICS OF COMMUNICATION
(4 CREDITS) (FM: 100)

Course Outcomes

- CO1: The students will understand the concept, functions, types and scope of communication.
- CO2: The students will be aware of the principles, elements and models of communication.
- CO3: The students will learn about the concept of effective communication.
- CO4: The students will gain an insight on the concept of diffusion, adoption and innovation.

THIRD SEMESTER

C-7 :PERSONAL FINANCE AND CONSUMER STUDIES

(4 CREDITS)

(FM: 100)

Course Outcomes

- CO1: The students will gain knowledge about income and expenditure.
- CO2: The students will be aware about consumer problems and education.
- CO3: The students will understand about consumer protection and empowerment.
- CO4: The students will gain an insight on legislative measures for consumer protections standardization and quality control.

FOURTH SEMESTER

C-8 :HUMAN DEVELOPMENT II

DEVELOPMENT IN ADOLESCENCE AND ADULTHOOD

(4 CREDITS)

(FM: 100)

Course Outcomes

- CO1: The students will know about the characteristics, body changes. and effect of puberty
- CO2: The students will learn about the characteristics, developmental tasks and body changes during Adolescence.
- CO3: The students will gain an insight on characteristics, developmental tasks and changes in Early Adulthood
- CO4: The student will understand various adjustments of family.

FOURTH SEMESTER

C-9 :NUTRITION: A LIFE CYCLE APPROACH

(4 CREDITS)

(FM: 100)

Course Outcomes

- CO1: The students will learn about the principles of meal planning.
- CO2: The students will gain an insight on Nutrition during childhood.
- CO3: The students will understand the Nutrition during adulthood.
- CO4: The students will be aware about the Nutrition for special conditions.

FOURTH SEMESTER

C-10 :: FASHION DESIGN

(4 CREDITS)

(FM: 100)

Course Outcomes

- CO1: The students will get advanced knowledge Fashion and Role of a fashion designer.
- CO2: The students will be aware about the origin, functions and importance of clothing.

CO3: The students will learn about the selection, use of clothing and evaluation of ready-made garments.

CO4: The students understand the Aesthetics in dress.

FIFTH SEMESTER

C-11 : THERAPEUTIC NUTRITION

(4 CREDITS)

(FM: 100)

Course outcome

- CO1: The students will study about the principles of nutrition care process.
- CO2: The students will understand the aetiology, clinical features and nutritional management of various diseases like weight imbalance, Diabetes mellitus and heart diseases.
- CO3: The students will gain an insight aetiology, clinical features and nutritional management of diarrhoea, lactose intolerance and liver diseases.
- CO4: The students will learn the aetiology, clinical features and nutritional management of typhoid, tuberculosis and HIV

FIFTH SEMESTER

C-12 : PHYSIOLOGY AND PROMOTIVE HEALTH

(4 CREDITS)

(FM: 100)

Course outcome

- CO1: The students will understand the structure and functions of Respirating and Circulatory systems.
- CO2: The students will gain an insight on the Actions and disorders of Endocrine glands.
- CO3: The students will focus on Renal and Reproductive physiology.
- CO4: The students will learn about the Health, Diseases and Promotive Health.

SIXTH SEMESTER

C-13 : RESEARCH METHODOLOGY

(4 CREDITS)

(FM: 100)

Course Outcomes

- CO1: The students will become aware of Research - meaning, purpose and its types.
- CO2: The students will learn about various. Research designs.
- CO3: The students will gain an insight on Sampling tools and techniques.
- CO4: The students will focus on the Research process.

SIXTH SEMESTER
C-14 :SOCIO ECONOMIC ENVIRONMENT
(4 CREDITS) (FM: 100)

Course outcome

- CO1: The students will gain an insight on sociological concerns and orientation.
- CO2 The students will learn about the Economics theory and environment.
- CO3: The students will focus on money, banking and public revenue.
- CO4: The students will understand the Indian Economic environment, constraints. on growth and issues related to Gender discrimination.

SIXTH SEMESTER
DSE-I: INDIAN TEXTILES HERITAGE
(4 CREDITS) (FM: 100)

Course outcome

- CO1: The students will learn about the history, production centres, techniques, design of women textiles and crafts.
- CO2: The students will understand the history, production, techniques, designs and colours of embroidery textiles.
- CO3: The students will get to know about the history, production centres, techniques, designs of painted and printed textiles.
- CO4: The students will gain an insight on conservation of traditional textiles.

SIXTH SEMESTER
DSE II: COMMUNICATION SYSTEMS AND MASS MEDIA
(4 CREDITS) (FM: 100)

Course outcome

- CO1: The students will gain insight on awareness of self in communication.
- CO2: The students will learn about interpersonal communication.
- CO3: The student will understand the organisation and public communication.
- CO4: The students will be aware about mass communication and mass media.

SIXTH SEMESTER
DSE- III: Marriage and Family Relationships
(4 CREDITS) (FM: 100)

Course outcome

- CO1: The students will learn about marriage, types of marriage and marriage in contemporary society.
- CO2: The students will gain an insight on marriage on rituals and ceremonies in different Indian communities.

- CO3: The students will understand the family, kinship and relationship and stages of family lifecycle. CO4: The students will focus on the problems of family.

SIXTH SEMESTER

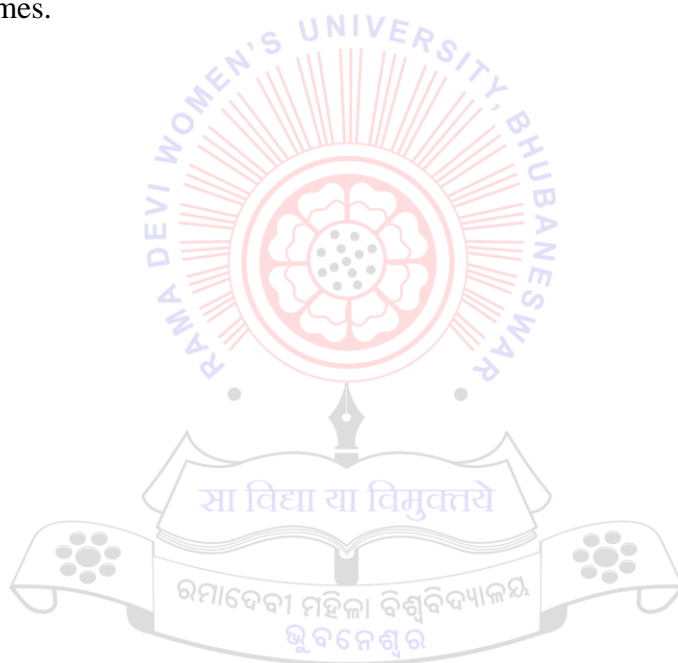
DSE- IV: PUBLIC NUTRITION

(4 CREDITS)

(FM: 100)

Course outcome

- CO1: The students will understand the definition, concept and scope of public health and nutrition .
- CO2: The students will gain an insight on nutritional problems and their implications.
- CO3: The students will learn about the objectives. and methods of assessment of nutritional status.
- CO4: The students will gain knowledge an national and international nutrition policy and programmes.



M.Sc. in HOME SCIENCE

Programme Outcome

The students will be able to

- PO-1-Learning and conceptual understanding
- Understand the concepts and application of Food sciences and Nutrition , Human Development , Resource Management , Textile and Clothing for community developments.
- PO 2-Applicability- Apply the knowledge of decisions making in management and problem solving ability.
- PO-3- Skill Enhancement- Skilled areas in Nutrition and Dietetics, Resource Management, Textiles and Extension Education.
- PO-4- Innovation-Enable the students to prepare new projects and proposal making.
- PO-5- Environment and Sustainability-Develop skill of designing, testing attitude, motivation and emotional intelligence and learn there use of sustainable practices for improved physical, emotional, social, psychological environment at micro/macro level.
- PO-6-Entrepreneurial Skill-Ability to learn the entrepreneurial qualities and also inculcate the abilities of employability .
- PO-7-Home Science and Society Understand the process of programme designing and apply the knowledge, identify, analyze the societal issues to improve quality of life of individual, family and society.
- PO-8- ICT Skills-Develop ability in planning, implementation and using of communication Technology
- PO-9-Exposure Learning-Acquired practical learning from internship, field visits , industrial visit and research projects.
- PO-10- Research aptitude-Understanding basics of computer will help to analysis the data , computing the data and presenting the data with statistical application

Programme Specific Outcome

- PSO1- Acquire practical knowledge through Field internship visits to industries and research organizations.
- PSO2- Develop research eco-system in the teaching learning environment.
- PSO3- Inculcate professional attitude and aptitude among the learners to broaden their vision.
- PSO 4- Create opportunity for employability through need based courses as per industry requirement.

FIRST SEMESTER

HC-101: ADVANCE FOOD SCIENCE AND NUTRITION

(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1 : The students will get to know about the basic food groups, food preparation and meal planning.
- CO 2 : Emphasize the need of different Foods and food products and study about the new trends in foods.
- CO 3 : This course enables a detailed study on Carbohydrates, Proteins and Fats.
- CO 4 : To provide knowledge about functions, sources and requirements of various vitamins and minerals.
- CO 5 :The students will gain knowledge on RDA, BMR and emerging and changing concepts in Human Nutrition

FIRST SEMESTER

HC-102: HUMAN DEVELOPMENT

(4 CREDITS) (FM: 100)

Course Outcomes

- On successful completion of the course students will be able to
- CO 1 : To acquire knowledge about the principles and theories of Human development.
- CO 2 : To Understand Biological basis of development.
- CO 3 : To highlight the need of the Developmental task during Infancy and Early Childhood years.
- CO 4 :To acquire detailed knowledge on Developmental changes during the transition phase from late childhood to Adolescence.
- CO 5 :To mark the difference in Developmental task during Adulthood and Oldage.

FIRST SEMESTER

HC-103: EXTENSION EDUCATION

(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1 : The students will learn about extension education, its philosophy and conceptual framework of extension education.
- CO 2 : This will enable students to gain knowledge about programme planning and evaluation processes/ cycles.
- CO 3 : The students will become familiar with various Home Science extension programmes.

- CO 4 : At the end of this unit, the students will know about principles of teaching and learning.
- CO 5 : The students will be able to understand about different aspects of Adult Education.

FIRST SEMESTER

HC-104: INTEGRATED HOME SCIENCE (PRACTICAL-1)

(4 CREDITS)

(FM: 100)

Course Outcomes

- CO 1 : The students will get expertise in menu planning for different stages of human life.
- CO 2 : The students will become skill ful on preparing menus on special conditions on the basis of different socio-economic groups.
- CO 3 : The students will understand the behavioural pattern and changes in childhood and adolescence.
- CO 4 : The students will become familiar with different case studies related to early and late adolescent issues.
- CO 5 :The students will get exposure on field situations, report preparation and presentation.

SECOND SEMESTER

HC-201- RESOURCE MANAGEMENT

(4 CREDITS)

(FM: 100)

Course Outcomes

- CO 1 :The students will be able to understand the significance of motivating factors applied in household management.
- CO 2 : The students will gain knowledge about skillful management of family resources.
- CO 3 : The students will become familiar with the energy demand, energy management techniques and work simplification.
- CO 4 : At the end of this unit, students willbe aware about the concept of income, types of income and expenditure and different account keeping pattern in households.
- CO 5 :The students will understand the importance of space management.

SECOND SEMESTER

HC-202- TEXTILE AND CLOTHING

(4 CREDITS)

(FM: 100)

Course Outcomes

- CO 1 : The students will be enabled to learn the basics of textile fibres- construction, sources and composition.
- CO 2 : The students will learn about the manufacturing of different textile fibres and its different physical and chemical properties.

- CO 3: The students will be aware about yarn formation, parts of a loom, classification of weaves.
- CO 4: The students will be able to understand about the clothing for the family and factors affecting its selection.
- CO 5: Students will gain knowledge on consumer problems and guidelines, for selection of clothing.

SECOND SEMESTER

HC-203- RESEARCH METHODOLOGY AND STATISTICS

(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1: The students will gain knowledge on Research and Research design.
- CO 2: The students will learn about different sampling designs and data collection methods.
- CO 3: The students will be about to understand about the data classification and its different types.
- CO 4: The students will gain basic ideas on data tabulation.
- CO-5 : The will gain knowledge on data interpretation and report writing.

SECOND SEMESTER

HC-204- INTEGRATED PRACTICAL

(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1: The students will get in-depth knowledge in skillful management of family resource.
- CO 2: The students will gain knowledge to prepare the layout of different types of kitchens.
- CO 3: The students will gain exposure to a textile industry to get practical knowledge.
- CO 4: The students will become aware of documentation of traditional and modified textile designs.
- CO 5: The students will understand the techniques of tracing information from different referencesources.

SECOND SEMESTER
CE-201- ADVANCED HUMAN DEVELOPMENT
(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1 :The students will gain knowledge about theories of human development and its critical analysis..
- CO 2 : The students will able to understand the critical analysis of theories of human development and its application.
- CO 3 : The students will be familiar with different adjustment skills of different phases of life.
- CO 4 : The students will understand about adjustments during middle hood and its hazards.
- CO 5 : The students will gain knowledge about old age adjustment and legal and welfare measures for elderly .

SECOND SEMESTER
CE-201(B)-RURAL DEVELOPMENT
(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1 :The students will have in depth knowledge on Rural sociology, socialization, social changes and social institution.
- CO 2 : The students will be familiar with basic rural institutions, cooperative societies and village schools and its activities.
- CO 3 : The students will be associated with different Rural Development programmes currently going on.
- CO 4 : They will have an insight on Rural Youth Service Schemes and Rural Youth Social profile and clubs.
- CO 5 : At the end of this Unit the students will be able to understand the role of Rural Women and about their empowerment.

SECOND SEMESTER
CE-201(C)- NUTRITION THROUGH LIFE SPAN
(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1 : The students will gain knowledge about the Special Nutrition during pregnancy and Lactation.
- CO 2 : The students will become aware of growth and development, Nutritional requirements and feeding problems associated with Infancy.
- CO 3 : The students will be familiar with Nutritional requirement for Pre- school and School-going children.

- CO 4 : The students will understand about the Nutritional Requirements, Food requirements and low-cost balanced diet for adolescents and adults.
- CO 5 : The students will gain knowledge and insight on Geriatric Nutrition

SECOND SEMESTER

CE-201(D)- HOUSING AND INTERIORS

(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1 : The students will gain in-depth knowledge on history of housing, changes in housing needs and standards and housing trends in India.
- CO 2 : The students will be aware of present housing conditions in India and housing management problems.
- CO 3 : The students will understand various factors affecting housing and housing standards and housing legislations.
- CO 4 : The students will be familiar with basic building materials and finishes and the various factors influencing housing design cost.
- CO 5 : The students will have idea on different type of housing services, housing research and development.

SECOND SEMESTER

CE-201(E)- ADVANCED TEXTILE PROCESSING

(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1 : The students will gain knowledge on classification of various dyes and its uses for different fibres.
- CO 2 : The students will understand about the application of dyes, several methods of dyeing and various dyeing defects.
- CO 3 : The students will gain expertise on several printing methods.
- CO 4 : The students will be aware of preliminary treatment in finishes and about mechanical and chemical finishes.
- CO 5 : At the end of this unit, the students will learn about the special finishes and finishing processes for functional effects.

SECOND SEMESTER

OE-201- NUTRITION ACROSS LIFE CYCLE

(4 CREDITS)

(FM: 100)

Course Outcomes

- CO 1 :The students will have the in-depth idea about nutrition during infancy.
- CO 2 : The students will gain knowledge on Nutrition during early Childhood.
- CO 3 : The students will become aware of nutrition during old age.
- CO 4 : The students will understand the Nutrition during Adolescents.
- CO 5 : The students will gain expertise degenerative diseases and dietary guidelines.

THIRD SEMESTER

HC-301- FAMILY SOCIOLOGY

(4 CREDITS)

(FM: 100)

Course Outcomes

- CO 1 : The students will able to gain knowledge on theories of family and types of family. CO 2 : The students will be able to familiar with marriage and Family life cycle and crisis in different stages life.
- CO 3 : At the end of this unit student will able to understand about the changes in family structure and contemporary issues of family.
- CO 4 : The student will be aware of different elements and types of Family relationship.
- CO 5 : The students will gain in depth knowledge on Family welfare Policy, Laws and Programmes.

THIRD SEMESTER

HC-302- GUIDANCE AND COUNSELLING

(4 CREDITS)

(FM: 100)

Course Outcomes

- CO 1 : The student be able to understand about the concept, types and theories of guidance counselling.
- CO 2 : The student will gain expertise on techniques of counselling, behavioural therapy and types of counselling.
- CO 3 : The student will be aware of different areas of counselling.
- CO 4 : The student will have in depth knowledge on various aspects of Guidance services.
- CO 5 : The student will be able to gain experience on vocation Guidance and Counselling.

THIRD SEMESTER
HC-303- INTEGRATED PRACTICAL
(4 CREDITS) (FM: 100)

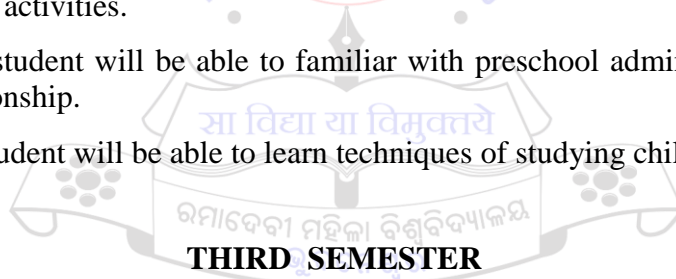
Course Outcomes

- CO 1 : The student will be aware of how to prepare a report on the issues of female headed families.
- CO 2 : The student will gain expertise on analytical report writing on contemporary issues of families.
- CO 3 : The student will have exposure visit to a family counselling centre.
- CO 4 : The student will learn to prepare a case study.

THIRD SEMESTER
CE-301 A- EARLY CHILDHOOD CARE AND EDUCATION
(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1 : The student will be able to understand about the early childhood and child rearing practices.
- CO 2 : The student will be aware about the care and Education in Early Childhood.
- CO 3 : At the end of this unit student will gain knowledge on pre-school program planning and activities.
- CO 4 : The student will be able to familiar with preschool administration and home school relationship.
- CO 5: The student will be able to learn techniques of studying children.



THIRD SEMESTER
CE-301 B- COMMUNITY DEVELOPMENT AND PROJECT MANAGEMENT
(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1: The students will be able to learn about the community development, its process and various CD programme.
- CO2: The students will gain knowledge about administration and units of organization.
- CO3- The students will be aware about coordination , techniques of coordination and machinery for coordination.
- CO4- The students will be able to familiar with project management skills .
- CO 5- The students will gain knowledge about evaluation process of extension education

THIRD SEMESTER
CE-302 C- NUTRITIONAL BIOCHEMISTRY
(4 CREDITS) (FM: 100)

Course Outcomes

- CO1- The students will be able to understand the process of carbohydrate metabolism.
- CO2- The students will gain some idea about overall protein metabolism.
- CO3- The students will be able to learn the steps involve in lipid metabolism.
- CO-4- The student will able to be familiar with the energy metabolism and measurement of energy requirement.
- CO-5-The student will gain better understanding on macro and micro nutrient metabolism.

THIRD SEMESTER
CE-302 D- ENTERPRISE MANAGEMENT
(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1- The student will be able to aware about the concept need, process and types of entrepreneurship development.
- CO2- The student will be able to learn about entrepreneurial motivation, developing entrepreneurial competencies and factors affecting entrepreneurs role.
- CO3- The student will gain expertise in in launching and organizing an enterprise.
- CO4-The student will able to learn about enterprise networking.
- CO-5-Indepth knowledge in evaluating and controlling market performance.

THIRD SEMESTER
CE-302 E- TEXTILES ECONOMICS AND MARKETING
(4 CREDITS) (FM: 100)

Course Outcomes

- CO 1- The students will able to gain some knowledge on Indian Textile Industry , its contribution in Indian economy , different policies and problems associated with it.
- CO2- The student will be able to familiar with various sectors of textile industry , handl
- CO3- The student will be aware of different textile associations and organizations across the globe.
- CO4- The student will be able to have an idea about Indian textile market and various export promotion council.
- CO5-The students will be able to learn about market research on Indian textile industries.

THIRD SEMESTER
CE-302 A- EXCEPTIONL CHILDREN
(4 CREDITS) (FM: 100)

Course Outcomes

- CO1- The student will understand about the exceptional children and their classifications.
- CO2- The students will gain an in-depth knowledge on socially handicapped children, Emotionally disabled children and orthopedically challenged children.
- CO3-The students will gain knowledge about children with speech defects and gifted children.
- CO4-The students will be aware of about the status and situations of differently abled children and adolescents in India.
- CO5- The student will learn about the different welfare programmes and policies for disabled children and adolescents in India.

THIRD SEMESTER
CE-302 B- Communication in Extension Education
(4 CREDITS) (FM: 100)

Course Outcomes

- CO1- The students will be able learn about the communication, the process of communication and factors affecting the communication.
- CO2- The students will acquire some knowledge on elements of communication and several models of communication.
- CO3- The students will be aware about the individual , group and mass approaches of communication.
- CO4- The student gain some exposure about various audio visual aids.
- CO5- The students will be able to understand about the importance of feedback in communication process.

THIRD SEMESTER
CE-302 C- Food Microbiology and Food safety
(4 CREDITS) (FM: 100)

Course Outcomes

- CO1- The student will get an idea about food components.
- CO2- The student will learn about the nuts, Milk and Milk products , Sugar, spices and beverages. CO3- The students will be familiar with properties of pigments , Additives and Enzymes present in food .
- CO4-The student will be able to aware about food sanitation, spoilage and Toxicology.
- CO-5- The student will be understand about the food quality and food adulteration.

THIRD SEMESTER

CE-302 D- Ergonomics

(4 CREDITS) (FM: 100)

Course Outcomes

- CO1-The students will gain knowledge about the scope of ergonomics and interdisciplinary and applied nature of ergonomics.
- CO2- The student will learn about the physiological aspects of work.
- CO3- The student will be able to aware about energy management and factor affecting muscular activity.
- CO4- The students will be able to learn the skill about Anthropometry and biomechanics measurement.
- CO5- The student will be able to get an idea about Engineering psychology

THIRD SEMESTER

CE-302 E- Clothing Standards and Specifications

(4 CREDITS) (FM: 100)

Course Outcomes

- Co1- The student will be skilled on stitching procedure of seam and seam finishes, pleats and fasteners in common use.
- CO2- The student will be able to aware about various sleeves, collar, Neckline finishes and Tucks.
- CO3- The student will be able to familiar with the quality standards , standardizing bodies and about quality assessments of garments.
- CO4- The students will be able to gain knowledge on importance and process of specialization and about fabric inspection to product quality certification.
- CO5- The students will gain much ideas on care labels and performance of Indian Garment Export.

THIRD SEMESTER

FI-301 –PROJECT CUM INTERNSHIP

(4 CREDITS) (FM: 100)

Course Outcomes

- CO1- The student will be skilled on project report writing.
- CO2- The student will be able to aware about various research areas through their exposure visits.
- CO3- The student will be able to familiar with the different methods used in research.
- CO4- The students will be able to gain knowledge on thorough review of different literatures
- CO5- The students will gain much ideas on analysing the collected facts and discussing the results skilfully.

FOURTH SEMESTER
HC-401 – COMMUNITY HEALTH MANAGEMENT
(4 CREDITS) (FM: 100)

Course Outcomes

- CO1- The student will be able to understand the concept of public health , different determinants of health and indicators of health.
- CO2- The student will gain in-depth knowledge or major nutritional problems.
- CO3- The students will be able to gain experience on several infectious diseases, its causes, symptoms, prevention and possible treatment.
- CO4- The student will be aware about Malnutrition and measure to combat mal nutrition.
- CO5- The student will be able to familiar with the direct and indirect methods of assessing Nutritional status.

FOURTH SEMESTER
HC-402 – COMMUNITY HEALTH MANAGEMENT
(4 CREDITS) (FM: 100)

Course Outcomes

- CO1- The student will have an exposure visit near by Nutrition Rehabilitation centre.
- CO2- The student will gain expertise in SAM management.
- CO3- The student will get opportunity to visit AnganwadiCentre .
- CO4- The students will gain exposure about the various audio visual aids.
- CO5- The students will be able to gain knowledge on supplementary nutritional management for pre-school children.

FOURTH SEMESTER
HC-403 – DISSERTATION
(4 CREDITS) (FM: 100)

Course Outcomes

- CO1- The students will understand about researchable areas.
- CO2- The student will able to learn different data collection techniques and data analysis through computer.
- CO3- The students will be able to prepare report on a topic.
- CO4- The students will gain exposure to field research.
- CO-5- The student will gain knowledge about research process and its application.

FOURTH SEMESTER
CE-401 –PARENTING ACROSS THE LIFE SPAN
(4 CREDITS) (FM: 100)

Course Outcomes

- CO1-The students will understand about parenting and parenthood in Indian family life.
- CO3- The students will be aware of types of parenting, its effect on child development and key issues in parenting.
- CO4- The students will gain an insight on challenges of parenting and new age parenting.
- CO-5-The student will explore knowledge about parent education and support.

FOURTH SEMESTER
CE-401(B) – ENTREPRENEURSHIP DEVELOPMENT
(4 CREDITS) (FM: 100)

Course Outcomes

- CO1-The students will understand transfer of technology and models of technology.
- CO2- The student will able to learn about characteristic of entrepreneurship and women entrepreneur.
- CO3- The students will be aware of the importance of training in Extension education.
- CO4- The students will get expertise in application of IT and E-governance.
- CO-5-The student will gain knowledge about management of extension organization.

FOURTH SEMESTER
CE-401(C) – THERAPEUTIC NUTRITION
(4 CREDITS) (FM: 100)

Course Outcomes

- CO1-The students will gain knowledge about introduction to diet therapy.
- CO2- The student will able to learn diet in infection and fever.
- CO3- The students will be aware of diet in diseases of digestive track.
- CO4- The students will gain an insight on diet in cardiovascular diseases and kidney diseases.
- CO-5-The student will gain knowledge diseases of metabolic disorder.

FOURTH SEMESTER

CE-401(D) – FAMILY FINANCE AND CONSUMER BEHAVIOUR

(4 CREDITS)

(FM: 100)

Course Outcomes

- CO1-The students will be aware about present consumer scenario and market.
- CO2- The students will learn about household income and expenditure.
- CO3- The students will understand about consumer credits practices.
- CO4- The students will gain knowledge about Family savings.
- CO-5-The student will gain knowledge about consumerism in India.

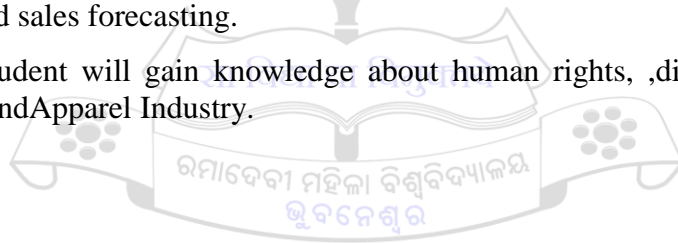
FOURTH SEMESTER

CE-401(E) – TEXTILE MANAGEMENT

(4 CREDITS) (FM: 100)

Course Outcomes

- CO1-The students will be able to understand the textile management ,operation strategies, HRM.
- CO2- The students will learn about manufacturing operations, Costing and processing.
- CO3- The students will gain knowledge about training,, Common training Practices,, Management development programmes.
- CO4-The students will learn about formulating sales policies, Advertising and sales promotionand sales forecasting.
- CO-5-The student will gain knowledge about human rights, ,disaster Management and Textile andApparel Industry.



Ph.D. IN HOME SCIENCE

Programme Outcomes

- PO1. The scholars will be enabled to develop research aptitude in the field of Home Science
- PO2. The scholars will be skilled in identifying research gaps and develop research plans by reviewing literatures related to their interest area.
- PO3. The ethical conduct of research and development activities will be inculcated among the students.
- PO4. To obtain a critical understanding and the ability to apply theoretical, practical and scientific knowledge in the field of Home Science
- PO5. To identify individual, national and global and environmental issues related to Home Science for diverse population.
- PO6. Tap self-potentials through thorough knowledge and research to enhance skills for self-employment and entrepreneurship
- PO7. Analyze the prospects for interdisciplinary research processes.
- PO8. Appraise and promote quality of life, happiness and wellbeing of community in the context of Human Development Index and embark on action and applied research and review policy in context with the current scenario of the nation.
- PO9. Ability to apply knowledge of human development and behavior in research across life span.
- PO10. To get insight into the origin and traditional textile patterns from different corners of India.

PAPER-1-RESEARCH METHODOLOGY AND COMPUTER APPLICATION

(4 CREDITS)

(FM: 100)

Course outcome

- CO 1. To acquaint with fundamental principles and techniques of social science research.
- CO 2. To gain skills in decision making on research topics and identifying sources of research problems, and formulating hypothesis
- CO 3. To aware of the fundamentals of Research Methodology, collecting and analyzing data
- CO 4. To develop competency in Literature Review, drawing inferences from data analysis and Report writing.
- CO 5. To able to get expertise in tools/software like Excel, MS-Office, SPSS, Active Scholar and alike.

PAPER -2: ADVANCE STUDIES IN HOME SCIENCE

(4 CREDITS)

(FM: 100)

Course outcome

- CO1. To gain knowledge on basic principles of food fortifications, and food and microbial interaction.
- CO2. To understand human health implications of organic food and role of antioxidants in preventing degenerative diseases.
- CO3. To develop idea about origin, history and growth of Indian traditional textile.
- CO4. To relate various concepts of consumer education, entrepreneurship and development entrepreneurship potential.
- CO5. To gain the in-depth knowledge on childhood assessment tools, parenting, geriatric care and families on 21st century.

PAPER – III REVIEW OF RELATED LITERATURE & SEMINAR PRESENTATION (4 CREDITS) (FM: 100)

Course outcome

- CO1. To conduct review of related literature.
- CO2. To identify the research gap and write the review in a synchronized manner.
- CO3. To find out variables relevant to the selected research area.
- CO4. To summarize the findings of different research studies.
- CO5. To write a thematic paper on any contemporary issue in the subject.

PAPER- IV: RESEARCH AND PUBLICATION ETHICS

(4 CREDITS)

(FM: 100)

Course outcome

- CO1. To learn about the philosophy of research ethics.
- CO2. To gain in-depth knowledge on different scientific conducts of research ethics.
- CO3. To aware the students on publication ethics, its violation and misconducts.
- CO4. To learn the terms and condition of open access publications.
- CO5. To gain an insight on different journal suggestion tools, different software for checking plagiarism and different predatory journals.

M.A IN JOURNALISM AND MASS COMMUNICATION

Programme Outcomes

- PO 1. The distinction of traditional and contemporary media theories will enhance better learning of the patterns of mass communication.
- PO2. The various ethical issues in media coverage and news writing are articulated through various case studies.
- PO3. The basic introduction to computers and the kinds of hardware and software are explained related to mass media.
- PO 4. The writing categories and styles for the audio and visual medium are well explained.
- PO 5: The strategies in development communication with the point of view of socio-economic and cultural indicators are explained.
- PO6. The usages of traditional media, rural development, development communication and environment communication with contemporary issues are discussed.
- PO7. The world of visual advertising and its techniques in various media platforms is disseminated.
- PO8. Students will deliberate on the role of media for women empowerment and employment.
- PO9. The world of media management in an economic lens such as budgeting,finance, capital costs and Investments etc are explained.
- PO10. Cinematic styles and kinds and various approaches to it on various treatments are discussed.

Programme Specific Outcomes

- PS01. To inculcate the idea of ethical reporting among the students.
- PS02. develop critical thinking among the students about the different perspectives on development,specificnational development issues and programs and role of communication in it.
- PS03. To enable discussion about the communication for Environment and media that reflectthedevelopmentschemes.
- PS04. The students will be able to demonstrate an understanding of the overall role of advertising in theBusinessworld.
- PS05. It offers a foundation for understanding cinema and its relation to culture, history, technologyandaesthetics.

FIRST SEMESTER

HC-101: PRINCIPLES OF MASS COMMUNICATION

(4 CREDITS) (FM:100)

Course Outcomes

On successful completion of the course students will be able to :

- CO 1. To develop a broad concept of mass communication
- CO 2. To understand the models and theories of communication
- CO 5. To foster sense a theoretical understanding of technological developments
- CO 6.To understand the mass culture through theories of communication
- CO 7.To comprehend on various functions of mass communication

FIRST SEMESTER

HC-102: PRINT MEDIA (REPORTING & EDITING)

(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To develop a broad concept of mass communication
- CO 2. To understand the models and theories of communication
- CO 3. To foster sense a theoretical understanding of technological developments
- CO 4. To understand the mass culture through theories of communication
- CO 5. To comprehend on various functions of mass communication

FIRST SEMESTER

HC-103: MEDIA HISTORY, LAWS & ETHICS

(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. Introduce students to the rules and regulations of media laws.
- CO 2. Explain the relationship between laws related to journalism, press freedom, and
- CO 3. responsibilities of media.
- CO 4. State the principles of journalism ethics

FIRST SEMESTER

HC-104: COMPUTER APPLICATIONS IN MASS MEDIA

(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. Provide an introduction to computers and their use in the media.

- CO 2. Teach students how to use various software for media production.
- CO 3. Understand the colour theory of designs
- CO 4. Impart basic understanding of graphics.

SECOND SEMESTER

HC-201: TELEVISION AND RADIO JOURNALISM

(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. A Comprehensive knowledge of electronic medium, with introduction of video production techniques and given hands on training for electronic journalism.
- CO 2. This course will help understand the importance of wireless communication and understand how its evolution changed the face of news.
- CO 3. To understand the discourse of radio and television journalism At the end of the course students will be acquainted to the techniques of electronic media
- CO 4. and its usages in journalism.

SECOND SEMESTER

HC-202: DEVELOPMENT COMMUNICATION

(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To understand the role of mass media in bringing about social, behavioural change in national development.
- CO 2. To Learn various development issues and initiatives taken through various forms of media technology.
- CO 3. To discuss the role of folk media in development of the country
- CO 4. To discuss the selected approaches to communication planning for policy development.
- CO 5. To discuss the role of communication in national development

SECOND SEMESTER

HC-203: MEDIA LITERACY (4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To concentrate on various aspects of the society which need to be addressed by the media.
- CO 2. To discuss approaches to learn new media technology for the development of society.

- CO 3. to understand the concept of media embedded values.
- CO 4. To discuss the core concepts of media literacy

CO 5. To understand society and how the media's role is important to reflect the various topics of Society.

SECOND SEMESTER

HC-204: ENVIRONMENT COMMUNICATION

(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To provide a realistic understanding of environmental issues
- CO 2. To help the students assess environmental issues
- CO 3. To identify strategies for overcoming them through various forms of media.
- CO 4. To discuss contemporary issues through communication.
- CO 5. Creating awareness and the role of media in safeguarding environment

SECOND SEMESTER

CE-201 (A): A. Culture, Communication and Media

(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To understand the social structure of Indian society
- CO 2. The role of mass media and its important factors in social change.
- CO 3. To discuss the various media audiences and its text.
- CO 4. The effect of media on culture and society

SECOND SEMESTER

CE-201 (B): MEDIA SOCIOLOGY

(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To introduce the students to the sociological perspective on mass media.
- CO 2. To deal with various conceptual and theoretical perspectives on mass media
- CO 3. To discuss how these perspectives help understand transformation in these concepts in contemporary times.
- CO 4. To discuss media issues and movements
- CO 5. To engage with contemporary issues in mass media and its social impact

SECOND SEMESTER

OE-201 :: FILMMAKING

(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To discuss the various directorial theory and its purpose of making
- CO 2. To understand film as a diverse art form, with a range of styles and genres, and as a powerful medium of communication
- CO 3. To understand cinema as the social means of communication
- CO 4. To understand the history of cinema and its ethnography
- CO 5. To Understand the film production process

THIRD SEMESTER

HC-301 :COMMUNICATION RESEARCH METHODS

(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. Comprehend the relationship between theory and research methods in the study of communication.
- CO 2.To discuss on various research process
- CO 3. To discuss the communication research approaches.
- CO 4. To understand various ethics associated with media research.
- CO 5. Master the concepts and technical vocabulary of communication research.

THIRD SEMESTER

HC-302: CINEMA STUDIES

(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To offer a foundation for understanding cinema-and its relation to culture, history, technology and aesthetics.
- CO 2. To create and analyze moving images, to produce research, and to make art.
- CO 3. To discuss alternative media in contemporary times
- CO 4. To discuss on film production from practical aspects
- CO 5.To understand the various film languages and forms

THIRD SEMESTER
HC-303: DOCUMENTARY PRODUCTION
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. To Understand Documentary as a diverse form, with a range of styles and genres
- CO 2. To discuss the root of this diversity in its various historical and social contexts.
- CO 3. To learn the production process of documentary making.
- CO 4. To discuss on conceptual; of plots in documentary film production
- CO 5. To discuss the research as an important part of film conceptualisation.

THIRD SEMESTER
CE-301: NEW MEDIA AND CONVERGENCE
(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To enhance the New Media Skills amongst students
- CO 2. To enable students to understand the concept of Media Convergence
- CO 3. To discuss on digital journalism in contemporary times
- CO 4. To impart on digital Mediated Communication
- CO 5. To help in understanding the importance of Digitalize Culture

THIRD SEMESTER
CE-301: MEDIA MANAGEMENT
(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To enable and understand the experience on the production, marketing, finance and operations.
- CO 2. To discuss on Contemporary Media Management
- CO 3. To understand the ownership of media organizations in India
- CO 4. To discuss the various issues and challenges in media management
- CO 5. To understand the functions of media management

THIRD SEMESTER
CE-302: A. ADVERTISING
(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To demonstrate an understanding of the overall role of advertising in the business world
- CO 2. To understand the advertising strategies and budget
- CO 3. Identity and understand the various advertising forms in media.
- CO 4. To discuss the consumer Behaviour and Market Segmentation
- CO 5. To understand the Advertising in various Media Forms

THIRD SEMESTER
CE-302: B. :PUBLIC RELATIONS AND CORPORATE COMMUNICATION
(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To equip with analytical public, private and corporate communication issues from a range of academic and practical perspective
- CO 2. To communicate effectively in the business world with the emerging concepts, principles and strategies in relation to better decision making in the area of public relation and corporate communication.
- CO 3. To Discuss various forms of public relations in contemporary scenarios.
- CO 4. To understand various patterns of PR management
- CO 5. To examine various PR tools in contemporary scenarios.

THIRD SEMESTER
FI-302: B. :FIELD INTERNSHIP
(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To train through an appropriate pedagogy of industry interface.
- CO 2. To intensify the spirit of practice-based education, the department encourages internship programmes in the media industry.
- CO 5. To understand the media industry in a pragmatic manner and raise numerous perspectives.
- CO 6. To understand the media organisation and its management

FOURTH SEMESTER
HC-401: Rural Journalism
(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To orient and understand the realities of rural India.
- CO 2. To learn the rural reporting, media structures and role of communication in rural India
- CO 3. To understand the basic needs of rural and the role of traditional and new media
- communication especially traditional media in enhancing their lives.
- CO 4. To discuss the role of the media in rural development.
- CO 5. To understand the changing behavior of the society according to the media.

FOURTH SEMESTER
HC-402: INTERNATIONAL AND INTERCULTURAL COMMUNICATION
(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To develop the student's intercultural competence and increase cultural awareness
- CO 2. To understand the meaning of cultural background in communication system
- CO 3. To help you develop effective strategies in dealing with potential cultural conflicts and improve intercultural communicative competence.
- CO 4. To discuss on the New communication technology and news flow
- CO 5. To Understand Current issues in International communication

FOURTH SEMESTER
HC-403: DISSERTATION COURSE
(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To understand the nature and implication of research
- CO 2. To apply qualitative and/or quantitative evaluation processes in the research area.
- CO 3 To inculcate various research approaches in media research.
- CO 4. To assess the ethics pertaining to media research

- CO 5. To understand and develop a new insight in writing the thesis.

FOURTH SEMESTER

CE-401(A): A. MEDIA AND HUMAN RIGHTS

(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To understand contemporary gender and human rights issues in society.
- CO 2. To give a multi-disciplinary approach in society through media.
- CO 3. To have a better understanding of the grass roots media and rights
- CO 4. To understand various Human rights issues in India.
- CO 5. To examine the function of the human rights commission.

FOURTH SEMESTER

CE-401(B): GENDER IN MEDIA

(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1. To understand contemporary gender and human rights issues in society.
- CO 2. To find out the intersection between gender and media
- CO 3. To give a multi-disciplinary approach in society through media.
- CO 4. To have a better understanding of the grass roots media and rights



Ph.D. IN JOURNALISM & MASS COMMUNICATION

Programme Outcomes

- PO1. They would develop their knowledge about the different theories of communication.
- PO2. They could learn about the schools of thoughts and be able to identify the changes in society.
- PO3. They could study how the different aspects (like multiculturalism, post enlightenment, truth and post truth etc.) of philosophy affect the research work.
- PO4. Scholars will get knowledge about the concept of research, definition of research and characteristics of it.
- PO5. It develops the idea to formulate a research problem.
- PO6. It introduces research ethics (ethics of planning, conduct and reporting of research).

Program Specific Outcomes

- PSO1. To make scholars understand the meaning and definition of different communication theories, which they can follow and apply in their research work.
- PSO2. To help the scholars to understand the different perspectives of the theorists, which can enhance their creativity to think in a different way.
- PSO3. To develop the research knowledge of scholars.
- PSO4. To learn various methods and techniques of conducting research.

PAPER 01: RESEARCH METHODOLOGY AND COMPUTER APPLICATION

(4 CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1.To help the scholars to learn various methods and techniques of conducting research
- CO 2.To Impart the skills of research tools during research
- CO 3.To understand the ethics of research
- CO 4.To train in writing the manuscripts.
- CO 5.To train on research technology and update software.

PAPER 02: COMMUNICATION THEORY

(4CREDITS) (FM:100)

Course Outcomes

On completion of this course, the students will be able to:

- CO 1.To teach various communication theories at the time of writing the manuscript.

- CO 2.To understand the implementation of models and theories in conducting research.
- CO 3.To discuss on various school of thoughts in the light of communication theories.
- CO 4.To train on research philosophies are to be used in the process of research.



M.Sc. IN INDUSTRIAL MICROBIOLOGY

Program Outcomes

- PO1: Develop an understanding of microbial diversity and their application, demonstrate practical knowledge & skills using bio instruments in industrial domain.
- PO2: Describe the microbial nutrition & growth and explain various culture, sterilization techniques in microbiology.
- PO3: To demonstrate the basic knowledge of immunological processes at cellular and molecular level.
- PO4: Describe the design and application of fermenter and bioreactors, explain the media requirement for fermentation process.
- PO5: Explain the microbial physiology, regulation of gene expression and understand the basics of RDT, bioinformatics and their applications.
- PO6: Develop an understanding of various microbial diseases and their management;
- the pathogens and spoilage microbes with respect to food and dairy processing and the bioremediation approaches for treatment of contaminated water and soil.
- PO7: Emergence of new microbial pathogens, basic concepts of epidemiology of infectious disease, pathogenicity of microorganisms, antimicrobial chemotherapy, mechanism of antibiotic resistance. Concept of biopesticides and biofertilizers.
- PO8: Learning the basic concepts of waste management, applications for its processing, characterization and its management in various places.
- PO9: Finding innovative idea in research topic to contribute for mankind following the research ethics, develop experimental and practical knowledge in lab and field research work and carry out efficient research using various instruments.
- PO10: To develop mental flexibility, sequential compilation of data, preparation of concise and comprehensible presentation and public speaking.

Program Specific Outcomes

- PSO-1 Develop deeper understanding of advanced techniques in biology such as ELISA, RDT, PCR, HPLC, SEM, TEM.
- PSO-2 Have a brief idea about application of fermenter, bioreactors and bioinformatics.
- PSO-3 Acquired practical learning from internship, field visit, industrial visit and research projects.
- PSO-4 To develop innovative idea in research topic, mental flexibility, sequential compilation of data, preparation of concise and comprehensible presentation and public speaking.

FIRST SEMESTER

HC-101: Introduction to Industrial Microbiology and Microbial Techniques (4CREDITS) (FM:100)

Course Outcomes

After reading this paper, students should have:

- CO 1. Deeper understanding of developments in Industrial Microbiology.
- CO 2. Knowledge regarding microbial diversity and ecology.
- CO 3. Hands on practice on culture techniques in Microbiology.
- CO 4. Deeper understanding of sterilization techniques and their effectiveness.
- CO 5. A brief knowledge on microbial nutrition and growth.

FIRST SEMESTER

HC-102: IMMUNOLOGY AND MICROBIAL TRANSFORMATION (4CREDITS)(FM:100)

Course Outcome:

After reading this paper, students should have:

- CO 1. Basic knowledge of immunological processes at a cellular and molecular level.
- CO 2. In-depth knowledge on cell types and organs present in the immune response.
- CO 3. Idea on various mechanisms that regulate immune responses and their mechanisms
- CO 4. Brief knowledge regarding microbial transformation of steroids.
- CO 5. The ability to work on various techniques involved in diagnosis of immune disorders.

FIRST SEMESTER

HC-103: BIOINSTRUMENTATION (4 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students should have:

- CO 1. Knowledge on working principles of basic instruments in laboratory..
- CO 2. Brief understand about the working principles of advanced instruments in Life Sciences.
- CO 3. Hands on working experience of different instruments.
- CO 4. Idea to perform the techniques involved in molecular biology and diagnosis of diseases.
- CO 5. An updated current knowledge regarding biomedical engineering involving new methods and the instrumentation.

FIRST SEMESTER

HC-104: PRACTICAL BASED ON PAPERS HC 101

(4CREDITS)(FM:100)

Course Outcomes

After reading this paper, students should have:

- CO 1. Knowledge and practical skills for using instruments in biology.
- CO 2. The ability to perform and evaluate methods used to identify microbes and their activity.
- CO 3. In-depth knowledge on microbial physiology including metabolism, regulation and replication.
- CO 4. Assess and apply knowledge of microbiology in various field.
- CO 5. Hands on practice with the basic instruments of laboratory.

SECOND SEMESTER

HC-201: FERMENTATION TECHNOLOGY

(4CREDITS)(FM:100)

Course Outcomes

After reading this paper, students should have:

- CO 1. An idea regarding the design of bioreactors and its types.
- CO 2. Basic knowledge about the structure of a fermenter and its types.
- CO 3. Deeper understanding related to media required for fermentation process.
- CO 4. knowledge on down stream processing.
- CO 5. Indepth knowledge of microbial production of industrial chemicals.

SECOND SEMESTER

HC-202: MICROBIAL PHYSIOLOGY AND GENETICS

(4CREDITS)(FM:100)

Course Outcomes

After reading this paper, students should have:

- CO 1. Explanatory knowledge on photosynthetic microorganisms and their physiology.
- CO 2. Deeper understanding on bacterial aerobic respiration.
- CO 3. An inidea on molecular basis of spontaneous and induced mutations.
 - CO 4. Deeper knowledge on organization of transcriptional units and regulation of gene expression.
 - CO 5. In-depth knowledge on different factors on induction and stages of sporulation in bacteria.

SECOND SEMESTER
HC-203 FOOD MICROBIOLOGY
(4 CREDITS)(FM:100)

Course Outcomes

After reading this paper, students should have:

- CO 1. Understanding on the principles involving food preservation via fermentation processes, the role and significance of microbial inactivation, adaptation and environmental factors (i.e., Aw, pH, temperature) on growth.
- CO 2. Examined the response of microorganisms in various environments, and conditions, including sanitation practices.
- CO 3. Developed knowledge regarding important pathogens and spoilage microorganisms are commonly inactivated, killed or made harmless in foods
- CO 4. Observed the impact of intrinsic and extrinsic factors affecting the growth of microbes in foods.
- CO 5. Knowledge on application of microbial enzymes in food and dairy industry

SECOND SEMESTER

HC-204: PRACTICAL BASED ON PAPER -201, 202, 203 & CE-201 A/B
(4CREDITS)(FM:100)

Course Outcomes

After reading this paper, students should have:

- CO 1. Performed experiments related to isolation of industrially important bacteria.
- CO 2. Practised the methods involved in antimicrobial assay.
- CO 3. Performed bioinformatics related practicals like BLAST search.
- CO 4. Measured TDS and TSS of samples.
- CO 5. Performed experiments related to bioinformatics.

SECOND SEMESTER

CE-201 A: RECOMBINANT DNA TECHNOLOGY & BIOINFORMATICS
(4CREDITS) (FM:100)

Course Outcomes

After reading this paper, students should have:

- CO 1. Understanding regarding the basics of recombinant DNA technology.
- CO 2. In-depth knowledge regarding cloning vectors and methods of clone identification and selection.
- CO 3. An idea about the techniques of gene expression analysis.
- CO 4. Understanding related to biological database and modes of database search.
- CO 5. Elucidated various techniques involved in genome sequencing.

SECOND SEMESTER
CE-201 B: Bioremediation
(4CREDITS)(FM:100)

Course Outcomes

After reading this paper, students should have:

- CO 1. Understanding of the environmental contaminants, and their microbial degradation techniques.
- CO 2. Understanding regarding bioremediation approaches for treatment of contaminated soils and water.
- CO 3. Knowledge about the basic principles of chemical and biological degradation of toxic chemicals and familiarize students with the application of bio remedial technologies in natural environments.
- CO 4. Understanding related to occurrence and ecological significance of toxic organic chemicals.

SECOND SEMESTER
OE-201 A: HUMAN HEALTH AND HYGIENE
(4CREDITS)(FM:100)

Course Outcome:

After reading this paper, students should have:

- CO 1. In-depth knowledge about the major life style diseases affecting each organ system.
- CO 2. Brief idea about the common infectious communicable diseases and their specific symptoms.
- CO 3. An idea about the implications of climate change and management of communicable diseases.
- CO 4 The understanding of management of communicable diseases.

THIRD SEMESTER
HC-301: Environmental Microbial Technology
(4CREDITS)(FM:100)

Course Outcomes

After reading this paper, students should have:

- CO 1. The knowledge to demonstrate the basic knowledge of microbial ecosystems.
- CO 2. The ability to describe the methodological approaches for investigations in environmental microbiology.
- CO 3. An idea about waste water treatment.
- CO 4. In-depth knowledge regarding the effects of mining with microorganisms.
- CO 5. Developed knowledge on mechanism of antibiotic resistance in bacteria.

THIRD SEMESTER
HC-302: Microbial diseases and their control
(4CREDITS) (FM:100)

Course Outcome:

After reading this paper, students should have:

- CO 1. Explanatory knowledge regarding the pathogenicity of microorganisms.
- CO 2. In-depth knowledge related to important developments of antimicrobial chemotherapy.
- CO 3. Basic concept on epidemiology of Infectious Disease.
- CO 4. Comparative idea about emerging and re-emerging pathogens.
- CO 5. Idea about the mechanism of emergence of new microbial pathogens.

THIRD SEMESTER
HC-303: Practical related to paper Practical related to paper
CE-301 A/B, CE-302 A/B
(4CREDITS)(FM:100)

Course Outcomes

After reading this paper, students should have:

- CO 1. Idea about the isolation of microorganism from waste water samples.
- CO 2. Deeper knowledge regarding molecular biology experiments like ELISA and SDS PAGE.
- CO 3. Ability to solve the problems related to mean, median, mode, SD, SE, ANOVA and Correlation.

- 4CO 4 An idea about the isolation of nitrogen fixing, phosphate and sulphate solubilising bacteria from soil.
- CO 5. Deeper knowledge regarding lab scale production of bacterial, algal and fungal biofertilizer.

THIRD SEMESTER

CE-301 A: Microbes, Bio fertilizer and Bioinsecticide

(4CREDITS) (FM:100)

Course Outcomes

After reading this paper, students should have:

- CO 1. The ability to distinguish the types of biofertilizers and methods of application in field.
- CO 2. Idea regarding integrated management for best results using nitrogenous and phosphate biofertilizers.
- CO 3. The ability to demonstrate the low-cost media preparation.
- CO 4. The idea to impart training on eco-friendly agricultural inputs in bio fertilizer production.
- CO 5. Understanding about microbes as bioinsecticides and their advantages over synthetic pesticides.

THIRD SEMESTER

CE-301 B: Virology

(4CREDITS) (FM:100)

Course Outcomes:

After reading this paper, students should have:

- CO 1. Brief idea on general principles of virology.
- CO 2. The ability to distinguish and classify the types of Viruses.
- CO 3. Hands on practice on virus cultivation methods.
- CO 4. Deeper knowledge regarding the life cycle of Viruses.
- CO 5. Understanding on oncogenic viruses and their types.

THIRD SEMESTER
CE-302 A: RESEARCH METHODOLOGY
(4CREDITS) (FM:100)

Course Outcome:

After reading this paper, students should have:

- CO 1. The ability to choose methods appropriate to research aims and objectives.
- CO 2. Understanding about the limitations of the particular research methods.
- CO 3. Developed skills in qualitative and quantitative data analysis.
- CO 4. Developed advanced critical thinking skills.
- CO 5. Developed skill relate to the principal concepts of bio-statistics.

THIRD SEMESTER
CE-302 B: WASTE MANAGEMENT
(4CREDITS) (FM:100)

Course Outcomes:

After reading this paper, students should have:

- CO 1. Basic concept on the types of waste management, beginning from source generation to waste disposal in a system of municipality organizational structure.
- CO 2. Developed understanding on various technological applications for processing of waste and their disposals in various ways.
- CO 3. Acquired knowledge on waste to energy productions in the perspectives of sustainable development.
- CO 4. Basic concepts in hazardous waste management and integrated waste management for urban areas.
- CO 5. Acquired knowledge on waste characterization and its management practiced in various cities of India.

FOURTH SEMESTER
HC401 SUBJECT OVERVIEW
(4CREDITS) FM:100)

Course Outcome:

After reading this paper, students should have:

- CO 1. Developed the concept of review writing.
- CO 2. Understanding regarding development of proposal and research writing.
- CO 3. Achieved a new area of interest for research.
- CO 4. Innovative idea in research topic to contribute for mankind.
- CO 5. Followed the research ethics while carrying out research work.

FOURTH SEMESTER
HC402 SEMINAR
(4CREDITS) (FM:100)

Course Outcome:

After reading this paper, students should have:

- CO 1. Developed the concept of presentation in public
- CO 2. Prepared a good comparative data on the research field.
- CO 3. Prepared well explainable power point presentation.
- CO 4. Prepared concise and comprehensible presentation.
- CO 5. Presented their research findings.

FOURTH SEMESTER
HC403 DISSERTATION
(4CREDITS)(FM:100)

Course Outcome:

After reading this paper, students should have:

- CO 1. Developed experimental and practical knowledge in lab and field research work.
- CO 2. Carried out a coordinated research work.
- CO 3. Developed the concept of writing a proposal for research.
- CO 4. An idea about exposure to industrial domain.
- CO 5. Carried out efficient research using various instruments.

FOURTH SEMESTER
CE401 Dissertation evaluation
(4CREDITS)(FM:100)

Course Outcome:

After reading this paper, students should have:

- CO 1. Developed the concept of public speaking and presentation.
- CO 2. Presented their research findings.
- CO 3. Developed skill for Sequential compilation of obtained research data.
- CO 4. Analysed data using different bio statistical tools.
- CO 5. Developed mental flexibility at par with the ongoing research studies.

M.Sc. IN LIFE SCIENCE

Programme Outcomes

- PO1. The interaction of chemical substances with the human body and other organic life processes and the positive and negative effects of chemicals on specific body parts.
- PO2. To improve scientific understanding of microorganisms and to apply this insight to enhance performance in medicine and related industries.
- PO3. To cover a broad range of biological studies like drug research, ecology, genetics and apply this knowledge in biotech and pharmaceutical sectors for improving human living standard.
- PO4. To understand the chemical nature of living entities such as cells, plants and animals. This might include biological processes, genetics, organism growth and disease.
- PO5. Research and development to improve industries like food processing, pharmaceutical, health care and agriculture.
- PO6. Enhance maintenance of laboratory equipment, help them to perform experiments, collect data and analyse it to discover new things.
- PO7. Enhance various complex statistical skills, guidance, study genetics information and disease rates regularly.
- PO8. Enhance their programming skills to improve software products, databases and analytical tools.
- PO9. Making them capable of using their expertise and learning of chemistry, physiology, genetics, physics and biology to extract DNA and RNA samples from living organisms and study their interactions.
- PO10. Making them capable to engage in research and development sectors such as biofuels, animal husbandry and environmental protection organizations, among others.

Programme Specific Outcomes

- PSO-1 Students can further pursue jobs for lectureship post in different educational institutions.
- PSO-2 Acquired practical learning from internship, field visit, industrial visit and research projects.
- PSO-3 Students can continue their academic career by opting for PhD in the interested field.
- PSO-4 Understand and develop new dimension of knowledge in the pharmaceutical industries.

FIRST SEMESTER
HC-101 CELL BIOLOGY
(5CREDITS)(FM:100)

Course Outcomes

After reading this paper, students should have:

CO 1. Developed a deeper understanding of cell structure and how it relates to cell function. And be able to discuss the mechanism behind the transport of molecules across plasma membrane.

CO 2. Ability to explain the cell-cell interactions and & various types cell junctions with significant role.

CO 3. Understood cell signalling and how it regulates cellular functions and how its dysregulation leads to cancer and other diseases.

CO 4. Knowledge about interpreting protein translocation, protein folding and processing in ER and Golgi.

CO 5. Knowledge about the events of cell cycle and its regulation.

FIRST SEMESTER
HC- 102 MICROBIOLOGY
(5CREDITS) (FM:100)

Course Outcomes:

After reading this paper, students should have:

CO 1. Ability to identify common infectious agents and the diseases that they cause.

CO 2. Idea to evaluate methods used to identify infectious agents in the clinical microbiology lab.

CO 3. Familiarized with microbial physiology including metabolism, regulation and replication.

CO 4. Knowledge of microbiology in various field.

CO 5. Ability to explain the mechanism of viral infections in current scenario.

FIRST SEMESTER
HC- 103 BIO INSTRUMENTATION
(5CREDITS) (FM:100)

Course Outcomes:

After reading this paper, students should have:

CO 1. Ability to describe the methodology involved in biotechniques and application of bioinstruments.

CO 2. Knowledge to demonstrate and practical skills of using instruments in biology and medical field.

CO 3. Ability to perform techniques involved in molecular biology and diagnosis of diseases.

CO 4. Updated current knowledge regarding biomedical engineering involving new methods and the instrumentation.

CO 5. Improved system productivity, reliability, safety and stability.

FIRST SEMESTER
HC-104 PRACTICAL BASED ON
PAPERS HC 101, HC 102, HC 103
(5CREDITS) (FM:100)

Course Outcomes:

After reading this paper, students should have:

CO 1. Knowledge to perform and evaluate methods used to identify microbes and their activity.

CO 2. Ideas to analyse microbial physiology including metabolism, regulation and replication.

CO 3. Ideas to evaluate and apply knowledge of microbiology in various field.

CO 4. Ability to execute various basic instruments of life sciences.

CO 5. Familiarized with perform various cell interaction experiments.

SECOND SEMESTER
HC 201 BIOCHEMISTRY
(5CREDITS) (FM:100)

Course Outcomes:

After reading this paper, students should have:

CO 1. Knowledge to demonstrate the role of carbohydrates in biological system by relating its structure.

CO 2. Ability to explain the structure of proteins and their role in metabolic pathways.

CO 3. Knowledge to provide indebt knowledge of lipids, their structure as well as their function.

CO 4. Learned basic function of enzymes, their properties and components.

CO 5. Understood the metabolism pathways of various biomolecules.

SECOND SEMESTER
HC-202 MOLECULAR BIOLOGY
(5CREDITS) (FM:100)

Course Outcomes:

After reading this paper, students should have:

- CO 1. Ability to distinguish between DNA, gene, chromosome and genome.
- CO2. Understanding of the basic rules governing replication, DNA repair and Recombination.
- CO 3. Knowledge to describe the process of transcription in prokaryotes, eukaryotes post transcriptional modification.
- CO 4. Working ideas on the process of Translation in prokaryotes and eukaryotes.
- CO 5. Ideas to explain the regulation of gene expression in prokaryotes and eukaryotes.

SECOND SEMESTER
HC-203 ECOLOGY AND EVOLUTION
(5CREDITS) (FM:100)

Course Outcomes:

After reading this paper, students should have:

- CO 1. Knowledge to provide definitions of environment, management, systems and organisations in relation to environmental management.
- CO 2. Ability to demonstrate broad-based knowledge of the fundamentals of Ecology, Behaviour, Evolution and physiology and the relationships among these disciplines.
- CO 3. Familiarized with skills in the observation and experimental study of organisms, using both field-based and laboratory-based approaches.
- CO 4. Ability to demonstrate skills in identifying, accessing, comprehending and synthesizing scientific information.
- CO 5. Able to demonstrate the ability to conceive and execute independent scientific research, theoretical or empirical/experimental approach.

SECOND SEMESTER
HC-204 PRACTICAL BASED ON PAPER -201, 202, 203 &
CE-201 A/B
(5CREDITS) (FM:100)

Course Outcomes:

After reading this paper, students should have:

- CO 1. Working knowledge on performing experiments related to enzyme kinetics.
- CO 2. Able to describe the methodology involved in molecular biology.
- CO 3. Working knowledge on performing experiments involved in ecology and evolution.
- CO 4. Updated current knowledge regarding diversity of plant and animal kingdom.
- CO 5. Working knowledge on understanding all biological processes.

SECOND SEMESTER
CE-201 A PLANT DIVERSITY AND TAXONOMY
(5CREDITS)(FM:100)

Course Outcomes:

After reading this paper, students should have:

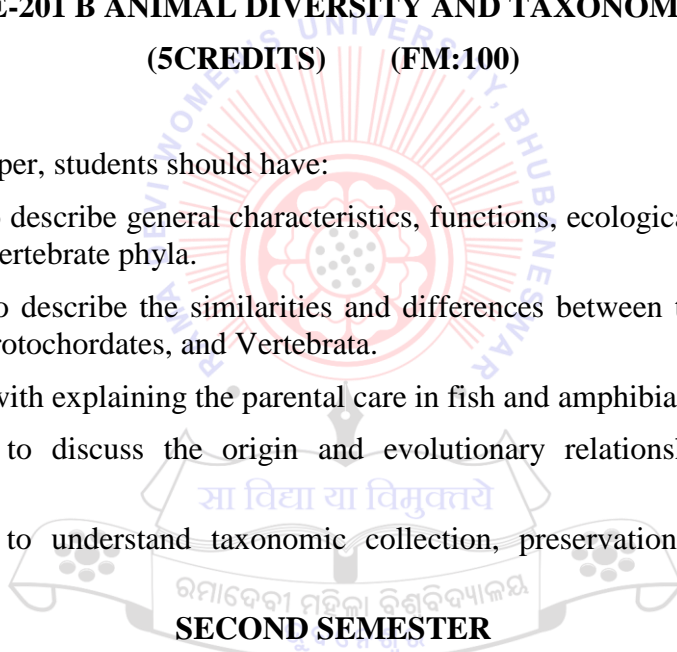
- CO 1. Understood diversity of various cryptogams and phanerogams.
- CO 2. Explained evolution of gametophytes and saprophytes.
- CO 3. Enumerated affinities of Bryophytes, Pteridophytes, Gymnosperms and Angiosperms.
- CO 4. Understood the structure of gametophytes and saprophytes.
- CO 5. Understood the range of floral structure of Angiosperms.

SECOND SEMESTER
CE-201 B ANIMAL DIVERSITY AND TAXONOMY
(5CREDITS) (FM:100)

Course Outcomes:

After reading this paper, students should have:

- CO 1. Knowledge to describe general characteristics, functions, ecological role and diversity of invertebrate and vertebrate phyla.
- CO 2. Knowledge to describe the similarities and differences between the members of the chordate subphyla protochordates, and Vertebrata.
- CO 3. Familiarized with explaining the parental care in fish and amphibia
- CO 4. Knowledge to discuss the origin and evolutionary relationships between each chordate group.
- CO 5. Knowledge to understand taxonomic collection, preservation and identification of samples



OE-201A HUMAN HEALTH AND HYGIENE
(5CREDITS)(FM:100)

Course Outcomes:

After reading this paper, students should have:

- CO 1. Ability to describe the major life style diseases affecting each organ system.
- CO 2. Familiarized with explain the common infectious communicable diseases and their specific symptoms.
- CO 3. Able to explain the Implications of climate change and management of communicable diseases.
- CO 4. Developed positive attitude towards health issues and promoting decision making.
- CO 5. Ability to promote the detection and prevention of various diseases through research and innovation.

THIRD SEMESTER
HC 301 IMMUNOLOGY
(5CREDITS)(FM:100)

Course Outcomes:

After reading this paper, students should have:

- CO 1. Learned to demonstrate the basic knowledge of immunological processes at a cellular and molecular level
- CO 2. Knowledge to describe which cell types and organs present in the immune response
- CO 3. Illustrative ideas about various mechanisms that regulate immune responses and their mechanisms
- CO 4. Ability to exemplify the adverse reactions of immune responses like Allergy, hypersensitivity and autoimmunity
- CO 5. Knowledge to elucidate the reasons for immunization and aware of different Infectious Diseases.

THIRD SEMESTER
HC 302 GENETICS
(5CREDITS)(FM:100)

Course Outcomes:

After reading this paper, students should have:

- CO 1. Working knowledge on explaining structure of the chromosome and hereditary characteristic.
- CO 2. Familiarized with on listing the important developments of genetics.
- CO 3. Ability to defining the of basic concepts of genetics can debate mechanisms of the genetic variation.
- CO 4. Able to comparing chromosome structure in mitosis and meiosis divisions.
- CO 5. Working knowledge on explaining Mendel's rules. calculate of phenotypic and genotypic ratios of crosses.

THIRD SEMESTER
CE- 301 A PLANT PHYSIOLOGY AND DEVELOPMENT
(5CREDITS)(FM:100)

Course Outcomes:

After reading this paper, students should have:

- CO 1. Ability to explain the transportation and translocation of water and solute
- CO 2. Familiarized with explain the importance of photosynthesis and respiration for plants.
- CO 3. Able to explain the assimilation of mineral nutrients and role of secondary metabolites.
- CO 4. Ability to explain the plant hormones and their significance in plant development.
- CO 5. Learnt the development of male and female gametophyte

THIRD SEMESTER
CE- 301 B ANIMAL PHYSIOLOGY AND DEVELOPMENT
(5CREDITS)(FM:100)

Course Outcomes:

After reading this paper, students should have:

- CO 1. Understanding on gametogenesis and the mechanism fertilization, cleavage and gastrulation.
- CO 2. Familiarized with formation of three Germ Layers in Frog and Chick
- CO 3. Understanding on the phenomenon of regeneration in amphibian and also able to explain concept of model organism used in Ageing study.
- CO 4. A solid foundation on the physiology of Circulation, excretory and respiration in mammal and able to Understand the phenomenon of muscle contraction.
- CO 5. Understanding on the properties, nature, classification, regulation of hormones along with their disorders.

THIRD SEMESTER
HC 303 Practical related to paper Practical related to
paper HC-301, HC- 302 and CE-301 A/B,
(5CREDITS)(FM:100)

Course Outcomes:

After reading this paper, students should have:

- CO 1. Knowledge on performing experiments related to immunology and antigen-antibody interactions.
- CO 2. Familiarized with describing the methodology involved in genetics and its analysis.
- CO 3. Able to performing experiments involved in plant physiology and development.
- CO4. Knowledge on performing experiments involved in animal physiology and development.
- CO 5. Updated current knowledge regarding research methodology and bio-statistics.

THIRD SEMESTER
CE 302A RESEARCH METHODOLOGY
(4CREDITS)(FM:100)

Course Outcomes:

After reading this paper, students should have:

- CO 1. Developed ability to demonstrate methods appropriate to research aims and objectives.
- CO 2. A solid foundation on the limitations of the particular research methods
- CO 3. Familiarized with qualitative and quantitative data analysis.
- CO 4. Developed advanced critical thinking skills.

CO 5. Understood ability to relate the principal concepts of bio-statistics

THIRD SEMESTER
CE 302B WASTE MANAGEMENT MARKS
(5CREDITS)(FM:100)

Course Outcomes:

After reading this paper, students should have:

CO 1. Learned basic concepts of different types of waste management, beginning from source generation to waste disposal in a system of municipality organizational structure.

CO 2. Developed understanding on various technological applications for processing of waste and their disposals in various ways.

CO 3. Acquired knowledge on waste to energy productions in the perspectives of sustainable development.

CO 4. Applied basic concepts in hazardous waste management and integrated waste management for urban areas.

CO 5. Acquired knowledge on waste characterization and its management practiced in various cities of India.

FOURTH SEMESTER
HC401 Review Literature
(5CREDITS)(FM:100)

Course Outcome:

After reading this paper, students should have:

CO 1. Developed the concept of review writing.

CO 2. Understanding regarding development of proposal and research writing.

CO 3. Achieved a new area of interest for research.

CO 4. Innovative idea in research topic to contribute for mankind.

CO 5. Followed the research ethics while carrying out research work.

FOURTH SEMESTER
HC402 SEMINAR
(5CREDITS)(FM:100)

Course Outcome:

After reading this paper, students should have:

CO 1. Developed the concept of presentation in public

CO 2. Prepared a good comparative data on the research field.

CO 3. Prepared well explainable power point presentation.

CO 4. Prepared concise and comprehensible presentation.

CO 5. Presented their research findings.

FOURTH SEMESTER
HC403 DISSERTATION
(5CREDITS)(FM: 100)

Course Outcome:

After reading this paper, students should have:

CO 1. Developed experimental and practical knowledge in lab and field research work.

CO 2. Carried out a coordinated research work.

CO 3. Developed the concept of writing a proposal for research.

CO 4. An idea about exposure to industrial domain.

CO 5. Carried out efficient research using various instruments.

FOURTH SEMESTER
CE401: Dissertation evaluation
(5CREDITS)(FM: 100)

Course Outcome:

After reading this paper, students should have:

- CO 1. Developed the concept of public speaking and presentation.
- CO 2. Presented their research findings.
- CO 3. Developed skill for Sequential compilation of obtained research data.
- CO 4. Analysed data using different bio statistical tools.
- CO 5. Developed mental flexibility at par with the ongoing research studies.

Ph.D. IN LIFE SCIENCE

Program Outcomes (POs):

- PO 1: Develop an understanding of microbial diversity and their application, practical knowledge & skills using bio instruments in industrial domain.
- PO 2: Describe the microbial nutrition & growth and explain various culture, sterilization techniques in microbiology.
- PO 3: To demonstrate the basic knowledge of immunological processes at cellular and molecular level.
- PO 4: Describe the design and application of fermenter and bioreactors, explain the media requirement for fermentation process.
- PO 5: Explain the microbial physiology, regulation of gene expression and understand the basics of RDT, bioinformatics and their applications.
- PO 6: Develop an understanding of computer application in context to MS office (word, excel, PowerPoint), graphic tools and fundamental use, services of internet.
- PO 7: A brief idea on measure of central tendency and develop deeper understanding on binomial distribution and ANOVA.
- PO 8: Learning the basic concepts of bioremediation, applications for its processing, characterization and its management in various places.
- PO 9: Finding innovative idea in research topic to contribute for mankind following the research ethics, develop experimental and practical knowledge in lab and field research work and carry out efficient research using various instruments.
- PO 10: To develop mental flexibility, sequential compilation of data, preparation of concise and comprehensible presentation and public speaking.

Program Specific Outcomes (PSOs):

- PSO-1 Develop deeper understanding of advanced techniques in biology such as RFLP, RAPD, AFLP, SNP and SSR.
- PSO-2 Have a brief idea about application of IR, FTIR, GLC, TEM, SEM and bioinformatics.
- PSO-3 Have a brief idea regarding principles and applications of spectroscopy, fermenter and filtration system.
- PSO-4 To develop innovative idea in research topic, mental flexibility, sequential compilation of data, preparation of concise and comprehensible presentation and public speaking.

PAPER-I : RESEARCH METHODOLOGY

(4 CREDITS) (FM: 100)

Course Outcomes:

After studying this paper, students will be able to:

- CO1:Choose methods appropriate to research aims and objectives as well as Understand about the limitations of the particular research methods.
- CO2:Understand the working principle and hands on practice of various instruments.
- CO3:Develop skill relate to the principal concepts of bio-statistics.
- CO4:Develop skills in qualitative and quantitative data analysis.

PAPER-II: ELECTIVE COURSE

(4 CREDITS) (FM: 100)

Course Outcomes:

After studying this paper, students will be able to:

- CO1:Get hands on practice on culture and sterilization techniques and their effectiveness in Microbiology.
- CO2:Update current knowledge regarding biomedical engineering involving new methods and the instrumentation in case of plant and animal cell culture.
- CO3:Have a brief knowledge on the principles and application of spectroscopy in biological system.
- CO4:Gets knowledge regarding microbial diversity and bioremediation

PAPER-III: REVIEW OF RELATED LITERATURE

(4 CREDITS) (FM: 100)

Course Outcomes:

After studying this paper, students will be able to:

- CO1:Develop the concept of review writing.
- CO2:Understand regarding development of proposal and research writing.
- CO3:Achieve a new area of interest for research.
- CO4:Get innovative idea in research topic to contribute for mankind.
- CO5: Follow the research ethics while carrying out research work.

PAPER- IV: RESEARCH AND PUBLICATION ETHICS

(4 CREDITS) (FM: 100)

Course Outcomes:

After studying this paper, students will be able to:

- CO1: Understand the basics of philosophy of science and ethics, research integrity, publication ethics.
- CO2: Identify research misconduct and predatory publications.
- CO3: Comprehend indexing and citations, open access publications, research metrics (citations, h-index, impact factor etc).
- CO4: Use plagiarism tools for a valid and ethical research report.



B.Sc./ B.A. MATHEMATICS

Programme Outcomes

- PO.1: Develop mental, analytical, employability and strategic skills through comprehensive studies to meet the challenges of contemporary trends.
- PO.2: Proficiency with the ability to qualify competitive and professional examinations.
- PO.3: Enhance ability to develop the business in banking sector.
- PO.4: Prepare students for cross-country professional courses.
- PO.5: Pursue advance research by applying critical thinking and analytical reasoning in some specific field of science like meteorology and astrology.
- PO.6: Application of information technology and digital tools to satisfy the everchanging demands of the software companies.
- PO.7: Enable students to have research in different field of science specifically to advance in space research.
- PO.8: Holistic development of students to create responsible citizenry through social, moral, ethical and professional code of conduct.
- PO.9: Encourage in designing and drawing in different fields of engineering and science.
- PO.10: Bridging the gap between academia and its application to enhance learners ability through problems solving skills to face the challenges and achieve excellence.

Programme Specific Outcomes

- PSO.1: Students can go for higher studies and they can choose academics as Mathematics is a basic subject.
- PSO.2: Acquired passion for research in various fields like Optimization, Numerical Analysis, Transportation, Sum ability, Operator Theory, and Number Theory.
- PSO.3: Students can opt for banking service/Administrative jobs/work in meteorological department etc.
- PSO.4: Professional courses like MCA/CS can be taken as further studies.

FIRST SEMESTER

C-1 : Calculus-I

(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Calculate the higher order derivatives and limits in indeterminate form by repeated use of L'Hospital rule.
- CO 2. acquire the concept of asymptotes and envelopes;
- CO 3. determine concavity and convexity of a function from its graph and from its second derivative;
- CO 4. explain the properties of two- and three-dimensional shapes and trace a curve.
- CO 5. solve first order ordinary differential equations utilizing the standard techniques for separable, exact, linear, homogeneous or Bernoulli cases.

FIRST SEMESTER

C-1 :Algebra-II

(4 CREDITS)

(FM:100)

Course Outcomes

CO 1. Find the inverse of a square matrix.

CO 2. Solve the matrix equation $Ax = b$ using row operations and matrix operations.

CO 3. Find the determinant of a product of square matrices, of the transpose of a square matrix, and of the inverse of an invertible matrix

CO 4. Find the characteristic equation, eigenvalues and corresponding eigenvectors of a given matrix.

CO 5. Determine if a given matrix is diagonalizable.

FIRST SEMESTER

GE A1 (Calculus & Differential Equations

(4 CREDITS)

(FM:100)

Course Outcomes

CO 1. Calculate the higher order derivatives and limits in indeterminate form by repeated use of L'Hospital rule.

CO 2. Acquire the concept of asymptotes and envelopes

CO 3. Solve first order differential equations utilizing the standard techniques for separable, exact, linear, homogeneous, or Bernoulli cases.

CO 4. Student will have a working knowledge of basic application problems described by second order linear differential equations with constant coefficients.

CO 5. How to set up and solve optimization problems involving several variables with or without constraints.

FIRST SEMESTER

AECC – I Environmental studies and disaster management

(4 CREDITS)

(FM:100)

Course Outcomes

CO 1. Students understand about problems of environmental pollution and Impact of pollution on human and ecosystem and control measures.

CO 2. Students will learn about increase in population growth and understand the issues of use of resources in proper manner leading to sustainable development.

CO 3. Learn about causes and impacts of Disasters and Case studies of National and Global disasters and risk reduction approaches of Disasters with safety issues in mitigating Industrial disasters.

CO 4. Basic idea about the mode of transmission and course of some communicable and non-communicable diseases and knowledge on the Importance and methods of prevention of epidemics and pandemics

SECOND SEMESTER
C – III: REAL ANALYSIS (ANALYSIS-I)
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Describe different properties of the real line \mathbb{R} .
- CO 2. Define and recognize bounded, convergent, divergent, Cauchy, and monotonic sequences and calculate limit superior, limit inferior of bounded sequences.
- CO 3. Apply the ratio, root, alternating series and limit comparison tests for convergence and absolute convergence of an infinite series of real numbers.
- CO 4. Describe the basic differences between the rational and real number.
- CO 5. Apply this sophisticated course to finance.

SECOND SEMESTER
C – IV: DIFFERENTIAL EQUATIONS
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Solve first order differential equations utilizing the standard techniques for separable, exact, linear, homogeneous, or Bernoulli cases.
- CO 2. Find the complete solution of a nonhomogeneous differential equation as a linear combination of the complementary function and a particular solution.
- CO 3. Do the complete solution of a nonhomogeneous differential equation with constant coefficients by the method of undetermined coefficients.
- CO 4. Find the complete solution of a differential equation with constant coefficients by variation of parameters.
- CO 5. Student will have a working knowledge of basic application problems described by second order linear differential equations with constant coefficients.

SECOND SEMESTER
GE A2 (ALGEBRA)
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Recognize the mathematical objects called groups and link the fundamental concepts of groups and symmetries of geometrical objects.
- CO 2. Explain the significance of the notions of cosets, normal subgroups, and factor groups and analyse consequences of Lagrange's theorem.
- CO 3. Describe about structure preserving maps between groups and their consequences.
- CO 4. Demonstrate the concepts of vector spaces, subspaces, bases, dimension and their properties with examples; identify matrices with linear transformations and compute eigenvalues and eigenvectors of linear transformations.

SECOND SEMESTER
MIL – ALTERNATIVE ENGLISH
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1: demonstrate high-level proficiency in writing and speaking English
- CO 2: employ effectively the language of their discipline
- CO 3: develop skills in organizing and expressing ideas and viewpoints with clarity and coherence in writing and speech
- CO 4: formulate and defend original arguments
- CO 5: enumerate skills in narration, description, and argumentation
- CO 6: ascertain insight into different cultures
- CO 7: gain good knowledge that includes understanding recent developments in language and literature
- CO 8: to develop an acumen for a better understanding of the diversity of human experiences
- CO 9: acquire an openness to new ideas, perspectives, and ways of thinking
- CO 10: enhance literary and critical thinking

THIRD SEMESTER
C-V – THEORY OF REAL FUNCTIONS (Analysis-II)
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Examine and calculate the limit, and investigate the continuity of a function at a point.
- CO 2. Describe with different properties of a continuous and uniformly continuous functions.
- CO 3. Describe the consequences of various mean value theorems for differentiable functions.
- CO 4. Describe the basic definition and topology of metric spaces.
- CO 5. Identify complete and incomplete metric spaces.

THIRD SEMESTER
C-VI – GROUP THEORY (ALGEBRA-II)
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1. Reorganize the mathematical objects called groups.
- CO 2: Link the fundamental concepts of groups and symmetries of geometrical objects.
- CO 3: Explain the significance of the notions of cosets, normal subgroups, and factor groups.
- CO 4: Analyse consequences of Lagrange's theorem.
- CO 5: Describe about structure preserving maps between groups and their consequences.

THIRD SEMESTER
C-VII – PARTIAL DIFFERENTIAL EQUATIONS & SYSTEM OF ODES
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1: Classify partial differential equations and transform into canonical form
CO 2: Solve linear partial differential equations of both first and second order
CO 3: Apply partial derivative equation techniques to predict the behaviour of certain phenomena.
CO 4: Apply specific methodologies, techniques and resources to conduct research and produce innovative results in the area of specialisation.
CO 5: Extract information from partial derivative models in order to interpret reality.

THIRD SEMESTER
SKILL ENHANCEMENT COURSE-I (ENGLISH)
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1: Enhance their ability to build and enrich their communication skills
CO 2: Be able to build up the four primary skills in students in the academic as well as in the wider domains of use like public offices.
CO 3: Acquire analytical and comprehension reading skills
CO 4: Identify basic principles of communication
CO 5: Build speaking and listening skills
CO 6: Learn beyond the conventional syllabus and be prepared to meet challenges while seeking a job
CO 7: Be able to synthesize knowledge and use it creatively to better understand and improvise themselves
CO 8: Be able to communicate effectively through written reports, presentations, and discussions
CO 9: Develop a neutral accent and improve general standard of pronunciation
CO 10: Speak globally intelligible English

FOURTH SEMESTER
C-VIII: NUMERICAL METHODS
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1: Obtain numerical solutions of algebraic and transcendental equations
CO 2: Find numerical solutions of system of linear equations and check the accuracy of the solutions
CO 3: Describe various interpolating and extrapolating methods

CO 4: Solve initial and boundary value problems in differential equations using numerical methods

CO 5: Apply various numerical methods in real life problems.

FOURTH SEMESTER

C-IX: RIEMANN INTEGRATION AND SERIES OF FUNCTIONS (ANALYSIS-III)

(4 CREDITS)

(FM:100)

Course Outcomes

CO 1: List some of the properties of Riemann integral functions, and apply the fundamental theorems of integration;

CO 2: Identify and test the convergence of an improper integral;

CO 3: Calculate Fourier transforms of functions belonging to $L^1(\mathbb{R})$ class of functions;

CO 4: Explain Parseval's identity, Plancherel's theorem, and applications of Fourier transforms to boundary value problems;

CO 5: Find Fourier series, prove Bessel's inequality, and find term by term differentiation and integration of Fourier series.

FOURTH SEMESTER

C-X: RING THEORY AND LINEAR ALGEBRA

(4 CREDITS)

(FM:100)

Course Outcomes

CO 1: Describe the fundamental concepts in ring theory such as of the ideals, quotient rings, integral domains, and fields;

CO 2: Demonstrate the concepts of vector spaces, subspaces, bases, dimension and their properties with examples;

CO 3: Identify matrices with linear transformations and compute eigenvalues and eigenvectors of linear transformations.

CO 4: Describe the concept of minimal polynomial and develop an idea about inner product space and proceed to normed linear spaces;

CO 5: Use Gram-Schmidt process to find orthogonal set of non-null vectors from any arbitrary set of vectors.

FOURTH SEMESTER

CSEC-II (MATHEMATICS)

(4 CREDITS)

(FM:100)

Course Outcomes

I. QUANTITATIVE APTITUDE & DATA INTERPRETATION

CO 1: Use their logical thinking and analytical abilities to solve Quantitative aptitude questions from company specific and other competitive tests.

CO 2: Solve questions related to Time and distance and time and work etc. from company specific and other competitive tests.

CO 3: Understand and solve puzzle related questions from specific and other competitive tests.

CO 4: Solve questions related to permutation & combinations and probabilities from company specific and other competitive tests.

II. LOGICAL REASONING

CO 1: Detect errors of grammar and usage in a given sentence/text and rectify them by making appropriate changes.

CO 2: Solve questions based on critical reasoning.

CO 3: Analyze reading passages and quickly find out the correct responses to questions asked by using reading skills like skimming, scanning, reading between the lines, etc.

CO 4: To use idiomatic expressions in writing and speaking and to solve questions based on them.

FIFTH SEMESTER

C-XI: MULTIVARIATE CALCULUS (CALCULUS-II)

(4 CREDITS)

(FM:100)

Course Outcomes

CO 1: How to differentiate and integrate functions of several variables.

CO 2: in single variable calculus the Fundamental Theorem of Calculus relates derivatives to integrals.

They will see something similar in multivariable calculus and the capstone to the course will be the three theorems (Green's, Stokes' and Gauss') that do this.

CO 3: Calculate partial derivatives, directional derivatives, extremum values and can calculate double, triple and line integrals.

CO 4: They will have idea of basic vector calculus including green's theorem, divergence theorem and Stokes theorem. They can take courses in calculus on manifolds, Differential geometry and can help in numerical computations involving several variables.

CO 5: How to set up and solve optimization problems involving several variables with or without constraints.

FIFTH SEMESTER

C-XII: PROGRAMMING IN C++ (C-XII)

(4 CREDITS)

(FM:100)

Course Outcomes

CO 1: Describe OOPs concepts and use functions and pointers in your C++ program

CO 2: Understand tokens, expressions, and control structures

CO 3: Explain arrays and strings and create programs using them

CO 4: Describe and use constructors and destructors

CO 5: Understand and employ file management

FIFTH SEMESTER

DSE-I DISCIPLINE SPECIFIC ELECTIVE: DISCRETE MATHEMATICS

(4 CREDITS)

(FM:100)

Course Outcomes

CO 1: There are several important reasons for studying discrete mathematics. First, through this course you can develop your mathematical maturity: that is, your ability to understand and create mathematical arguments.

CO 2: It is an excellent tool for improving reasoning and problem-solving skills, and is appropriate for all at all levels and of all abilities.

CO 3: The importance of discrete mathematics lies in the fact that the modern mathematics deals with sets not numbers or more precisely sets with additional structures because the sets we come across in practice are usually finite.

CO 4: The ideas of discrete mathematics are the fundamental to the science and technology specific to the computer age.

CO 5: The knowledge of discrete mathematics is the key prerequisite for advanced work in many branches of mathematics and computer science which includes data structure, database theory, compiler design, operating system and many others.

FIFTH SEMESTER

DSE-II DISCIPLINE SPECIFIC ELECTIVE: NUMBER THEORY (DSE-II)

(4 CREDITS)

(FM:100)

Course Outcomes

CO 1: Describe some important results in the theory of numbers including the prime number theorem, Chinese remainder theorem, Wilson's theorem and their consequences;

CO 2: Describe number theoretic functions, modular arithmetic and their applications;

CO 3: Familiarise with modular arithmetic and find primitive roots of prime and composite numbers;

CO 4: Know about open problems in number theory, namely, the Goldbach conjecture and twin prime conjecture.

CO 5: Apply public crypto systems, in particular, RSA.

SIXTH SEMESTER

C-XIII: METRIC SPACES AND COMPLEX ANALYSIS (ANALYSIS-IV)

(4 CREDITS)

(FM:100)

Course Outcomes

CO 1: Describe several standard concepts of metric spaces and their properties like openness, closedness, completeness, Bolzano-Weierstrass property, compactness, and connectedness.

CO 2: Describe the differentiability and analyticity of complex functions leading to the Cauchy-Riemann equations.

CO 3: Apply the Cauchy-Goursat theorem and Cauchy integral formula in evaluation of contour Integrals and apply Liouville's theorem in fundamental theorem of algebra;

- CO 4: Evaluate Taylor and Laurent series expansions of analytic functions;
CO 5: Classify the nature of singularity, poles and residues and application of Cauchy Residue theorem.

SIXTH SEMESTER
C-XIV: LINEAR PROGRAMMING
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1: Will be able describe quantitative methods used in decision making.
CO 2: Compares the types of quantitative methods.
CO 3: Explain the applications of linear programming.
CO 4: Constructs linear programming model.
CO 5: Applies solution methods for linear programming models.

SIXTH SEMESTER
(DSE-III): DISCIPLINE SPECIFIC ELECTIVE: DIFFERENTIAL GEOMETRY
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1: Describe various properties of curves including Serret-Frenet formulae and their applications;
CO 2: Describe the interpretation of the curvature tensor, Geodesic curvature, Gauss and Weingarten formulae;
CO 3: Describe the role of Gauss's Theorem Egregium and its consequences;
CO 4: Apply problem-solving with differential geometry to diverse situations in physics, engineering and in other mathematical contexts.
CO 5: Compute quantities of geometric interest such as curvature as well as develop a facility to compute in various specialised systems such as semi geodesics.

SIXTH SEMESTER
(DSE-IV): DISCIPLINE SPECIFIC ELECTIVE: PROBABILITY AND STATISTICS
(4 CREDITS) (FM:100)

Course Outcomes

- CO 1: Identify distributions in the study of the joint behaviour of two random variables;
CO 2: Establish a formulation helping to predict one variable in terms of the other, i.e., correlation and linear regression;
CO 3: Prove and apply central limit theorem.
CO 4: Have critical thinking.
CO 5: Gain proficiency in using statistical software for data analysis.

MASTER OF BUSINESS ADMINISTRATION

Programme Outcomes

PO-1: Enrich the students with professional etiquettes and proficiencies in the business world making them capable of competing with the outside environment and best coping with the situation on the basis of their skill sets.

PO-2: Students will enhance their managerial skill sets by acquiring professionalism in their daily lives, which will help them in their future career development.

PO-3: Equip students with digital skills through the use of information technology in order for them to compete in a technologically evolving society, as well as insights into Industry

PO-4: Students will be able to conduct their own SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis and will be exposed to practical and industry interface to help them choose a career path.

PO-5: Produce entrepreneurs in their respective sectors of ideation and field of interest, thereby creating employment opportunities for others and contributing to societal growth.

PO-6: Acquaint students with different functional areas of business management, like general administration, operations, marketing, finance, HR, IT, etc.

PO-7: Propel students with an aptitude for teaching and research to pursue careers in the fields of education, research, and corporate development.

PO-8: forecast the future and design futuristic organizations.

PO-9: Familiarize students with financial knowledge and awareness, smart investment, legal compliances in business, the legality of the organizations, dynamic market structure, and ever-changing customer expectations.

PO-10: Develop an attitude of lifelong learning among the students and make them strive for holistic development to successfully maintain a balance between the personal and professional lives

Programme Specific Outcomes

PSO1: To groom students so that they can be adaptable to multifunctional roles with respect to their specializations and work as successful business development executives.

PSO2: To develop competent management professionals with strong ethical values capable of assuming a pivotal role in various sectors of Indian economy and society aligned with the national priorities.

PSO3: To enrich students with the ability to identify entrepreneurial opportunities and develop leadership skills so as to carry forward their respective family Business.

PSO4: To facilitate students with analytical thinking which will enable them to find out potential risk associated with dynamic market structure and take appropriate decision as an efficient finance professional.

PSO5: To foster knowledge in students for proper understanding of market segments so as to meet customer needs by applying a suitable

pricing strategies while playing the role of a marketing executive.

PSO6: To equip students with the principles of operations & supply chain domain to be capable of improving the performance of organizations by applying classical practices into emerging business models.

SEMESTER-I

HC-101: ORGANIZATION STRUCTURE & PROCESS

(4CREDIT)

FM:100

Course Outcomes:

After going through this paper, students will be able to:

CO1. Gain a general understanding of managerial process and managerial functions.

CO2. Have conceptual clarity in relation to the ownership alternatives for a business entity.

CO3. Understand the significance of planning, decision making, and the flaws in the decision-making process.

CO4. Learn about the organizing and staffing process and realize the importance of organizational hierarchy.

CO5. Develop the leadership abilities in the students along with a problem-solving attitude.

SEMESTER-I

HC 102: QUANTITATIVE TECHNIQUES

(4CREDIT)

FM:100

Course Outcomes:

After going through this paper, students will be able to:

CO1. Gain knowledge about the basic concepts of statistics and its techniques.

CO2. Use correlation and regression analysis for estimation and forecasting.

CO3. Apply time series and index numbers in business organizations.

CO4. Understand the basics of probability and its application in business like random binomial distribution and Poisson distribution.

CO5. Estimate the population characteristics using point and interval estimators, standard errors.

SEMESTER-I
HC 103. MANAGERIAL ECONOMICS
(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Get a general understanding of decision making and long-term planning in terms of economic viability.

CO2. Understand the law of demand and supply control and the movements of a particular market.

CO3. Analyze the cost structure and the production functions.

CO4. Have conceptual clarity of pricing strategies and market structure.

CO5. Understand the national income and employment scenario in relation to fiscal and monetary policies.

SEMESTER-I
HC 104: ORGANIZATIONAL BEHAVIOUR DURATION
(4 CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Understand aspects of an organization's essence of behaviour, manage diversity, and engage in ethical behaviour.

CO2. Obtain a concrete idea on professional groups, team building, and group development.

CO3. Develop conflict management skills to manage the organizational power structure.

CO4. Create an innovative organizational culture and atmosphere that fosters individual creativity, innovation, and communication.

CO5. Understand the trends and patterns of organizational behaviour from a global perspective.

SEMESTER-I
HC 105: FINANCIAL ACCOUNTING FOR MANAGERS
(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Get an understanding of the basic concepts and scopes of accounting.

CO2. Know about capital and revenue gains and capital and revenue expenditures.

CO3. Understand the share market scenario and functionalities.

CO4. Familiarize themselves with the process of preparing financial reports, annual reports, and making decisions.

CO5. Learn about new trends in accounting such as inflationary accounting, forensic accounting, creative accounting, and HRA accounting.

SEMESTER-I
HC 106 BUSINESS COMMUNICATION
(4CREDIT) (FM:100)

Course Outcomes:

After reading the paper the students will be able to:

- CO1. Gain knowledge of the use, significance, kinds, and benefits of communication in organizations.
- CO2. Recognize various communication techniques, nonverbal cues, the traits of a passive listener, and body language applications.
- CO3. Prepare office orders, memos, sales reports, financial statements, and business and financial reports.
- CO4. Develop skills to write an application letter, a notice, an email, and a CV.
- CO5. Improve knowledge for delivering content in a formal and detailed manner, schedule meetings, and gain detailed insight into interview.

SEMESTER-I
HC 107: BUSINESS AND CORPORATE LAWS
(4CREDIT) (FM:100)

Course Outcomes

After going through this paper, students will be able to:

- CO1. Have an insight into the Indian Contract Act and its applications in the corporate fraternity.
- CO2. Understand the concepts of the Special Contract Act, quasi-contracts, and the Sales and Goods Act, etc.
- CO3. Get a brief understanding of the Information Technology Act, Cyber Laws, and their regulatory authorities, etc.
- CO4. Ideate a brief insight into the different aspects, concepts, and applications of intellectual property rights (IPR) & Copyrights.
- CO5. Acquire knowledge on the concepts and prospects of Negotiable Instruments Acts.

SEMESTER-I
AC 101. COMPUTER APPLICATIONS FOR MANAGEMENT
(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

- CO1. Have a detailed understanding of the basics of computer software and its applications.
- CO2. Understand the concepts of business data processing along with file management.
- CO3. Learn the fundamentals of data communication and computer networks.
- CO4. Learn about the various aspects, concepts, and applications of E-Commerce.
- CO5. Learn about the future of Business Analytics.

SEMESTER-II

HC 201. HUMAN RESOURCE MANAGEMENT DURATION

(4CREDIT) (FM:100)

Course Outcomes:

After reading the paper the students will be able to:

CO1. Recognize human resource management supervisors' responsibilities in an evolving organizational environment.

CO2. Understand the organization's talent acquisition PROGRAME as well as the legal options for protecting female employees.

CO3. Acquire knowledge on promotion and the essence of job analysis in the organization.

CO4. Understand the performance appraisal, compensation, and reward structure in the organization.

CO5. Become familiar with the organization's uses for training and training methodologies.

SEMESTER-II

HC 202 OPERATIONS MANAGEMENT DURATION

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Have a detailed insight into the basics of production and operations management and its applications in business.

CO2. Understand the concepts of facilitation of location- and layout-based decision making.

CO3. Ideate a brief understanding of the planning procedure in operations.

CO4. Learn about the concepts and applications of Inventory Management, Logistics, and Supply Chain Management in a nutshell.

CO5. Acquire knowledge on the concepts and prospects of quality management, just-in-time, six-sigma, ISO 9000 standards, etc.

SEMESTER-II

HC 203. MARKETING MANAGEMENT

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Have a detailed insight into the basics of marketing management and its applications.

CO2. Understand the concepts of "customer connection, "networking, "consumer decision making, "market information systems," etc.

CO3. Create a brief understanding of market strategy formulation, including marketing mix and segmentation.

CO4. Get a brief insight into product mix decisions, PLC, product classification, branding, packaging and labeling, pricing strategies, etc.

CO5. Learn about marketing channel communication, logistics, integrated marketing communications, sales and advertising, public relations, and other topics.

SEMESTER-II

HC 204. FINANCIAL MANAGEMENT

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Understand the fundamentals of finance, including its scopes and objectives.

CO2. Get the ability to make capital budgets, understand capital structures, and conduct risk analyses for an enterprise.

CO3. Understand the financial decisions determining the optimal capital structure, Checklist for Capital Structure Decisions and the Concept of Leverage.

CO4. Gain knowledge about factors determining dividend policy, Walter Model, MM Hypothesis, forms of dividend.

CO5. Acquire knowledge about the importance of working capital, its sources, and calculations.

SEMESTER-II

HC 205. ECONOMIC & BUSINESS ENVIRONMENT

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Differentiate between the economic and non-economic environments.

CO2. Have an overall idea of macroeconomics and the determinants of national income.

CO3. Know how the market reaches equilibrium and how monetary and fiscal policy operates.

CO4. Analyze the recent changes in industrial policy and the means of foreign investments.

CO5. Have a general understanding of economic reforms and the operations of the WTO, IMF, and World Bank.

SEMESTER-II

HC 206: MANAGEMENT INFORMATION SYSTEM & DSS

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Have an overall conceptual clarity of the basics of the information system.

CO2. Understand the types of decisions and the allied models of the decision-making process.

CO3. Make decisions using MIS and DSS tools.

CO4. Get an overview of system analysis and design models for IS.

CO5. Understand the concept of a decision support system completely.

SEMESTER-II

HC 207. RESEARCH METHODOLOGY DURATION

(4CREDIT) (FM:100)

Course Outcomes:

After reading the paper the students will be able to:

CO1. Get detailed ideas on the essence of research in the field of management.

CO2. Understand various research designs; determine the sample size and sampling techniques for the collection of data from the respondents.

CO3. Find out how to use different data formats, measurement scales, and test validity in your research.

CO4. Learn about the different sources and techniques for gathering information from respondents.

CO5. Employ diverse statistical techniques to solve a variety of research problems and be able to create research reports.

SEMESTER-II

HC 208. COST AND MANAGEMENT ACCOUNTING

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Understand the fundamental concepts of cost, cost accounting, and management accounting.

CO2. Get the ability to control material and labour costs with the use of inventory control techniques, different rates, and premium plans.

CO3. Acquire knowledge about the methods of costing, like job costing, contract costing, and process costing.

CO4. Understand decision making and marginal costing.

CO5. Prepare budgets for an organization with the application of budgeting techniques.

SEMESTER-III

HC 301. BUSINESS POLICY & STRATEGIC MANAGEMENT

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Have a thorough understanding of the Strategic Management Process Mission and the significance of policy and strategy, as well as the role of top executives in the strategic management process.

CO2. Understand the concepts of scanning and industry analysis in relation to external environmental analysis, etc.

CO3. Develop a basic understanding of Strategic Alternatives, Strategic Alliances, the BCG matrix, the GE 9 cell model, Mc Kinsey's 7 s framework, and the Balance Scorecard.

CO4. Discover different aspects of strategic decision-making and strategic implementation.

CO5. Learn about the principles and outlook for the strategic review and control process as well as corporate strategic failures.

SEMESTER-III

HC 302. PROJECT PLANNING, CONTROL & MANAGEMENT

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Understand the role of the strategist and the various types of strategies used in an organization.

CO2. Apply various analytical tools for business strategies.

CO3. Know how risk will be analyzed for different kinds of projects.

CO4. Consider social cost-benefit analysis, judgment, behavioural, strategic, and organizational factors.

CO5. Handle multiple projects through network techniques.

SEMESTER-III

HC-303 SUMMER TRAINING PROJECT

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Get the practical experience of the industrial world outside the periphery of classroom teaching.

CO2. Serving as interns at the respective organizations, students will be able to get an overall idea of the managerial practices of the corporate world.

SEMESTER-IV

HC 401: BUSINESS ETHICS AND CORPORATE GOVERNANCE DURATION: 3

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Acquire insights into ethics and business ethics.

CO2. Have knowledge of the factors that affect business ethics.

CO3. Fair idea about the role and responsibilities of stakeholders towards the business.

CO4. Understand the moral and social responsibility dimensions of corporate governance.

CO5. Gain knowledge on the role and responsibilities of directors and auditors in enforcing good governance.

SEMESTER-IV
HC-402 DISSERTATION & VIVA VOCE
(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Plan and carry out a critical evaluation of a chosen area of research that is pertinent to the environment and society.

CO2. Systematically identify relevant theory and concepts, relate these to appropriate methodologies and evidence.

CO3. Appropriately apply qualitative and/or quantitative evaluation processes to original data.

CO4. Understand and apply ethical standards of conduct in data collection and resource valuation.

CO5. Communicate research concepts and contexts clearly and effectively, both in writing and orally.

SEMESTER-IV
AC 401 WOMEN AND SOCIETY
(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Students will familiarize with the women lead environmental movements and women's participation in the climate resilience natural resources management.

CO2. Students will acquire knowledge on the differential impact of climate change disasters.

CO3. Students will be familiar with the role of technology and how has ICT brought about a change in on women's everyday lives and livelihoods.

CO4. It will enhance students' critical thinking in the use and management of technology in different productive sectors across different category of women.

CO5. Students will gain an insight into the women and law from rights and equality of opportunity in the access to justice as well as the nuances involved in it.

CO6. Students will entrust with the duties of framing reports, conducting research and development activities and solving the issues of injustice imparted to the public.

SEMESTER-IV
AC 402 DISASTER MANAGEMENT
(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Have a detailed insight into the basics of understanding disasters, including their causes and effects, with practical examples.

CO2. Understand the concepts of risk and vulnerability; disaster management Strategic Development for Vulnerability Reduction.

CO3. Get a brief understanding of the components of disaster preparedness and response preparedness, comprising disaster preparedness, concept and nature, disaster preparedness plan, prediction, early warnings, and disaster safety measures, and the roles of information, education, communication, and training in disaster mitigation.

SEMESTER-IV
FM 3101: SECURITY ANALYSIS & PORTFOLIO MANAGEMENT
(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Understand the theoretical and practical foundations of investments and securities.

CO2. Value financial securities like bonds and stocks.

CO3. Know how to analyze market inefficiencies, securities, and the random walk theory.

CO4. For the creation of securities, use Sharpe's Single Index Model, Capital Market Theory, and the Markowitz Mode.

CO5. Gain an understanding of portfolio, revision, need, constraints, and portfolio management practices.

SEMESTER-IV
FM 3102: FINANCIAL MARKET & INSTITUTIONS
(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Understand the Indian financial system and its role in economic development.

CO2. Know the role of the capital market and the money market in the financial system.

CO3. Familiarize themselves with the money market instruments, regulators, and regulations.

CO4. Get acquainted with the depository systems, benefits, rules, and regulations for trading and settlement. 5. Learn about the origins of SEBI, its constitution and organization, investor rights, BSE facilities, and insider trading.

SEMESTER-IV

FM 3103: INTERNATIONAL FINANCIAL MANAGEMENT

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Learn the fundamentals of international financial management, the international monetary system, and the balance of payments.

CO2. Determine the cross rate for the foreign exchange market, and trade options contracts in FOREX.

CO3. Understand purchasing power parity, factors affecting the exchange rate, the inflation rate, international arbitrage, and interest rate parity.

CO4. Explore the foreign exchange relationship with risk management.

CO5. Manage multinational capital budgeting, payment methods for international trade, the cost of capital, and the capital structure of MNCs.

SEMESTER-IV

FM 3104: FINANCIAL SERVICES

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Obtain insight into the nature, scope, and importance of financial services.

CO2. Analyze the credit ratings from different agencies for financial services institutions.

CO3. Have a brief understanding of mutual funds, their schemes, insurance, and reinsurance services.

CO4. Know about lease, hire-purchase, installment credit, consumer finance, and housing finance.

CO5. Understand venture capital, the securitization process, and methods of financing.

SEMESTER-IV

FM 3105 CORPORATE TAX PLANNING AND MANAGEMENT

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Understand the fundamentals of corporate tax planning.

CO2. Use the tax planning avenues in ownership, hire-purchase, and leasing.

CO3. Recognize leverage buyout schemes, sick company restructuring, intangible asset value, payment methods, and financing possibilities.

CO4. Implement tax planning strategies for new industrial and infrastructure projects, exports, foreign exchange profits, and capital gains.

CO5. Obtain an insight into tax exemptions and reductions, tax planning for mergers and acquisitions.

SEMESTER-IV

FM 3106 MERGERS AND ACQUISITIONS

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Know the basics of corporate restructuring, mergers, and acquisitions.

CO2. Analyze corporate restructuring strategies and practices.

CO3. Develop the skills to restructure sick companies.

CO4. Evaluate corporate performance across the globe.

CO5. Obtain knowledge about the process of integration, cross-border deals, and due diligence.

SEMESTER-IV

FM 3107 FINANCIAL DERIVATIVES

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Understand risk management and financial derivatives.

CO2. Learn how to price forward contracts, how to speculate on forward rate agreements, and how to take long and short positions.

CO3. Obtain the concepts of futures contracts, hedging, and index futures.

CO4. Develop the skill of understanding options and their valuation.

CO5. Learn about the different types of swaps and how to use them to hedge risks.

SEMESTER-IV

MM 3201 CONSUMER BEHAVIOR

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Understand consumer behaviour and the factors influencing consumer behaviour.

CO2. Have a clear conceptual understanding of how to make decisions as a responsible consumer.

CO3. Identify the determinants of consumer behaviour.

CO4. Know the consumer in a social and cultural context.

CO5. Perceive organizational buying behaviour and consumer research.

SEMESTER-IV
MM 3202 INTEGRATED MARKETING COMMUNICATION
(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

- CO1. Understand the basics of IMC and advertising.
- CO2. Have a clear conceptual understanding of the advertising strategies and the related theories.
- CO3. Perceive the media planning process and how creative advertisements work.
- CO4. Realize the importance of sales promotion and other kinds of trade promotion.
- CO5. Learn about the various methods of marketing communication.

SEMESTER-IV
MM 3203 SALES & DISTRIBUTION MANAGEMENT
(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

- CO1. Understand the objectives and functions of sales management.
- CO2. Estimate the sales force requirement and retain the sales people.
- CO3. Learn how sales effort has a direct impact on profitability management.
- CO4. Have an understanding of distribution channels and marketing systems.
- CO5. Learn how to handle physical distribution channels and how case studies' outcomes played out.

SEMESTER-IV
MM 3204 MARKETING RESEARCH DURATION
(4CREDIT) FM:100

Course Outcomes:

After going through this paper, students will be able to:

- CO1. Understand the application of managerial decision-making and the types of research in marketing.
- CO2. Identify the sources and methods of data collection.
- CO3. Have an understanding of measurement, scaling, and sampling techniques.
- CO4. Obtain the techniques of data analysis.
- CO5. Distinguish several special application areas of marketing research.

SEMESTER-IV
MM 3205 PRODUCT & BRAND MANAGEMENT
(4CREDIT) FM:100

Course Outcomes:

After going through this paper, students will be able to:

- CO1. Understand the types of products and PLC strategies.
- CO2. Analyze the product development and marketing strategies.
- CO3. Have a proper understanding of product portfolio management.
- CO4. Examine the distinction between brand positioning and co-branding strategies.
- CO5. Outline the outcomes from several case studies from the Indian context.

SEMESTER-IV
MM 3206 INTERNATIONAL MARKETING
(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

- CO1. Have a basic idea regarding International marketing.
- CO2. Understand the Entry and Expansion strategies in an International market.
- CO3. Give an explanation of the marketing mix and how it relates to distribution planning and global marketing communication.
- CO4. Have an insight how decisions are being taken in International marketing and what are the export promotion policies of India.
- CO5. Identify the emerging issues in international marketing and research.

SEMESTER-IV
MM 3207 MARKETING SERVICES
(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

- CO1. Understand the service marketing sectors conceptually.
- CO2. Understand the marketing mix for services.
- CO3. Learn how consumer behaviour plays a vital role in service marketing.
- CO4. Understand the significance of managing the demand and supply chain in service sectors through case studies.
- CO5. Determine the specialty of marketing in the service sector and how technology influences it.

SEMESTER-IV

HR 3301 HUMAN RESOURCE MANAGEMENT GROUP MANAGEMENT OF INDUSTRIAL RELATIONS DURATION

(4CREDIT) (FM:100)

Course Outcomes:

After reading the paper, students will be able to:

CO1. Get detailed knowledge about the industrial relations (IR), positive and negative effects of IR, enablers of IR, and IR system in India.

CO2. Perceive the trade union system, its concept, and theories that deal with trade unions.

CO3. Obtaining the legal aspects is helpful in maintaining a good industrial relations system. How disputes are settled in the organization.

CO4. Understand the entire nexus of collective bargaining concepts, characteristics, functions, and worker participation in management.

CO5. Learn about the grievance system, international labour organizations, and the functions of the Indian Labour Conference and the Standing Labour Committee.

SEMESTER-IV

HR 3302 HUMAN RESOURCE DEVELOPMENT: STRATEGIES AND SYSTEM

(4CREDIT) (FM:100)

Course Outcomes:

After reading the paper, students will be able to:

CO1. Learn the concepts of human resource development, training, and development.

CO2. Understand various systems under human resource development (HRD), the procedure of selecting various specialists under HRD, and the need for and analysis of organization, task, and person.

CO3. Understand the HRD strategies and training methods used to train employees.

CO4. Learn about organizational development (OD), interventions, motivational factors in OD, and the organizational change system.

CO5. Learn about HRD evaluation methods and available HRD evaluation models.

SEMESTER-IV

HR 3303 HUMAN RESOURCE PLANNING

(4CREDIT) (FM:100)

Course Outcomes:

After reading the paper, students will be able to:

CO1. Learn the fundamental details of human resource planning, its dimensions, and approaches.

CO2. Learn how information systems are used to manage people in the workplace.

CO3. Have a detailed idea of demand forecasting for HR at both micro and macro levels.

CO4. Learn more about HR supply forecasting and waste management techniques.

CO5. Understand the meaning, purpose, types, and steps involved in human resource audits and the meaning, objectives, and methods of human resource accounting systems.

SEMESTER-IV

HR 3304 MANAGEMENT OF TRAINING AND DEVELOPMENT

(4CREDIT) (FM:100)

Course Outcomes:

After reading the paper, students will be able to:

CO1. Understand the fundamental aspects of learning, learning strategies, and similarities and differences between learning and training.

CO2. Get in-depth knowledge about the training needs assessment, the steps involved in the analysis, and the role of performance appraisal in the training needs analysis.

CO3. Learn about various on-the-job training and off-the-job training methods used for training employees. 4. Perceive various methods of management development PROGRAMES for enhancing the skills of the managers.

CO5. Get knowledge about the objective, methods, models, and framework of training evaluation.

SEMESTER-IV

HR 3305 COMPENSATION

(4CREDIT) (FM:100)

Course Outcomes:

After reading the paper, students will be able to:

CO1. Understand the concepts and objectives, principles, the 3-Ps concept, non-financial aspects of compensation, trends in compensation management, and the basic concepts of reward.

CO2. Learn about the ILO's role in wage setting, as well as wage policy, wage ideas, earnings components, and wage disparity.

CO3. Obtain various theories of wages and the detailed nexus of job evaluation.

CO4. Know the available mechanisms for wage determination (wage boards, various incentive schemes).

CO5. Perceive different legislation dealing with various aspects of wages in India.

SEMESTER-IV

HR 3306 LEGAL FRAMEWORK GOVERNING HUMAN RELATIONS

(4CREDIT) (FM:100)

Course Outcomes:

After reading the paper, students will be able to:

CO1. Know the legislation for dealing with the working conditions of employees.

CO2. Understand the legislation that will govern various industrial relations systems in the organization.

CO3. Perceive the legislation that will deal with various wage-related issues in the organization.

CO4. Analyze the various pieces of legislation in place to provide social security in the organization.

CO5. Learn the practical application of various labour laws, such as the ID Act, the Factory Act, the Standing Order Act, and the ECA, in dealing with various situations.

SEMESTER-IV

HR 3307 ORGANIZATIONAL CHANGE AND INTERVENTION STRATEGIES

(4CREDIT) (FM:100)

Course Outcomes:

After reading the paper, students will be able to:

CO1. Learn the concept, importance, cause, nature, various perspectives on change, and various types of change that occur in the organization.

CO2. Understand the process of change, problems and prospects of change, resistance to change, management of change, and stress management.

CO3. Analyze various aspects of OD intervention, its action components, training-based OD intervention, and roles focused on OD intervention.

CO4. Know the various types of OD interventions, their uses, and their benefits.

CO5. Acquaint themselves with the application of OD, the OD process, and the future prospects of OD in the organization.

SEMESTER-IV

INFORMATION AND TECHNOLOGY MANAGEMENT

GROUP ITM 3501 ELECTRONIC COMMERCE (E Commerce)

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Have a detailed insight into e-commerce and business models for e-commerce.

CO2. Understand the concepts of the Internet and WWW: basic network architecture, web system, architecture, URLs, an overview of HTTP, and cookies.

CO3. Get a brief understanding of the B2B E-Commerce, Supplier-Oriented and Buyer-Oriented MarketPlace, JIT, and Software Agents Role for B2B EC, E-Marketing in B2B, and Managerial Issues.

CO4. Get a brief insight into the different aspects and concepts of electronic payment systems.

CO5. Acquire knowledge on economics, global issues, and other issues in e-commerce and software agents.

SEMESTER-IV

ITM 3502 OBJECT-ORIENTED MODELING AND DESIGN

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Have a detailed insight into object-oriented development and themes. Modeling concepts: Modeling as a design technique.

CO2. Understand the concepts of objects and classes, generalization and inheritance, a sample object model, aggregation, multiple inheritance, metadata, and candidate keys.

CO3. Obtain a brief understanding of the dynamic modeling comprising of events and states, operations, a dynamic model sample, objects, and dynamic model relationships.

CO4. Learn about the various aspects and concepts of writing PROGRAMEs in C++, such as variable declaration, functions, and PROGRAME structures, and arrays.

CO5. Acquire knowledge on classes and objects, inheritance, overloading, and polymorphism.

SEMESTER-IV

ITM 3503 DATABASE MANAGEMENT SYSTEM

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Obtain the basic concepts of databases and the advantages and disadvantages of DBMS.

CO2. Have a fair idea of the data base model, FMS, and E-R model.

CO3. Understand the rationale model, objectives, and rationale algebra.

CO4. Perceive the application of database properties and the design of a database.

CO5. Acquire the ability to manage data using SQL.

SEMESTER-IV

ITM 3504 ADVANCED DATABASE MANAGEMENT SYSTEM

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Develop insights about data modeling.

CO2. Gain knowledge about rational database design and query processing.

CO3. Understand the database recovery and reliability of database systems.

CO4. Learn about the data base's security and deadlock.

CO5. Make different designs for distributed databases.

SEMESTER-IV
ITM 3505 TELE COMMUNICATIONS FOR BUSINESS
(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Have a detailed insight into the basic concepts of data communications, data transmission services, communication processors, and asynchronous and synchronous transmission.

CO2. Understand the concepts of computer networks, the roles of a communication protocol, and the concept of layered protocols in network design.

CO3. Obtain a brief understanding of the network models, the OSI model, the TCP/IP protocol, and network devices like NICs, modems, hubs, switches, bridges, routers, and gateways.

CO4. Get a brief insight into the different aspects and concepts of client-server computing, intranet and extranet, e-commerce, and ERP.

CO5. Learn about wireless networks, mobile communications, cryptography, network security.

SEMESTER-IV
ITM 3506 SOFTWARE ENGINEERING DURATION
(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Have a detailed insight into the basic concepts of software engineering, computer system engineering, and software life cycle modeling.

CO2. Understand the concepts of software project management, the COCOMO model, scheduling, risk management, and software configuration management.

CO3. Learn about requirements analysis and specification, formal system development techniques, software design, FOD, and OOD.

CO4. Learn about the various aspects and concepts of object modeling using UML, UML Diagrams, Use Case Model, Class Diagrams, and Object Oriented Software Development in a nutshell.

CO5. Acquire knowledge on coding and testing, PROGRAMME analysis tools, integration testing, system testing, software reliability, and quality management.

SEMESTER-IV
ITM 3507 INTELLIGENT SYSTEM
(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Learn the fundamentals of Data Warehousing, Mining & Visualisation, Modeling, and Artificial Intelligence.sss

CO2. Understand the concepts of knowledge-based systems, representation of knowledge, knowledge organization, and knowledge manipulation.

CO3. Obtain a brief understanding of knowledge acquisition and validation, knowledge engineering, and matching techniques.

CO4. Get a brief insight into the different aspects and concepts of object-oriented representations.

CO5. Learn about Intelligent Systems Fundamentals, Knowledge-Based Decision Support such as Artificial Intelligence, and Expert Systems.

SEMESTER-IV

OPERATIONS MANAGEMENT GROUP

OM 3401 TOTAL QUALITY MANAGEMENT

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Have a detailed insight into the basics of the concept of quality management.

CO2. Understand the concepts of quality planning like operations planning, quality management related to assurance, product design for services, etc. Process control, sampling techniques.

CO3. Learn about the Product Quality Audit, which includes the discovery and analysis of quality control problems, diagnosis tool stratification, and Pareto diagrams.

CO4. Acquire a brief insight into different aspects and concepts of Quality Control Audit and ISO 9000 consisting of the purpose and effectiveness of quality control audit.

CO5. Perceive knowledge on total quality management inclusive of systems, quality circles, Kaizen, and benchmarking aspects of service quality management.



OM 3402 SUPPLY CHAIN MANAGEMENT DURATION

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Gain a thorough understanding of the fundamentals of Supply Chain Foundations and Customer Service.

CO2. Understand the concepts of procurement logistics, like sourcing in a supply chain, supplier scoring and assessment, supplier selection and contracting, and supplier development.

CO3. Learn about Inventory Management in SCM, including Inventory Management Purpose, Third Party Logistics, and its Implications.

CO4. Perceive a brief insight into the different aspects and concepts of distribution and transportation in SCM.

CO5. Acquire knowledge on important issues in SCM, inclusive of reverse logistics, green logistics, global logistics, and the role of IT in SCM and logistics.

SEMESTER-IV

OM 3403 SERVICES OPERATIONS MANAGEMENT

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Get a detailed insight into the basics of operations management.

CO2. Understand the concepts of "dimensions of service quality," like the service quality GAPS model, service quality measurement and control, and service recovery and guarantees.

CO3. Obtain a brief understanding of the dynamics of the service delivery system.

CO4. Have a brief insight into the different aspects and concepts of service inventory.

CO5. Acquire knowledge on important issues in the growth and globalization of services.

SEMESTER-IV

OM 3404 TECHNOLOGY MANAGEMENT DURATION

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Understand the fundamentals of technology management roles and their significance.

CO2. Understand the concepts of technology forecasting, like roles and needs, methodologies, and various methods of forecasting.

CO3. Get a brief understanding of the technology strategy, which consists of technology generation and technology development.

CO4. Obtain a brief insight into the different aspects and concepts of technology transfer, consisting of models and modes of transfer.

CO5. Learn about important issues in Technology Assessment methods such as technology evaluation, technology diffusion strategies, and appropriate technology mode.

SEMESTER-IV

OM 3405 PURCHASING AND MATERIAL MANAGEMENT

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Have a detailed insight into the basic concepts of purchasing and materials

CO2. Understand the concepts and objectives of the purchase system and procedures, which comprise the purchasing function, policies, decisions, vendor selection, and rating.

CO3. Perceive a brief understanding of inventory management, which consists of detailed descriptions and functions of inventory management, classifications, costing, and inventory models.

CO4. Get a brief insight into different aspects and concepts of store layout, classification and codification, store systems and procedures, receipt systems, store products, and account management.

CO5. Acquire knowledge on important issues in warehousing management, material handling, traffic and transportation, scrap disposal, and waste reduction management.

SEMESTER-IV

OM 3406 OPERATION PLANNING AND CONTROL

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Have a detailed insight into the basics concepts of operations planning

CO2. Understand the concepts of operations forecasting, consisting of good forecast elements, demand forecast factors, and forecasting methods classification.

CO3. Perceive a brief understanding of capacity planning, which consists of capacity measurement, capacity requirements, and differentiation between forecasting and capacity planning.

CO4. Obtain a brief insight into aggregate operations planning.

CO5. Acquire knowledge on important issues in operations scheduling and distribution planning.

SEMESTER-IV

OM 3407 WORLD CLASSMANUFACTURING

(4CREDIT) (FM:100)

Course Outcomes:

After going through this paper, students will be able to:

CO1. Have a detailed insight into the basics and concepts of world-class manufacturing.

CO2. Understand the concepts of optimized production technology, gold-ratt principles, JIT manufacturing systems and pull systems, Kanban usage, buyer-seller relations, and supply chain management.

CO3. Get a brief understanding of total quality management, which consists of detailed TQM tools and systems.

CO4. Obtain a brief insight into total system effectiveness, breakdown prevention, maintenance management, maintainability and reliability improvement, total employee involvement, and small group activities.

CO5. Obtain knowledge on customer-driven project management, automation in design and manufacturing, flexible manufacturing systems, group technology, and cellular manufacturing systems.

B.A. PHILOSOPHY

Programme Outcomes

- PO 01. Develops the skill of critical thinking, without accepting anything blindly, one exercises his reasoning.
- PO 02. It sharpens the intellect by the use of logical tools because of which one is capable of taking conclusive decisions.
- PO 03. Helps to resolve the most fundamental problems of life which are of onto logical and ethical nature.
- PO 04. Gives directions to follow the right means for attending the ultimate end of life i.e., freedom.
- PO 05. It acquaints the students with our long tradition of social, religious cultural and Philosophical nature, starting from ancient to present day period.
- PO 06. Gives the knowledge of various trends of Philosophy such as Metaphysics, Epistemology, Axiology etc. developed in different parts of the Globe.
- PO 07. So, students get a scope of comparative study of the Philosophical developments of Indian and Western Philosophy.
- PO 08. It also acquaints the students with our ancient literature and Philosophy by the textual study the Bhagavad Gita and the Upanishads.
- PO 09. It teaches life skills and makes us realize the essential identity of one-self with others and thereby contribute for world peace and social order.
- PO 10. Philosophical Counselling can be a career option for the students of philosophy.

Programme Specific Outcomes

- PSO 01. Understand the basic concepts of philosophy.
- PSO 02. Develop critical thinking.
- PSO 03. Teaches how to raise questions rather than answering the questions.
- PSO 04. Helps in developing the right attitude for empathetic social concern.
- PSO 05. Determining values and moral concern for others including flora and fauna for a sustainable planet.

FIRST SEMESTER

AECC-1 ENVIRONMENTAL SCIENCE & DISASTER MANAGEMENT

(4CREDIT)

(FM:100)

Course Outcomes

- Co1. Understand about problems of environmental pollution and Impact of pollution on human and ecosystem and control measures.
- Co2. Learn about increase in population growth and understand the issues of use of resources in proper manner leading to sustainable development.

Co3. Learn about causes and impacts of Disasters and Case studies of National and Global disasters and risk reduction approaches of Disasters with safety issues in mitigating Industrial disasters.

Co3. Acquire basic idea about the mode of transmission and course of some communicable and non-communicable diseases and knowledge on the Importance and methods of prevention of epidemics and pandemics.

FIRST SEMESTER

C: I: GENERAL PHILOSOPHY

(4CREDIT)

FM:100

Course Outcomes:

Co1. It introduces the students about the basic concepts of Philosophy.

Co2. It helps the students to become free from the dogmas and blind faiths.

With the attitude of critical thinking, they do not accept anything blindly.

Co3. It develops analytical temperament by which they become judicious.

Co4. It enables them to live a perfect moral life; as a result, the society can be a just society.

FIRST SEMESTER

C: II: LOGIC AND SCIENTIFIC METHOD

(4CREDIT)

FM:100

Course Outcomes:

Co1. Makes one logical both in attitude and practice.

Co2. Helps students to face the competitive tests successfully.

Co3. Scientific method helps for scientific investigations to solve various problems both in individual and social spheres.

FIRST SEMESTER

GE I: SYMBOLIC LOGIC

(4CREDIT)

FM:100

Course Outcomes:

Co1. using symbols students get interest in reasoning, as a result of which their reasoning skill develops.

Co2. So also, by the use of other methods like derivation, direct and indirect proofs, quantification etc. students get interest and skill in solving the problems of language.

Co3. It establishes a relation between our natural language and formal language.

Co4. It also helps students to solve the problems in their competitive examinations

FIRST SEMESTER
E &V : ETHICS AND VALUES
(4CREDIT) FM:100

Course Outcomes:

- Co1. Have changes in their perceptions and practices towards women and develop proper attitude towards women and value their work and contribution.
- Co2. Come forward to challenge the unethical treatments against women.
- Co3. End gender-based hierarchy and hegemony, remove the feeling that women are counter to men and bring about a complementarity among the hitherto existing gender binary.
- Co4. Pioneer in creating a gender equal society where the well-being, happiness and security of the women will be well protected & contributing towards a better and happier society

SECOND SEMESTER

AECC-2 MIL
(4CREDIT) FM:100

Course Outcomes:

- Co1. Students of other departments of the University can easily present their theoretical knowledge in Odia by studying Odia Grammar and Communication skills in the course AECC-II.
- Co2. Students of Science, Commerce and Humanities can fluently discuss their research findings in their mother tongue (ODIA)
- Co3. Though we receive higher education in various subjects and media of instruction, it is always more convenient to express oneself in one's Mother tongue. It is an enriching experience for both the knowledge giver and the receiver.

SECOND SEMESTER
MIL (ALTERNATIVE ENGLISH)
(4CREDIT) (FM:100)

Course Outcomes:

- Co1. Demonstrate high-level proficiency in writing and speaking English and employ effectively the language of their discipline.
- Co2. Develop skills in organizing and expressing ideas and viewpoints with clarity and coherence in writing and speech
- Co3. Enumerate skills in narration, description, and argumentation, ascertain insight into different cultures and gain good knowledge that includes understanding recent developments in language and literature.
- Co4. Develop acumen for a better understanding of the diversity of human experiences and acquire openness to new ideas, perspectives, and ways of thinking.

SECOND SEMESTER
MIL – Hindi
(4CREDIT) (FM:100)

Course Outcomes:

- Co1. Gain knowledge on Hindi poets and their poems and understand the variations in ancient, medieval and modern poetry.
- Co2. Acquire knowledge on different perspectives of writers through their prose.
- Co3. Gain understanding of basic structure of Hindi sentence and grammar.
- Co4. Develop a skill of essay writing.

SECOND SEMESTER
C: III: SYSTEMS OF INDIAN PHILOSOPHY–I
(4CREDIT) (FM:100)

Course Outcomes:

- Co1. It enables students to know the comprehensive study of different aspects of Philosophy such as metaphysics, epistemology, ethics, and aesthetic so that they can study the Western Philosophy in a better way by a comparative study of both the approaches.
- Co2. It gives direction to them to lead a perfect life.
- Co3. It gives a way of life.

SECOND SEMESTER
C: IV: SYMBOLIC LOGIC
(4CREDIT) (FM:100)

Course Outcomes:

- Co1. By using symbols students get interest in reasoning, as a result of which their reasoning skill develops.
- Co2. So also, by the use of other methods like derivation, direct and indirect proofs, quantification etc. students get interest and skill in solving the problems of language.
- Co3. It establishes a relation between our natural language and formal language.
- Co4. It also helps students to solve the problems in their competitive examinations.

SECOND SEMESTER
G.E: II: INDIAN PHILOSOPHY
(4CREDIT) (FM:100)

Course Outcomes:

- Co1. It enables students to know the comprehensive study of different aspects of Philosophy such as metaphysics, epistemology, ethics, and aesthetic so that they can study the Western Philosophy in a better way by a comparative study of both the approaches.
- Co2. It gives direction to them to lead a perfect life.
- Co3. It gives a way of life.

SECOND SEMESTER
ETHICS AND VALUES
(4CREDIT) (FM:100)

Course Outcomes:

Co1. Have changes in their perceptions and practices towards women and develop proper attitude towards women and value their work and contribution.

Co2. Come forward to challenge the unethical treatments against women.

End gender-based hierarchy and hegemony, remove the feeling that women are counter to men and bring about a complementarity among the hitherto existing gender binary.

Co3. Pioneer in creating a gender equal society where the well-being, happiness and security of the women will be well protected & contributing towards a better and happier society.

THIRD SEMESTER
C: V: ETHICS
(4CREDIT) (FM:100)

Course Outcomes:

Co1. The course helps students to solve the ethical problems faced in their everyday life.

Co2. Helps them to lead a moral life, being concerned for their own and good of their fellow beings.

Co3. Helps to take appropriate decisions easily in moral sticky situations.

Co4. Make aware of one's own duties, so that it helps students in decision Making

THIRD SEMESTER
C: VI: HISTORY OF GREEK PHILOSOPHY
(4CREDIT) (FM:100)

Course Outcomes:

Co1. Students are benefited by getting the knowledge of ancient Greek Philosophy which was developed during pre-Socratic period.

Co2. They are mostly benefited with knowledge of the Being, developed by Parmenides, Becoming of Heraclitus and Atoms of Democritus.

Co3. With the Philosophy of Socrates, Plato and Aristotle their knowledge gets matured, which helps them to understand the fundamental problems of Philosophy.

THIRD SEMESTER
C: VII: SYSTEMS OF INDIAN PHILOSOPHY (II)
(4CREDIT) (FM:100)

Course Outcomes:

Co1. Helps the students to have the knowledge of the reality.

Co2. Helps to develop the art of living.

Co3. Helps to know the cause of suffering and points out the means to overcome it.

THIRD SEMESTER
(SEC-I): ENGLISH COMMUNICATION
(4CREDIT) (FM:100)

Course Outcomes:

Co1. Enhance their ability to build and enrich their communication skills and build up the four primary skills in students in the academic as well as in the wider domains of use like public offices.

Co2. Acquire analytical and comprehension reading skills, identify basic principles of communication, build speaking and listening skills

Co3. learn beyond the conventional syllabus and be prepared to meet challenges while seeking a job and synthesize knowledge and use it creatively to better understand and Improve themselves

Co4. communicate effectively through written reports, presentations and Discussions and develop a neutral accent and improve general standard of pronunciation

FOURTH SEMESTER
C: VIII: CONTEMPORARY INDIAN PHILOSOPHY
(4CREDIT) (M:100)

Course Outcomes:

Co1. Students will be benefited with having a clear understanding of the social, moral and religious concepts of 20th century India.

Co2. It also makes students aware about the nature of man, society and their inter-relationship.

Co3. It teaches how to develop the spiritual nature of man through proper understanding of religion.

FOURTH SEMESTER
C: IX: HISTORY OF MODERN EUROPEAN PHILOSOPHY
(4CREDIT) (FM:100)

Course Outcomes:

Co1. Students get a comprehensive knowledge in various aspects of Philosophy such as ontology, epistemology, axiology etc. of Western thinkers.

Co2. This course enables them to have a comparative study of it with Indian Philosophy which sharpens their thinking.

Co3. Students are benefited being acquainted with various theories of knowledge such as empiricism, rationalism, criticism. They also get the knowledge of the various theories of reality like, monism, dualism and pluralism.

FOURTH SEMESTER

C: X: PHILOSOPHY OF LANGUAGE

(4CREDIT)

(FM:100)

Course Outcomes:

- Co1. Students are benefited by proper use of language.
- Co2. So they overcome all linguistic confusions and misunderstandings.
- Co3. This makes our communication easier and accurate.
- Co4. most of the problems in empirical and metaphysical domains get solved.

FOURTH SEMESTER

SEC-2 QUANTITATIVE APTITUDE AND LOGICAL THINKING

(4CREDIT)

(FM:100)

Course Outcomes:

- Co1. Use their logical thinking and analytical abilities to solve Quantitative aptitude questions from company specific and other competitive tests and Solve questions related to Time and distance and time and work etc. from company specific and other competitive tests.
- Co2. Understanding solve puzzle related questions from specific and other competitive tests and Solve questions related to permutation & combinations and probabilities from company specific and other competitive tests.
- Co3. Detect errors of grammar and usage in a given sentence/text and rectify them by making appropriate changes and Solve questions based on critical reasoning.
- Co4. Analyze reading passages and quickly find out the correct responses to questions asked by using reading skills like skimming, scanning, reading between the lines, etc.

FIFTH SEMESTER

C: XI: WESTERN CLASSICS: MEDITATIONS OF RENE DESCARTES

(4CREDIT)

(FM:100)

Course Outcomes:

- Co1. The students get the knowledge of the deductive method which is considered as the foundation of Philosophical enquiry.
- Co2. They also get the knowledge of a systematic study of philosophy pertaining to that of the reality, world and self, which help them to understand the contributions of his subsequent Philosophers.

FIFTH SEMESTER

C XII: INDIAN TEXT: ISA UPANISHAD

(4CREDIT)

(FM:100)

Course Outcomes:

- Co1. Students get the knowledge of the reality which is both immanent and transcendent.
- Co2. They also get the knowledge of the self, world, bondage and liberation.
- Co3. Besides, it also gives the knowledge of vidya, avidya, sambhuti, asambhuti and at the same time gives the direction how to lead a life which will make one's life complete and serene.

FIFTH SEMESTER

DSE I: PHILOSOPHY OF BHAGAVAD GITA

(4CREDIT) FM:100

Course Outcomes:

- Co1. Students will be rewarded with the knowledge of important concepts of the Gita such as Svadharma, Paradharm, Svabhava, Varnadharma etc. which will help them in practical life situations.
- Co2. They will become aware of different kinds of yoga such as Jnana, Karma, Bhakti by following any one of which one gets absolute freedom.
- Co3. These yogas are not contradictory rather complementary.
- Co4. Besides, the Gita's concepts like niskamakarma, Lokasangraha, khetranja, Purusottama, Prapatti, Kripa etc. are the key concepts proper realisation of which lead a man to absolute freedom.

FIFTH SEMESTER

DSE-II: PHILOSOPHY OF RELIGION

(4CREDIT)

FM:100

Course Outcomes:

- Co1. Students get a scope to learn the religious concepts from Judaic- Christian Perspective.
- Co2. They can compare these concepts with our Indian view point.
- Co3. So they can develop the critical so also analytical approach in understanding the religious concepts in general which will help them to become free from dogmatic beliefs.

SIXTH SEMESTER

C: XIII: SOCIAL & POLITICAL PHILOSOPHY

(4CREDIT)

FM:100

Course Outcomes:

- Co1. It will help the students to appear for civil service examination.
- Co2. Proper understanding the above concepts will help the students to become a good citizen being aware of his duties and responsibilities for his self and the society.
- Co3. As a result, the dream of an ideal society (Ramarajya) can be materialized.

SIXTH SEMESTER
C: XIV: APPLIED ETHICS
(4CREDIT) (FM:100)

Course Outcomes:

- Co1. It helps the students to distinguish between universal values and customary values.
- Co2. It will help the students to become value oriented in their approach from practical point of view.
- Co3. It will help them to modify their attitudes towards the society and nature in large, for the benefit of all.

SIXTH SEMESTER
DSE –III: GANDHIAN STUDIES
(4CREDIT) FM:100

Course Outcomes:

- Co1. Students will definitely be benefited from the Philosophical ideas of Gandhi.
- Co2. They will be inspired by Gandhi's ideal which is the outcome of his own experiments.
- Co3. Particularly Gandhi's concept of Democratic socialism, Truth and ahimsa will influence the students to lead a perfect social moral and spiritual life.

SIXTH SEMESTER
**DSE-IV: RECENT WESTERN PHILOSOPHY (RECENT WESTERN
PHILOSOPHY/ PROJECT)**
(4CREDIT) FM:100

Course Outcomes:

- Co1. Students will be familiarized with recent development of Philosophy, its problems and methods.
- Co2. Being acquainted with modern western Philosophy students will definitely develop an approach of comparative study with Indian Philosophy

Project (Optional)
(4CREDIT) FM:100

Course Outcomes:

- Co1. Helps the students to undertake research in systematic way in their higher studies.
- Co2. Helps them in selecting a topic with social relevance for writing an article.
- Co3. Helps them to become critical in their thought and actions.

M.A. IN PHILOSOPHY

Programme Outcomes:

- PO1. Helps to get mastery over the critical and analytical methods of the study of Philosophical concepts, theories and doctrines.
- PO2. Helps the students to acquaint the comprehensive knowledge of various Aspects of Philosophy such as Ontology, Epistemology, Aesthetics, Axiology etc.
- PO3. Helps to develop the skill of research on key problems of Philosophy following the appropriate methodology.
- PO4. Helps one to develop leadership qualities to lead the society in the right direction. Plato for that reason was on the view of a philosopher king.
- PO5. Gets the skill to decide one's own duty in a particular situation keeping in view of his own good and the good of the society.
- PO6. Tries to solve all sorts of problems pertaining to religion such, Religious Conflicts by analyzing the logical geography of such religious concepts.
- PO7. Helps to analyze language to determine its appropriate meaning in the Context and thereby solves the problem of language.
- PO8. It not only deals with the empirical knowledge but also spells out the Spiritual wisdom and leads to absolute freedom.
- PO9. Helps the students to apply theoretical knowledge to real life situations and Make right decisions in right situations.
- PO10. Philosophical Counseling can be a better career option in the future.

Programme Specific Outcomes

- PSO1. Understand the key concepts of both Indian and Western philosophy.
- PSO2. Critically analyses the socio-political and religious issues and attempts to Clarify the misunderstandings related to them.
- PSO3. Educate for better life skills by recognizing individual autonomy.
- PSO4. Effective on public policy and decision making after cross examining the Different available theories.
- PSO5. Aims at value-based education which is essential for world-peace and non violent socialorder.

FIRST SEMESTER
HC:101: INDIAN EPISTEMOLOGY
(4CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

CO1. The knowledge of Indian Epistemology should enhance the students' ability regarding systematic reflection concerning knowledge.

CO2. The course is to understand the distinct sources of knowledge.

CO3. It will provide the students to inculcate in-depth knowledge of Indian Epistemology.

CO4. Broadens analytical ability of the students

FIRST SEMESTER
HC-102: INDIAN METAPHYSICS
(4CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

CO1. On completion of the course students will understand the interface between the religio-cultural traditions and philosophic enquiry.

CO2. Help them understand the synergy among the orthodox and heterodox schools with regard to the nature of the 'highest good' differently conceived in different systems.

CO3. To discover affinity between orthodox systems and heterodox systems. especially, Buddhism and Jainism.

CO4. To understand how the epistemology and metaphysics remain intertwined in Nyaya, Vaisesika, Samkya and Yoga.

FIRST SEMESTER
HC-103: INDIAN ETHICS
(4CREDIT) (FM:100)

Course Outcomes

After studying this paper, the students can

CO1. This course should empower students to develop ability for moral reasoning and act with ethical deliberations.

CO2. After studying Indian ethics, one is equipped with the ethical sensitivity and moral understanding required to solve complex ethical dilemmas in their everyday life.

CO3. Helps the students to understand moral decision making procedure in Indian philosophy.

CO4. Equips the students with decision making tools which they should use to guide their practical life.

FIRST SEMESTER
HC-104: SYMBOLIC LOGIC
(4CREDIT) (FM:100)

Course Outcomes

After studying this paper, the students can

CO1. Students will develop interest in logic both as a method of derivation and as a way of understanding structure in language.

CO2. Interest will be generated in the relation between natural language and Formal languages.

CO3. Students will become adept at truth tables, and methods of derivation like conditional proof, indirect proof, and quantification theory.

CO4. Students will understand the significance of the logics of necessity and possibility and will learn the debates around modalities in philosophy.

FIRST SEMESTER
AC- 101: Computer Application
(4CREDIT) (FM:100)

Course Outcomes

After studying this paper, the students can

CO1. Trains the students – how to read and understand philosophical texts.

CO2. Builds up philosophical ideas and arguments through conceptual analysis.

CO3. Helps the students – how to argue and what to argue.

CO4. Reflects upon the conceptual clarifications and makes the students aware of the epistemological problems and their solutions from western philosophical standpoints.

As a result, the students get the advantage of a comparative study

CO5. of Indian and Western knowledge structure.

SECOND SEMESTER
PAPER –HC-201
WESTERN EPISTEMOLOGY
(4CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

CO1. Trains the students – how to read and understand philosophical texts.

CO2. Helps the students – how to argue, what to argue and builds up philosophical ideas and arguments through conceptual analysis.

CO3. Reflects upon the conceptual clarifications and makes the students aware of the epistemological problems and their solutions from western philosophical standpoints.

CO4. As a result, the students get the advantage of a comparative study of Indian and Western knowledge structure.

SECOND SEMESTER
HC-202: WESTERN METAPHYSICS
(4CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

CO1. The students would understand how certain epistemological assumptions give rise to metaphysical models and vice-versa.

CO2. To develop the capacity to understand the logic of the fundamental concepts and how a metaphysical system is an elaboration of the foundational concepts along with certain fundamental assumptions.

CO3. To understand how the metaphysical models constitute the basis of the ethical paradigms.

CO4. To understand the nature of absolutism or reductionism in the respect of the metaphysical thinking in the west.

SECOND SEMESTER
HC-203: WESTERN ETHICS
(4CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

CO1. This course addresses everyday life issues through theoretical concepts and, hence, it is one of the courses that require a practical interface of theory and real-life situations.

CO2. It will enable the students to develop skills to help them taking decisions in a morally sticky situations or what is called a dilemma.

CO3. Students need to be initiated into deliberating upon some viable models/planners to suggest a resolution of these issues. An engagement with other institutions like hospitals, business organizations, old age homes, NGOs etc. and use of Ted talks, social media as pedagogical tools will certainly add value to this course.

CO4. Develops moral reasoning in students.

SECOND SEMESTER
HC-204: COMPARATIVE STUDY OF RELIGIONS
(4CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

CO1. By studying a variety of religions, students gain a broad understanding and appreciation of mechanism for enhancing cross-cultural religious communication.

CO2. It will further benefit towards the realization of peace, harmony and coexistence in the society.

CO3. Develops virtues like equality, empathy and tolerance in students.

CO4. Paves way for a secular and value added society.

SECOND SEMESTER

CORE ELECTIVE (CE)

201(I) THE PHILOSOPHY OF MAHIMA CULT

(4CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

CO1. It preaches universal love, brotherhood and peace.

CO2. Students can realize the altruistic outlook of BhimaBhoi which they can utilize in their life.

CO3. It will clarify why Mahima cult is rightly called spiritual humanism.

CO4. Develops spirituality and compassion in students.

SECOND SEMESTER

CE-201(II)

LINGUISTIC AND CONCEPTUAL ANALYSIS

(4CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

CO1. Introduces the basic notion of language-analysis as a tool against speculative metaphysics.

CO2. Sensitizes students to the very notion of analysis - its importance and drawbacks.

CO3. Enables students to develop an insight into the relation between language and reality.

CO4. Makes students aware of the analytical method.

SECOND SEMESTER
(OE)-(201) Indian Value System
(4CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

CO1. They will know about the goal of life and the means to realize it. They can realize vivekajnanai.e discriminating knowledge.

CO2. As a result of which one can live in the world with heavenly peace.

CO3. This core value manifests in all indic religions — Hinduism, Jainism, Buddhism (even with its atheistic overtones), Sikhism and the hundreds of sects within and outside.

CO4. This is the thread that has weaved India into a spiritual, cultural and even geographical.

THIRD SEMESTER
HC -301: APPLIED ETHICS (4CREDIT) (FM:100)

Course Outcomes

After studying this paper, the students can

CO1. The course will help students to understand the nature of value and moral judgment.

CO2. Why be moral?

CO3. How can there be transition between the knowledge of good to the practice of goodness, i.e. from paradigm to praxis.

CO4. Will sensitize students to perceive different moral issues which are to be attended with priority in different contexts.

THIRD SEMESTER
HC-302: POST-KANTIAN AND CONTEMPORARY PHILOSOPHY
(4CREDIT) (FM:100)

Course Outcomes

After studying this paper, the students can

CO1. Becomes familiar with major philosophical problems and the methods

CO2. Identifies and discuss the role and importance of epistemology in the domain of philosophy.

CO3. Comprehends and explains some important concepts from philosophical point of view

CO4. Offers the critical understanding of modern western philosophy from diverse vantage points such as modernism and postmodernism. These thinkers were not only contested the tenets of western philosophy but also make us aware of other ways of reading western philosophy. The methodologies and tools provided by these thinkers have their own philosophical significance and social implication.

THIRD SEMESTER
HC-303 PHILOSOPHY OF VEDANTA
(4CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

CO1. It is hoped that Advaita Vedanta will help students to know the principal concepts in relation to other systems of Indian thought and thereby make for extending the frontiers knowledge.

CO2. Expected that by practical use of the Vedantic knowledge they will be benefited in every steps of life.

CO3. Vedanta teaches you how to manage your emotions to reduce or remove the stress.

CO4. Preaches spiritual consciousness among students.

THIRD SEMESTER
CE- 301 (I) CONTEMPORARY INDIAN PHILOSOPHY
(4CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

CO1. To introduce the social and political theories of Indian thinkers. The central concern of this paper is to make students aware about the nature of man, society and the state, and the relation between them.

CO2. To make understand the dynamics of Indian social reality and its conceptualization.

CO3. To familiarize the students with the concepts such as colonialism, nationalism, rights and justice from Indian perspective.

CO4. Presents new modern methodology in Philosophy adopted by modern thinkers

THIRD SEMESTER
PAPER- CE -301 (II) POLITICAL PHILOSOPHY
(4CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

CO1. The paper is designed to appreciate the profound ideas that sprung from the minds of the great philosophers of the modern western world.

CO2. It also makes students aware that there is no place for superficial approach to the complex questions in life.

CO3. It will make students a better citizen by understanding the notion of democracy.

CO4. This course also offers to know rights of Individuals and communities. Students also learn to live in cohesive manner in a multicultural setup.

THIRD SEMESTER
CE -302 (I)
PHILOSOPHY OF WITTGENSTEIN
(4CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

- CO1. Gives the clarity of thought as well as language.
- CO2. Provides analytical ability or analytical approach which makes our understanding clear.
- CO3. Develops the conceptual clarity by linguistic analysis.
- CO4. Develops the critical reasoning ability. Enhances the research ability, analytical skill and methodological outlook.

THIRD SEMESTER
CE-302(II) CRITICAL THINKING
(4CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

- CO1. It will help students to develop the spirit of critical enquiry.
- CO2. Cultivates the objective and secular attitude towards problems in life.
- CO3. Helps students to listen, understand and re-examine articles of faith by the parameters of reason.
- CO4. Brings about clarity in thinking and understanding of issues and avoid confusion or ambiguity.

THIRD SEMESTER
PAPER-FI-201 FIELD INTERNSHIP
(4CREDIT) (FM:100)

Course Outcomes

After studying this paper, the students can

- CO1. Reinforce experiential and contextual learning.
- CO2. Enhance classroom learning by making connections with the real world.
- CO3. Develop ability to test the theoretical learning in practical situations by accomplishing the tasks assigned during the internship period.
- CO4. Hone the skills to apply various soft skills such as time management, positive attitude and communication skills during accomplishment of the assigned tasks. Acquire wider perspectives of a work environment and benefit from a mentor or supervisor's experience and advice.

FOURTH SEMESTER
HC-401
MAJOR TRENDS IN ODISHAN PHILOSOPHY
(4 CREDIT) (FM:100)

Course Outcomes:

Basic Study Materials:

After studying this paper, the students can

CO1. It is found from sample study, most the students are inspired both in spirit and practice with academic knowledge of Odishan Philosophy.

CO2. Students are determined to uphold the glory of Odishan Philosophy culture and religion both in ideal and practical level.

CO3. Preaches universal brotherhood.

CO4. Promotes cultural diversity among students.

FOURTH SEMESTER
HC-402 PHILOSOPHY OF THE UPANISADS:
TEXTUAL STUDY OF THE KENA UPANISAD AND THE
KATHA UPANISAD WITH THE COMMENTARY OF
SHANKARACARYA
(4 CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

CO1. It should also be the endeavour to promote the Indian way of life encapsulating Indian values, ethos and cultural context.

CO2. As future citizens, students should go out of the university fully aware of Indian philosophical tradition and should be indeed part of it. Unless they feel part and parcel of this thought processes, they would not be able to contribute any value addition to their job profile.

CO3. The student must fully understand the reverence of the Vedic Values in the contemporary world.

CO4. This course will help developing an understanding about the importance of the Nature (Cosmos) and also help students to pursue a holistic existence.

FOURTH SEMESTER
CE-403: DISSERTATION
(4 CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

CO1. Prepares a project proposal.

CO2. Organizes and conduct research in a more appropriate manner.

- CO3. Writes research report and dissertation.
- CO4. Writes a research proposal for projects, grants, books etc.
- CO5. Explains key research concepts and issues.
- CO6. Reads, comprehends and explains research articles in his academic discipline.
- CO7. Understands the importance of research ethics and integrates research ethic into the research process
- CO8. Becomes able to assess and critique a published journal article that uses one of the primary research methods in the field.

FOURTH SEMESTER
-CE-401(I) PHILOSOPHY OF MIND
(4CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

- CO1. Helps the students to know the exact meaning of the mental concepts.
- CO2. Distinguishes mental concepts from bodily concepts. So, confusions no longer remain regarding these terms.
- CO3. Aspects of the mind that are studied include mental events, mental functions, mental properties, consciousness and its neural correlates.
- CO4. Sharpens the critical ability of students.

FOURTH SEMESTER
CE-401(II) PHILOSOPHY OF SOCIAL SCIENCES
(4CREDIT) (FM:100)

Course Outcomes:

After studying this paper, the students can

- Co1. To provide the knowledge of natural and social environment.
- Co2. To enhance human qualities in students.
- Co3. To develop critical thinking and reasoning power among students.
- Co4. To create awareness towards his duty and responsibility for human society.

FOURTH SEMESTER
PAPER - AC-401 WOMEN AND SOCIETY
(4CREDIT) (FM:100)

Course Outcomes:

After reading this paper, students would be able to;

- Co1. Students will familiarize with the women lead environmental movements and women's participation in the climate resilience natural resources management.

Co2. Students will acquire knowledge on the differential impact of climate change disasters.

Co3. Students will be familiar with the role of technology and how has ICT brought about a change in on women's everyday lives and livelihoods.

Co3. It will enhance students' critical thinking in the use and management of technology in different productive sectors across different category of women.

Co4. Students will gain an insight into the women and law from rights and equality of opportunity in the access to justice as well as the nuances involved in it.

Co5. Students will entrust with the duties of framing reports, conducting research and development activities and solving the issues of injustice imparted to the public.



B.Sc. PHYSICS

Programme Specific Outcomes

- PO 1. Understand the basic laws and explore the fundamentals of mechanics, properties of matter and electrodynamics.
- PO 2. Understand the theoretical CONCEPTS of quantum mechanics, relativistic physics, nuclear physics, optics, spectroscopy, solid state physics, astrophysics, statistical physics, photonics and thermodynamics.
- PO 3. Understand the basics of computer programming and numerical analysis.
- PO 4. Understand and apply the concepts of electronics in designing of different analog and digital circuits.
- PO 5. To carry out experiments to understand the laws and concepts of Physics and apply the theories learnt and the skills acquired to solve real time problems through laboratory experiments.
- PO 6. Be initiated into the basics of research.
- PO 7. Providing a hands-on learning experience such as in measuring the basic concepts in properties of matter, heat, optics, electricity and electronics.
- PO 8. Become conscious of environmental and societal responsibilities.
- PO 9. To enhance the student's academic abilities, communication skills, personal qualities and transferable skills this will give them an opportunity to develop as responsible citizens.
- PO 10. To motivate the students to pursue PG courses in reputed institutions and holistic development of the student.

Programme Specific Outcomes

- PSO 1. Gain hands on experience to work in applied fields.
- PSO 2. Gain a through grounding in the subject to be able to teach it at college as well as school level.
- PSO 3. Viewing physics as a training ground for the mind developing a critical attitude and the faculty of logical reasoning that can be applied to diverse fields.
- PSO 4. Learn to carry out experiments in basic as well as certain advanced areas of physics such as nuclear physics, condensed matter physics, nano science, lasers and electronics.

FIRST SEMESTER

Core I: Mathematical Physics-I

(CREDITS:6)

(FM:100)

Course Outcome

The students will have understanding of:

- CO1. Understand the basic concept of Grad Div and Curl and hence verify Gauss Greens and Stroke's theorem
- CO2. Analyze first and second order differential equations, different Techniques to solve differential and integral equations

CO3. Find the basic ideas of complex variables and verify Cauchy's integral and Residue theorem

CO4. Understand the Fourier sine and cosine series and various special functions and important transforms and their applications

CORE-I PRACTICAL/TUTORIAL: MATHEMATICAL PHYSICS-I LAB

Course Outcome

The students will have understanding of:

CO1. Basic and advanced mathematical tools required for Physics Problems

CO2. This course is designed as revision to basic Mathematics in programming form so that students can easily adapt to the advanced Mathematics and Physics being taught in the PG level.

CO3. The students will be able to write their own C and C+ program, compile and execute.

CO4. The students will be exposed to practical implementation of numerical methods in programming.

CORE –II: MECHANICS

(CREDITS:6)

(FM:100)

Course Outcome

After successful completion of this course the students will learn:

CO1. Application of Newton's laws of motion to solve various problems related to day Todaylife.

CO2. Understand the definition for centre of gravity in hemisphere, hollow hemisphere etc., Examples of surface tension in nature and its applications in our day to day life. Concept of viscosity of fluids, Bernoulli's Equation and its applications.

CO3. Analyze the performance of hydrostatic and hydrodynamics

CO4. Understand the negative result of Michelson morley experiment ,galilean and Lorentz transformation and Concepts like zero work done, conservative forces, mass energy equivalence ($E= mc^2$)

CORE-II: PRACTICAL/TUTORIAL MECHANICS LAB

Course Outcome

After successful completion of this course the students will learn:

CO1. Understanding of basic physics of fluids.

CO2. Gaining knowledge to calculate and design engineering applications involving fluid.

CO3. Understanding of analyzing flow systems in terms of mass, momentum, and energy balance.

CO4. Having knowledge about current research topics about fluid mechanics and understand and analyze the features of central forces with respect to planetary motion

GE-1:Generic Elective -1

(CREDITS:6)

(FM:100)

Course Outcome

After successful completion of this course the students will learn:

CO1. Understand the process of thermal conductivity, viscosity, and diffusion in gases.

CO2. Understand the basic statistical methods and concepts like probability, random variables, expected value, variance, estimators, and common probability distributions.

CO3. Understand the relation between microscopic and macroscopic description through statistical mechanics; know and can apply the laws of thermodynamics and principles of free energy; describe thermodynamic processes, heat engines, and master the use of the chemical potential to describe diffusive equilibrium, phase equilibrium and chemical processes.

CO4. Understand the efficiency of Carnot's engine and the significance of first law and second of thermodynamics and implications of the second law of thermodynamics and limitations placed by the second law on the performance of thermodynamic systems.

Generic Elective -1 Practical/Tutorial

Course Outcome

After successful completion of this course the students will learn:

CO1. Students would gain practical knowledge about heat and radiation, thermodynamics, Thermoemf , RTD etc. and perform various experiments.

CO2. Ability to understand the basic concepts of thermodynamic such as temperature, pressure, system, properties, process, state, cycles and equilibrium.

CO3. Ability to conduct experiments regarding the measurement and calibration of temperatures and pressures in groups.

CO4. Ability to identify the properties of substances on property diagrams and obtain the data from property tables.

Core-III: Electricity and Magnetism

(CREDITS:6)

(FM:100)

Course Outcome

After successful completion of this course the students will learn:

CO1. Students will be able to understand the concept of the electric force, electric field and electric potential for stationary charges. They are able to calculate electric potential and electric field by using Gauss's law.

CO2. Student will understand the dielectric phenomenon and effect of electric field on dielectric.

CO3. Study the concept of magnetic field, magnetic field for steady currents using BiotSavart's and Ampere's Circuital laws.

CO4. Student will learn magnetic materials and its properties.

CORE -III PRACTICAL/TUTORIAL: ELECTRICITY AND MAGNETISM LAB

Course Outcome

Upon successful completion of this course, students will be able to:

- CO1. Understand the characteristics and properties of electric and magnetic fields.
- CO2. Understand the behavior and use of dielectrics.
- CO3. Understand the Maxwell equation and their usefulness.
- CO4. Experiences electricity & magnetism in practice mode

SECOND SEMESTER

Core-IV: Waves and Optics

(CREDITS:6) (FM:100)

Course Outcome

Upon successful completion of this course, students will be able to:

- CO1. The course is important for the students to make their career in various branches of science and engineering, especially in the field of photonics
- CO2. Understand the basic ideas of oscillations and waves
- CO3. To acquire skills allowing the student to identify and apply formulas of optics and wave physics using course literature.
- CO4. To be able to identify and illustrate physical concepts and terminology used in optics and to be able to explain them in appropriate detail.

CORE -IV :PRACTICAL/TUTORIAL WAVES AND OPTICS LAB

(CREDITS: 6) (FM:100)

Course Outcome

Upon successful completion of this course, students will be able to:

- CO1. To acquire skills allowing the student to organize and plan simpler laboratory course experiments and to prepare an associated oral and written report.
- CO2. Able to illustrate the principle of fiber optics communications.
- CO3. Able to categorize different waveguides for the utilization in optics communication system
- CO4. Able to interpret different fiber sensors and their respective application and can recommend this technique for other new application. To solve nonlinear optical interaction problem in two-level system

GENERIC ELECTIVE -2

(CREDITS: 6)

(FM:100)

Course Outcome

Upon successful completion of this course, students will be able to:

CO1. Students will learn the basics of modern Physics and quantum mechanical methods, its application by using Matrix calculations to solve problems, Fourier series and related problem

CO2. Students get the glimpse of fluid mechanics and of relativistic mechanics. Studying the energy conversion from matter, students come to know about the formation of universe and its constituents.

CO3. The students to work with concept of real life problems related with energy harvesting

CO4. Study of relativistic mechanics of a point particle makes the analytic strength of the students stronger.

GENERIC ELECTIVE -2: PRACTICAL/TUTORIAL

Course Outcome

Upon successful completion of this course, students will be able to:

CO1. In this course the experiments are designed to give glimpse of heat, magnetism, electricity and optics experiments.

CO2. Study of propagation of light in optical media clarifies the knowledge of students regarding the interference, diffraction, polarization and other optical phenomena. These train the students to work with different optical media and instruments as well.

CO3. They also develop basic communication skills through working in groups in performing the laboratory experiments.

CO4. Students can learn and understand related physics concepts by performing experiments, applying analytical techniques and interpreting the results with the help of graph and by estimating the errors due to discrepancies in the experimental data and theoretical predictions.

CO5. It enables them to explain the basic physical principle behind the experiment.

THIRD SEMESTER

CORE –V : MATHEMATICAL PHYSICS-II

(CREDITS: 6)

(FM:100)

Course Outcome

Upon successful completion of this course, students will be able to:

CO1. Understand the basic elements of signals and linear time-invariant systems, including the complex exponential and sinusoidal signals, unit step function and unit impulse

function (Dirac delta function), discrete time unit step and unit impulse sequences, continuous and discrete time system, linear time invariant (LTI) systems, continuous time LTI systems, and properties of LTI systems.

CO2. Ability to solve ordinary second order differential equations important in the physical sciences; solve physically relevant partial differential equations using standard methods like separation of variables, series expansion (Fourier-type series) and integral transforms.

CO3. Understand how to expand a function in a Fourier series, and under what conditions such an expansion is valid. You will be aware of the connection between this and integral transforms (Fourier and Laplace) and be able to use the latter to solve mathematical problems relevant to the physical sciences.

CO4. Understand Fourier analysis of continuous-time signals and systems and Students gain competence which will enable them to solve problems in many areas of science and engineering.

CORE -V PRACTICAL/TUTORIAL :MATHEMATICAL PHYSICS-II LAB

(CREDITS: 6)

(FM:100)

Course Outcome

Students will have understanding of:

CO1. Basic and advanced mathematical tools required for Physics Problems Different Techniques to solve differential and integral equations. Various special functions and important transforms and their applications

CO2. The students will be able to write their own Scilab program, compile and execute.

CO3. Students will learn the basics of Computational Physics and numerical methods, its application by using Matrix calculations to solve problems, Fourier series and related problems

CO4. Writing programs in Fortran to solve numerical analysis program as such solving algebraic, transcendental, and polynomial equations, Solution of differential equations Methods of least squares and curve fitting and Generation of random numbers and their applications in finding values of integrals

CORE-VI: THERMAL PHYSICS

(CREDITS: 6)

(FM:100)

Course Outcome

Upon successful completion of this course, students will be able to:

CO1. Understand the process of thermal conductivity, viscosity and diffusion in gases. and the basic statistical methods and concepts like probability, random variables, expected value, variance, estimators and common probability distributions.

CO2. Understand the relation between microscopic and macroscopic description through statistical mechanics; know and can apply the laws of thermodynamics and principles of free energy; describe thermodynamic processes and heat engines and master the use of the chemical potential to describe diffusive equilibrium, phase equilibrium and chemical processes.

CO3. Understand the efficiency of Carnot's engine and the significance of first law and second of thermodynamics and implications of the second law of thermodynamics and limitations placed by the second law on the performance of thermodynamic systems.

CO4. Ability to evaluate entropy changes in a wide range of processes and determine the reversibility or irreversibility of a process from such calculations and understand the interrelationship between thermodynamic functions and ability to use such relationships to solve practical problems.

CORE -VI PRACTICAL/TUTORIAL : THERMAL PHYSICS LAB

(CREDITS: 6)

(FM:100)

Course Outcome

The candidate should be able to:-

CO1. Quantitatively describe systems in thermal equilibrium by methods from thermodynamics and statistical physics

CO2. Design simple heat engines and refrigerators- Perform and analyze basic experiments and measurements within thermal physics

CO3. General competence.

CO4. Development on hand on techniques in day to day life

CORE-VII :ANALOG SYSTEMS AND APPLICATIONS

(CREDITS: 6)

(FM:100)

Course Outcome

Upon successful completion of this course, students will be able to:

CO1. Student learns about the various applications of semiconductors in LED, Solar cell devices

CO2. Understand Semiconductor diodes, bipolar junction transistor.

CO3. Sketch, explain and design the amplifier circuit for given specification and analyze them discuss oscillator principles, and frequency stability.

CO4. Analyze the different types of Oscillators

CORE –VII: PRACTICAL/TUTORIAL ANALOG SYSTEMS & APPLICATIONS LAB

Course Outcome

Upon successful completion of this course, students will be able to:

CO1. The students will have practical understanding of the characteristics of various diodes, transistors, Op-Amp, designing concepts of logic gates and digital circuits. They will also be trained in basic elements and measurement using millimeters' and utilization of CRO.

CO2. The basic filters will help the student to identify how the frequency depend on resistance And how the signals behave with the frequencies. They can explore how to filter these signals with resistors and capacitors.

CO3. The students can analyse and compare the effect of frequency to the output voltage. are exposed to the usage of semi-log graph and how to plot with respect to the given values. The experiments related to operational amplifier makes the students to analyse and working of IC 741 and its characteristics and finding the solution for linear and nonlinear applications using OP-Amp.

CO4. To appreciate and differentiate the working principles. How the resistor capacitor affects the uniformity of waveform and to comprehend the difficulties and to overcome that. The study of basic logic gates will help the student to have thorough understanding of the fundamental concept and the various techniques in digital electronics.

GENERIC ELECTIVE -3

(CREDITS: 6)

(FM:100)

Course Outcome

Upon successful completion of this course, students will be able to:

CO1. Understand the process of thermal conductivity, viscosity, and diffusion in gases.

CO2. Understand the basic statistical methods and concepts like probability, random variables, expected value, variance, estimators, and common probability distributions.

CO3. Understand the relation between microscopic and macroscopic description through statistical mechanics; know and can apply the laws of thermodynamics and principles of free energy; describe thermodynamic processes, heat engines, and master the use of the chemical potential to describe diffusive equilibrium, phase equilibrium and chemical processes.

CO4. Understand the efficiency of Carnot's engine and the significance of first law and second of thermodynamics and implications of the second law of thermodynamics and limitations placed by the second law on the performance of thermodynamic systems.

GENERIC ELECTIVE -3 PRACTICAL/TUTORIAL

Course Outcome

Upon successful completion of this course, students will be able to:

CO1. Students would gain practical knowledge about heat and radiation, thermodynamics, Thermoemf , RTD etc. and perform various experiments.

CO2. Ability to understand the basic concepts of thermodynamic such as temperature, pressure, system, properties, process, state, cycles and equilibrium.

CO3. Ability to conduct experiments regarding the measurement and calibration of temperatures and pressures in groups.

CO4. Ability to identify the properties of substances on property diagrams and obtain the data from property tables.

FOURTH SEMESTER

CORE -VIII :MATHEMATICAL PHYSICS III

(CREDITS:6) (FM:100)

Course Outcome

Upon successful completion of this course, students will be able to learn:

CO1. The three commonly used co-ordinate systems and general curvilinear co-ordinate system.

CO2. Concept of relativity, length contraction, relativistic mass, time dilation and twin paradox. Various methods to solve different differential equations.

CO3. Properties of Legendre polynomials, Hermite polynomials and Bessel function. These are useful to solve the problem of linear simple harmonic oscillator in quantum mechanics.

CO4. Have a good grasp of the basic elements of complex analysis, including the important integral theorems. Students will be able to determine the residues of a complex function and use the residue theorem to compute certain types of integrals.

CORE-VIII PRACTICAL/TUTORIAL : MATHEMATICAL PHYSICS-III LAB

(CREDITS: 6) (FM:100)

Course Outcome

Upon successful completion of this course, students will be able to:

CO1. Learning Numerical techniques and C programming analytical power is grown within the students. As well as the students get practiced to find accurate and precise values.

CO2. In this laboratory course students get the lessons in computer programming using C++. Students get acquainted with Linux fundamentals as well as Latex fundamentals.

CO3. Students get practiced with Scilab of graph plotting.

CO4. Students learn to solve differential equations by learning Euler method determination of eigenvalues of matrix, inverse of matrix also in C++ and Scilab.

CORE -IX :ELEMENTS OF MODERN PHYSICS

(CREDITS: 6) (FM:100)

Course Outcome

Upon successful completion of this course, students will be able to learn:

CO1. Students would know about the basic principles in the development of modern physics. The topics covered in the course build a basic foundation of undergraduate physics students

to study the advance branches: quantum physics, nuclear physics, particle physics and high energy physics.

CO2. The course contains the study of Planck's hypothesis, photoelectric effect, Compton effect, matter waves, atomic models, Schrodinger wave equations, and brief idea of nuclear physics. Main aspects of the inadequacies of classical mechanics as well as understanding of the historical development of quantum mechanics, formulation of Schrodinger equation and the idea of probability interpretation associated with wavefunctions, the spontaneous and stimulated emission of radiation, optical pumping and population inversion, Basic lasing

CO3. The study brings a basic idea on the properties of nuclei like density, size, binding energy, nuclear forces and structure of atomic nucleus, liquid drop model and nuclear shell model and mass formula.

CO4. Some interesting topics which are included in this course are decay rates and lifetime of radioactive decays like alpha, beta, gamma decay. Neutrino, its properties and its role in theory of beta decay, Fission and fusion: Nuclear processes to produce nuclear energy in nuclear reactor and stellar energy in stars which helps students to pursue career in research.

CORE -IX PRACTICAL/TUTORIAL :ELEMENTS OF MODERN PHYSICSLAB

Course Outcome

Upon successful completion of this course, students will be able to learn:

CO1. In this course students would be able to understand Basic experiments of modern physics such as: Determination of Planck's and Boltzmann's constants, Determination of ionization potential, Wavelength of H-spectrum, Single and double slit diffraction, Photo electric effect and determination of e/m

CO2. The students will get opportunity to measure Planck's constant, verify photoelectric effect, determine e/m of electron, Ionization potential of atoms, study emission and absorption line spectra.

CO3. They will also find wavelength of Laser sources by single and Double slit experiment, wavelength and angular spread of He-Ne Laser using plane diffraction grating.

CO4. Students would know about the basic principles in the development of modern physics

CORE -X: DIGITAL SYSTEMS AND APPLICATIONS

(CREDITS: 6) (FM:100)

Course Outcome

Upon successful completion of this course, students will be able to:

CO1. Gain both theoretical and experimental knowledge about digital electronics.

CO2. Understand computer architecture.

CO3. Verify and design various logic gates. Write programs using 8085 microprocessor.

CO4. This course lays the foundation for understanding the digital logic circuits and their use in combinational and sequential logic circuit design.

CORE -X PRACTICAL/TUTORIAL : DIGITAL SYSTEMS &APPLICATIONSLAB

Course Outcome

Upon successful completion of this course, students will be able to:

CO1. In the laboratory students will learn to construct both combinational and sequential circuits by employing NAND as building blocks and demonstrate Adders, Subtractors, Shift Registers, and multivibrators using ICs. They are also expected to use μP 8085 to demonstrate the same simple programme using assembly language.

CO2. Acquire the ability to formulate and solve problems involving Boolean algebra and learn to design digital systems using simple logic elements.

CO3. Develop understanding of digital codes and number systems.

CO4. Develop understanding of sequential logic circuits and their applications. It then builds the concept of Integrated Chips (IC): its classification and uses. Differentiating the Analog and Digital circuits, the concepts of number systems like Binary, BCD, Octal and hexadecimal are developed to elaborate and focus on the digital systems. Sequential Circuits: Basic memory elements Flips-Flops, shift registers and 4-bits counters leading to the concept of RAM, ROM and memory organization.

GENERIC ELECTIVE -4 **(CREDITS: 6) (FM:100)**

Course Outcome

Upon successful completion of this course, students will be able to:

CO1. Students will learn the basics of modern Physics and quantum mechanical methods, its application by using Matrix calculations to solve problems, Fourier series and related problem

CO2. Students get the glimpse of fluid mechanics and of relativistic mechanics. Studying the energy convection from matter, students come to know about the formation of universe and its constituents.

CO3. The students to work with concept of real life problems related with energy harvesting

CO4. Study of relativistic mechanics of a point particle makes the analytic strength of the students stronger.

GENERIC ELECTIVE -4 PRACTICAL/TUTORIAL

Course Outcome

Upon successful completion of this course, students will be able to:

CO1. In this course the experiments are designed to give glimpse of heat, magnetism, electricity and optics experiments.

CO2. Study of propagation of light in optical media clarifies the knowledge of students regarding the interference, diffraction, polarization and other optical phenomena. These train the students to work with different optical media and instruments as well.

CO3. They also develop basic communication skills through working in groups in performing

the laboratory experiments.

CO4. Students can learn and understand related physics concepts by performing experiments, applying analytical techniques and interpreting the results with the help of graph and by estimating the errors due to discrepancies in the experimental data and theoretical predictions. It enables them to explain the basic physical principle behind the experiment.

FIFTH SEMESTER

CORE –XI : QUANTUM MECHANICS & APPLICATIONS

(CREDITS: 6) (FM:100)

Course Outcome

Upon successful completion of this course, students will be able to:

CO1. This course provides understanding and knowledge to realize the basics of molecular, atomic and subatomic physics. Concept of wave function and wave packet is introduced. Students get their critical thinking ability developed by studying uncertainty principle.

CO2. Study of probability, expectation value and Ehrenfest's theorem assist students to be enriched with mathematical calculation. The concept of Schrodinger equation creates analytical power of students. The knowledge of quantization is clarified by studying levels.

CO3. The study of different potentials nourish them to think about system and its function with the help of mathematical tools. Students get skilled by studying the formalism of quantum mechanics in describing the systems mathematically and this knowledge becomes very useful for their study of particle physics, spectroscopy and research. By learning the symmetry principles, the visualization about the system gets stronger. Concept of linear vector space help them to write the systems in proper way.

CO4. By studying angular momentum, the conceptual clarity regarding the calculations of heeigen-value and eigen vector. Learning the calculations of CG coefficients students get ready to solve analytical and mathematical problems.

CORE -XI :PRACTICAL/TUTORIAL QUANTUM MECHANICS LAB

Course Outcome

Upon successful completion of this course, students will be able to learn:

CO1. The students after the course are competent enough to use the knowledge of Quantum Mechanics to different Quantum Mechanical systems encountered in different areas of Physics

CO2. They learn to solve the non-relativistic quantum mechanical problem and can demarcatethe problems which are quantum mechanical.

CO3. Identify and understand the kinds of experimental results which are incompatible with classical physics and which required the development of a quantum theory of matter and light

CO4. Interpret the wave function and apply operators to it to obtain information about a particle's physical properties such as position, momentum and energy

CORE-XII: SOLID STATE PHYSICS

(CREDITS: 6) (FM:100)

Course Outcome

Upon successful completion of this course, students will be able to learn:

CO1. Students would be able to understand various types of crystal structures and symmetries and understand the relationship between the real and reciprocal space and learn the Bragg's X-ray diffraction in crystals. Would also learn about phonons and lattice

CO2. Find out the relationship between crystals detector, structure analysis by various methods. Understand the elastic constant of crystals and lattice vibration. Understand the Energy levels and define Electrical conductivity – Hall Effect and free electron model and band gap energy. Analyse the relationship between dielectric and Ferro electric proportion of crystal. Perform and verify the theory and experimental procedure for magnetism and super conductivity phenomenon

CO3. Students will able to study difference between crystalline and amorphous material, crystal structures, miller indices, inter planer distances, interatomic forces and bonds. From this study students get to learn the basics of solid state physics.

CO4. Students will understand Bragg's diffraction, Bragg's law. X-ray diffraction and characterization techniques. With the help of this knowledge students know the principles of structures determination by X-ray diffraction method. This would be helpful in performing experiments in nanotechnology.

CORE -XII PRACTICAL/TUTORIAL :SOLID STATE PHYSICS LAB

Course Outcome

Upon successful completion of this course, students will be able to learn

CO1. To understand Lattice heat capacity and to compare Classical theory, Einstein's theory, Debye's theory of specific heat of solids.

CO2. To apply techniques of X-Ray Diffraction and UV Spectroscopy to study crystals.

CO3. Students can describe and explain the behaviour of permanent magnet including induced magnetism, behaviour of paramagnetic, diamagnetic, ferromagnetic materials in terms of magnetic domain.

CO4. With the help of this knowledge students know the principles of structures by X-ray diffraction method. This would be helpful in performing experiments in nanotechnology.

DISCIPLINE SPECIFIC ELECTIVE -1 CLASSICAL DYNAMICS

(CREDITS: 6) (FM:100)

Course Outcome

Upon successful completion of this course, students will be able to learn

CO1. Application of Lagrangian mechanics to solve various problems related to day to day life.

CO2. Hamiltonian mechanics and its applications

CO3. Understand the concepts of four dimensional space and apply it to solve the collision and decay problems easily

CO4. Understand the negative result of Michelson Morley experiment, Galilean and Lorentz transformation and concepts like zero work done, conservative forces, mass energy equivalence ($E = mc^2$)

DISCIPLINE SPECIFIC ELECTIVE -2 : NUCLEAR AND PARTICLE PHYSICS

(CREDITS: 6) (FM:100)

Course Outcome

Upon successful completion of this course, students will be able to learn

CO1. To promote background knowledge on atmospheric sciences.

CO2. To make students aware of the concepts of Physics involved in day-to-day life.

CO3. To update the knowledge of students with recent science and technology devices

CO4. Relate Cosmic activity and the environmental effect on the earth's surface.

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SIXTH SEMESTER

CORE-XIII : ELECTRO-MAGNETIC THEORY

(CREDITS: 6) (FM:100)

Course Outcome

Upon successful completion of this course, students will be able to learn

CO1. As the paper deals with mathematical detail, the ability of approaching and solving the problems is also nurtured.

CO2. As this course is full of vector, tensor and differential equations, the understanding of mathematical methods can be completed with applications of those topics in electrodynamics.

CO3. The concept of dielectric and the field in material medium are also grown within the students in this course.

CO4. Analytical skill and the realization of the regular electromagnetic phenomena are developed studying the electromagnetic waves. Understanding of Maxwell's equations

help students for a complete grip over the subject.

CORE-XIII PRACTICAL/TUTORIAL :ELECTRO-MAGNETIC THEORY LAB

(CREDITS: 6) (FM:100)

Course Outcome

After completing the course, the students should be able:

CO1. To differentiate different types of coordinate systems and use them for solving the problems of electromagnetic field theory.

CO2. To describe static electric and magnetic fields, their behavior in different media, associated laws, boundary conditions and electromagnetic potentials.

CO3. To use integral and point form of Maxwell's equations for solving the problems of electromagnetic field theory.

CO4. To describe time varying fields, propagation of electromagnetic waves in different media, pointing theorem, their sources & effects and to apply the theory of electromagnetic waves in practical problems.

CORE -XIV ;STATISTICAL MECHANICS

(CREDITS: 6) (FM:100)

Course Outcome

After completing the course, the students should be able:

CO1. The course provides an introduction to statistical physics, mainly for systems in thermalequilibrium. The student should understand quantum and classical statistical mechanicsfor ideal systems, and be able to judge when quantum effects are important.

CO2. The student should understand the connection between microphysics and thermodynamics.

CO3. Skills:The student should be able to perform quantitative calculations on ideal systems, be able to formulate models of more realistic systems, and be able to use standard numerical packages for simulation and analysis of such.

CO4. The student should have acquired a foundation for advanced courses in physics, specially those involving many-particle systems.

CORE-XIV PRACTICAL/TUTORIAL ;STATISTICAL MECHANICS LAB

Course Outcome

After completing the course, the students should be ablelearn :

CO1. The students would be able to have strong foundation knowledge and comprehend the basic concepts and principles in Physics.

CO2. The students would be able to progress in their academic performance through structured curricula.

CO3. The students would be able take up competitive exams in different sectors, can be

entrepreneurs and succeed in higher education in Physics

CO4. The students would be able to experience a well resourced environment for learning Physics

DISCIPLINE SPECIFIC ELECTIVE -3 :NANO MATERIALS AND APPLICATIONS

(CREDITS: 6) (FM:100)

Course Outcome

After completing the course, the students should be able to learn :

CO1. To understand Basics of Nano technology and sciences

CO2. To study the characterization techniques such as Scanning electron microscope, tunneling electron microscope

CO3. Students can describe and explain the behaviour of nano materials in quantum scale

CO4. With the help of this knowledge students know the various applications of nano materials in bio medical field, energy harvesting, sensors and MEMS devices.

DISCIPLINE SPECIFIC ELECTIVE PAPER-4: PROJECT OR BASIC INSTRUMENTATION

(CREDITS: 6) (FM:100)

Course Outcome

After completing the course, the students should be able to learn :

CO1. Research areas of interest and learn to choose a research field of their interest by doing proper literature survey.

CO2. A small scale project will be done by student by interacting with research scholars

CO3. Characterisation techniques and data analysis of the results found during their research project

CO4. Writing a research paper and publish it in a renowned journal

DISCIPLINE SPECIFIC ELECTIVE PAPER-4: BASIC INSTRUMENTATION

(CREDITS: 6) (FM:100)

Course Outcome

After completing the course:

CO1. Student learns about the various applications of Digital storage Oscilloscope and analog Oscilloscope

CO2. Understand Cathode Ray Oscilloscope, Construction of CRT, Electron gun,

CO3. Sketch, explain and design the Signal Generators circuit for given specification and analyze them discuss oscillator principles, and frequency stability.

CO4. Analyze the different types of digital multimeter

Discipline Specific Elective Paper-4 Practical/Tutorial

Course outcome

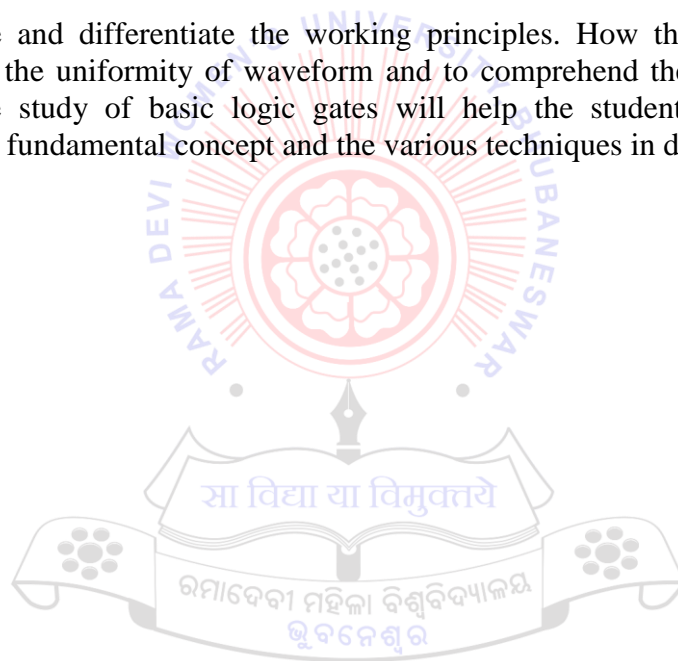
After completing the course:

CO1. The students will have practical understanding of the characteristics of various diodes, transistors, Op-Amp, designing concepts of logic gates and digital circuits. They will be trained in basic elements and measurement using multimeters and utilization of CRO.

CO2. The basic filters will help the student to identify how the frequency depend on resistance and how the signals behave with the frequencies. They can explore how to filter these signals with resistors and capacitors.

CO3. The students can analyse and compare the effect of frequency to the output voltage. They are exposed to the usage of semi-log graph and how to plot with respect to the given values. The experiments related to operational amplifier makes the students to analyse and working of IC 741 and its characteristics and finding the solution for linear and nonlinear applications using OP-Amp.

CO4. To appreciate and differentiate the working principles. How the resistor capacitor combination affects the uniformity of waveform and to comprehend the difficulties and to overcome that. The study of basic logic gates will help the student to have thorough understanding of the fundamental concept and the various techniques in digital electronics.



B.A. POLITICAL SCIENCE

Programme Outcomes

- PO 1: Develop a comprehensive understanding of the core subjects of Political Science from political theory to International Relations
- PO 2: Enhance an interdisciplinary knowledge of the subject by interlinking political science with other Social Sciences
- PO 3: Enabling students to have various perspectives on the major political developments and events across the globe.
- PO 4: Develop critical thinking about politics and society
- PO 5: Acquaintance with the contemporary socio-political, cultural, and economic trends
- PO 6: Pursue socially relevant learning necessary for the empowerment of marginalized groups like the poor, Dalits, tribals, and women
- PO 7: Enabling students for careers in political science as well as administrative services
- PO 8: Cultivating among students a scientific temper, tolerance etc., through the learning experience and undertaking a comparative analysis of the global socio-political and cultural phenomena
- PO 9: Equipping with research-based skills for pursuing advanced research by applying critical thinking and analytical learning
- PO 10: Developing problem-solving capabilities to deal with various socio-economic, cultural, and political challenges

Programme Specific Outcomes

- PSO 1. The students will be able to acquire in depth knowledge, and develop a broad understanding on the core subject of political science.
- PSO 2. The students will be enabled for professing a career on the subject of political science or civil service.
- PSO 3. The students will be able to distinguish between theoretical discourse and practical knowledge.
- PSO 4. The students will be motivated to go for higher studies and to conduct advanced research after equipping them with research skills, critical thinking and analytical understanding.
- PSO 5. The students will be aware of the social, economic and political scenario of the contemporary world, and also enable them to do a comparative analysis of the global north with global south.

FIRST SEMESTER

Core- I : (UNDERSTANDING POLITICAL THEORY)

(6 CREDITS)(FM:100)

Course Outcomes

After reading this paper, students will be able

CO1. Define and distinguish concepts like politics and political, and various approaches to study political theory.

CO2. Critically assess different perspectives in political theory viz., feminism, modernism and postmodernism and their impacts upon the society.

CO3. Consider whether procedural or substantive notion of democracy is more vital for the society.

CO 4. Analyze the significance of people's participation and representation in a democracy.

Core – II : CONSTITUTIONAL GOVERNMENT AND DEMOCRACY IN INDIA

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

CO1. Define the ideals of constitution and constitutionalism, and their necessity in a democratic polity

CO2. Trace the areas in which both the Centre and States can keep a coordination for their mutual benefits

CO3. Identify the prevailing issues and challenges in India's federal structure

CO4. Demonstrate the essence of decentralization in the administration

SECOND SEMESTER

Core- III : POLITICAL THEORY-CONCEPTS AND DEBATES

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

CO1. Applying the normative concepts of political theory like freedom, right, equality and justice in their normal course of lives

CO2. Discussing the idea of three generations of rights and its implication on the lives of the individuals

CO3. Explaining the need for affirmative action in the society

CO4. Evaluate the essence of multiculturalism in the contemporary world

Core-IV : POLITICAL PROCESS IN INDIA

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. Analyse how the actual politics in India quite diverges from constitutional and legal rules
- CO2. Examine the voting behaviour of the electorates through the techniques of castes, class, gender and religion
- CO3. Distinguish the space between the politicisation of caste and caste-cization of politics, and their mutual interaction
- CO4. Spell out the developmental, welfare, and coercive dimensions of the Indian state

THIRD SEMESTER

Core-V : INTRODUCTION TO COMPARATIVE GOVERNMENT AND POLITICS

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able to

- CO1. Understand different approaches to the study of comparative politics
- CO2. Explain globalization in a holistic manner that impacts the developed and developing countries
- CO3. Critically analyze the growth or development of capitalism and socialism in Global Politics
- CO4. Compare and contrast the governmental structures of United States and China

Core- VI : INTRODUCTION TO PUBLIC ADMINISTRATION

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. Explain the public administration with a special emphasis on various classical and contemporary theories viz., Scientific Management, Administrative Management, Human Relations Theory, Rational Decision Making and so on
- CO2. Design, formulate and execute public policies; and list out various challenges in the process of their implementation
- CO3. Analyse the impact of greater democratization on public administration
- CO4. Apply the feminist perspective in governance

Core-VII : PERSPECTIVES ON INTERNATIONAL RELATIONS

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. Assess the nature of globalization and its alternative perspectives
- CO2. Analyse the dynamic nature of the world economy, and the interaction between state and various transnational actors
- CO3. Critically examine some of the imperative global issues like nuclear proliferation, international terrorism, ecological issues, migration, and human security
- CO4. Assess the shifts in global power and governance

THIRD SEMESTER

Core-VIII

POLITICAL PROCESSES AND INSTITUTIONS IN COMPARATIVE PERSPECTIVE

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. Apply various conceptual tools or approaches to study several issues and events in comparative politics
- CO2. Outline the meaning and procedures of different electoral system
- CO3. Explain the meaning and evolution of nation-state in western Europe, and the debate around the nation and state post-colonial context
- CO4. Analyse the democratic situation in post-colonial societies

Core-IX: PUBLIC POLICY AND ADMINISTRATION IN INDIA

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. Outline characteristics and models of public policy in India
- CO2. Design and shape public welfare policies and programmes
- CO3. Analyse the issues of decentralization, financial management (budget), administration and social welfare from a non-western point of view
- CO4. Showcase the talent to resolve the public grievances via RTI, Lokpal and E-Governance

Core-X : GLOBAL POLITICS

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. Assess the nature of globalization and its alternative perspectives
- CO2. Analyse the dynamic nature of the world economy, and the interaction between state and various transnational actors
- CO3. Critically examine some of the imperative global issues like nuclear proliferation, international terrorism, ecological issues, migration, and human security
- CO4. Assess the shifts in global power and governance

FIFTH SEMESTER

Core- XI : WESTERN POLITICAL PHILOSOPHY

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able to

- CO1. Trace the Greek antiquity and determine the manner in which political questions were initially posed
- CO2. Elucidate importance of Machiavelli as the forerunner of modern politics
- CO3. Compare the notion of freedom as enunciated by Thomas Hobbes, John Locke and J J Rousseau with the contemporary notion of freedom
- CO4. Apply the ideas of Karl Marx and M. K. Gandhiji on the state into modern politics

Core-XII : INDIAN POLITICAL THOUGHT (ANCIENT AND MEDIEVAL

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. Elaborate basic elements of Indian political thought
- CO2. Explain the Ved Vyasa's concept of Rajadharma and its significance
- CO3. Critically assess the relevance of Manu's social laws in present context
- CO4. Compare and contrast the ideas of Kautilya and Machiavelli

Core-XIII : CONTEMPORARY POLITICAL PHILOSOPHY

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. Draw the interrelationship between philosophy and politics
- CO2. Examine Lenin's ideas of revolution
- CO3. Explain the impact of Gramscian notion of hegemony on contemporary global order
- CO4. Evaluate the notions of procedural justice and substantive justice in reference to the Indian context

Core-XIV : MODERN INDIAN POLITICAL THOUGHT

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. Ascertain the significance of Raja Rammohan Roy as the man of the renaissance in India
- CO2. Explain Pandita Ramabai's concept of gender and critique of orthodoxy
- CO3. Compare and contrast the ideas of Gandhi and Ambedkar
- CO4. Critically assess Savarkar's conception of Hindutva vis-à-vis Nehruvian secularism

DSE-I : INTRODUCTION TO HUMAN RIGHTS

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able to

- CO1. Develop a broader conception of human rights
- CO2. Spell out the rights as mentioned in Indian and South African constitutions
- CO3. Explain the significance of international refugees' laws and international humanitarian laws
- CO4. Critically assess the humanitarian interventions in the context of the protection of human rights

DSE-II

DEVELOPMENT PROCESS AND SOCIAL MOVEMENTS IN CONTEMPORARY INDIA (Project)

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

- CO1. Assess the developmental process in India since independence
- CO2. Explain the developmental paradigms of India in the era of globalization
- CO3. Create a perception about agricultural development, and list out various causes of the

agricultural crisis in India

CO4. Assess the necessity and constraints of different social movements viz., women's movements, environmental movements, Dalit movements, and tribal movements in a democratic space of India

DSE- III : INDIA'S FOREIGN POLICY IN A CHANGING WORLD

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

CO1. Elucidate the evolution, major determinants and different phases of India's foreign policy

CO2. analyse India's growing relationship with the superpowers during the period of cold war, and a dynamic shift in its relations with US in post cold war power structures of international politics

CO3. Evaluate Sino-Indian relations in the light of mutual interest and mutual benefits

CO4. Appreciate India as an emerging global power; and assess the challenges and opportunities associated with it

DSE-IV : DISSERTATION / RESEARCH PROJECT

Learning Objectives:

- To help students to learn how to develop scientific research designs in the study of public administration.
- To guide students to understand the previous research in their field of interest and review them to arrive at a research problem
- To encourage the students to learn ways to describe and evaluate public policy implementation.
- To help students understand the logic of hypothesis testing in both quantitative and qualitative research.
- To make students to learn the methods of writing a research report.

Expected outcomes: Students will be able to

- Independently prepare a research design to carry out a research project
- Review the related research papers to find out a research problem and relevant hypotheses
- Understand the dynamics of citizen – administrative interface and administrative behaviours.
- Learn the use of statistical techniques for interpretation of data.
- Learn the APA style of reporting a research project.

Generic Elective Paper I: (FEMINISM: THEORY AND PRACTICE)

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

CO1. Distinguish between sex and gender and public man and private woman

CO2. Examine divergent theories of feminism

CO3. Explain various policy initiatives carried out by Indian state for the women
Empowerment

CO4. Identify the causes of violence against women, and list out the measures to check them

Generic Elective Paper II (GOVERNANCE: ISSUES AND CHALLENGES)

(6 CREDITS) (FM:100)

Course Outcomes

After reading this paper, students will be able

CO1. Decipher the nature and types of governance

CO2. Analyse the idea of sustainable development vis-à-vis governance

CO3. Assess the significance of people's participation and democratic decentralization in the administration

CO4. Spell out the initiatives for good governance in India



M.A. IN POLITICAL SCIENCE

Programme Outcomes

- PO 1: Enabling the students to understand the core areas of Political Science comprehensively
- PO 2: Developing an interdisciplinary approach and orientation among the students
- PO 3: Creating awareness about the career opportunities in the domain of the subject and outside it
- PO 4: Sensitizing students on various forms of deprivation, discrimination and marginalization and empowering them to challenge those.
- PO 5: Gaining the required knowledge and skills to face the challenges in their professional career through seminars, workshops, etc.
- PO 6: Developing inter-personal skills to gain self-confidence and scientific temper
- PO 7: Developing first-hand knowledge of the community and its various problems through the community connect programmes
- PO 8: Enabling students to crack various competitive exams through mock-test and similar relevant programmes
- PO 9: Equipping with research-based skills for pursuing advanced research by applying critical thinking and analytical learning
- PO 10: Moulding students as good citizen committed to the cause of nation building through various value-based orientation programmes

Programme Specific Outcomes

- PSO 1. The students will be able to understand, articulate and explain their core subjects of political science in a detailed manner.
- PSO 2. The students would experience a scenario from a social, economic, cultural, political and gender perspective.
- PSO 3. The students will be competent to conduct research rigorously on relevant issues, and apply the research findings effectively for the requirement of the society.
- PSO 4. The students will be enlightened about the career opportunities available in the fields of political science and outside it.
- PSO 5. The students will cultivate the spirit of good citizenship, discipline, tolerance, scientific temper, mutual respect, self-confidence and self-reliance in the minds of the students through various value-based orientation programmes.

FIRST SEMESTER

Hard Core-101(COMPARATIVE POLITICS (CONCEPTS AND MODELS))

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After completing the course, the students will be competent to

- CO1. Define constitution and constitutionalism, and its different typologies
- CO2. Apply structural-functional approach to understand contemporary issues
- CO3. Compare and contrast the behavioural and post behavioural approaches
- CO4. Discuss capitalist, socialist, and post-colonial perspectives of the state
- CO5. Assess the relevance of the elite theory of democracy in present-day politics

Hard Core-102

ADMINISTRATIVE THEORY-PRINCIPLES AND APPROACHES

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After pursuing the course, the students will be able to

- CO1. Demonstrate skills of management and qualities of leadership in the administrative sector
- CO2. Apply the theoretical knowledge of developmental administration into practice
- CO3. Distinguish between public and private administration
- CO4. Analyse the rules of public administration of developed and developing countries
- CO5. Discuss the different dimensions of new public administration and new public management

Hard Core-103

INTERNATIONAL RELATIONS -MAJOR CONCEPTS AND THEORIES

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After going through the course, the students will be enabled to

- CO1. Identify the mechanism and principles for the resolution of global conflicts
- CO2. Critically assess the relevance of disarmament and arms control agreements in an era when global peace is at a stake
- CO3. Determine the strategies for the augmentation of national interest
- CO4. Identify which theory is highly relevant for studying the changing discourse of international politics
- CO5. Describe the systems, structures and agents of international relations

HARD CORE-104: CONTEMPORARY POLITICAL THEORY-I

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After reading out the course, the students will be able to

CO1. Analyse the nature of political theory and its decline and resurgence

CO2. Elaborate the liberal, Marxist, feminist and post colonial theories of the state

CO3. Critically assess the nature of representative, participatory and deliberative democracy; and consider whether the prevailing mode of democracy practised in India needs to be replaced by any other model

CO4. Discuss the impact of Rawls's notion of justice on Indian society and polity

CO5. Explain the Gramscian concept of civil society

ALLIED CORE-101- COMPUTER APPLICATIONS IN TEACHING LEARNING

(CREDITS:5)(Int :20+10 End-Sem:70)

Course Outcomes

After reading out the course, the students will be able to

CO1. Learn basis of Basics of MS Windows. (Remembering)

CO2. Demonstrate basic understanding of computer applications with reference to MS Windows, MS excel and MS PowerPoint. (Applying)

CO3. Generate spreadsheets, charts and presentations. (Creating)

CO4. Design personal, academic and business documents using MS Office. (Creating)

CO5. Model the modes of development of self-learning materials and prepare different

SECOND SEMESTER

Hard Core-201: COMPARATIVE POLITICAL PROCESS

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After completing the course, the students will be competent to

CO1. Explain the role of legislature, executive and judiciary on the issue of public policy formulation

CO2. Discuss the essence of political parties and political representation in democracy

CO3. Distinguish between political modernization and political development

CO4. Analyse educational institutions as the agent of political socialization

CO5. Describe divergent theories of social and new social movements

HARD CORE-202: CONTEMPORARY DEBATES IN POLITICAL THEORY-II

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After going through the course, the students will be able to

CO1. Critically assess the relevance of Marxism and neo-marxism in contemporary society

CO2. Evaluate whether the concept of the end of ideology is outlived in the light of the resurgence of Russia's power and position

CO3. Discuss various perspectives of feminism and their implication on the assertion of rights for women at large

CO4. Distinguish between multi-culturalism and cultural relativism

CO5. Identify whether the Gandhian way of peaceful protest or Lenin and/or Mao's approach of revolutionary struggle is essential for the progress of the mankind

HARD CORE-203 : INDIAN GOVERNMENT AND POLITICS-BASICS-I

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After pursuing the course, the students will be enabled to

CO1. Spell out the philosophy of the Indian constitution

CO2. Explain the constitution as the instrument of social change

CO3. Make an assessment of the actual functioning of the constituent assembly with the proceedings of the current parliament

CO4. Identify the issues and challenges in centre-state relations, and spell out certain remedial measures with respect to them

CO5. Evaluate the role of the prime minister in India's democratic landscape

Hard Core-204 : INDIAN POLITICAL TRADITIONS-I

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After reading out the course, the students will have the knowledge to

CO1. Compare and contrast the Kautilya's concept of state and relation between ethics and politics with the ideas of Niccolo Machiavelli

CO2. Discuss Dayanand Saraswati's concept of Vedic Swaraj

CO3. Explain Raja Ram Mohan Roy's ideas of socio-economic and religious reforms

CO4. Apply the notion of humanism of Swami Vivekananda to the contemporary time which has been marred by communalism, intolerance and parochial feeling

CO5. Spell out the political goals and techniques of Gopal Krishna Gokhale

Elective-201

STATE AND LOCAL ADMINISTRATION IN INDIA-WITH SPECIAL REFERENCE TO ODISHA

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completing the course, the students will be competent to

CO1. Explain the inevitability and rational framework of state and local administration in India

CO2. Discuss the role and functions of board of revenue and revenue divisional commissioner

CO3. Analyse the impact of citizen's participation in development

CO4. Describe the administrative structures and process of local government in Odisha

CO5. Identify what sort of reforms need to be introduced to make the administration more efficient and people friendly

SECOND SEMESTER

Core Elective -201

ADMINISTRATION IN INDIA WITH SPECIAL REFERENCE TO ODISHA

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After pursuing the course, the students will be competent to

CO1. Discuss the evolution of Indian administration; especially, colonial and post-colonial administration.

CO2. Analyze the structure and functioning of central administration in India.

CO3. Identify the steps in the preparation and passage of the budget, and techniques for controlling the public expenditures.

CO4. Narrate the emerging issues in Indian administration; and conflicts, serious challenges and resolution mechanisms in Centre-state relations.

CO5. Compare and contrast the functioning of erstwhile Planning Commission and NITI Aayog.

Open Elective -201 : GENDER AND POLITICS

(CREDITS:4) (End-Sem:50)

Course Outcomes

After pursuing the course, the students will have the capability of

CO1. Locating women in the public policy arena

CO2. Comprehending gendering development through public policy

- CO3. Developing an analysis of the impact of globalization on women
- CO4. Identifying the context of women's rights violations
- CO5. Analysing women's perspective in the formulation of population policy

THIRD SEMESTER

Hard Core-301

RESEARCH METHODOLOGY AND STATISTICAL METHODS

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After pursuing the course, the students will have the capability of

- CO1. Describing the significance of research methodology in social science
- CO2. Applying various techniques and tools like observation, questionnaire and interviewing to conduct research in social science
- CO3. Defining the meaning, types, sources and formulation of hypothesis
- CO4. Designing various types of sampling with a view to collect data
- CO5. Analysing and interpreting the data after their collection

Hard Core-302

POLITICAL SOCIOLOGY -CONCEPTS AND ISSUES

(CREDITS:5)(Int :20+10 End-Sem:70)

Course Outcomes

After going through the course, the students will be able to

- CO1. Define the concepts of political participation, political communication and political Development
- CO2. Discuss theories of circulation of elites vis-à-vis theory of class
- CO3. Explain the significance of the ideas of Karl Marx, Max Weber, Emile Durkheim, Talcott Parsons, Vilfredo Pareto and Gaetano Mosca on the lives of the individuals, society, polity and economy
- CO4. Analyse the theories and process of social conflict
- CO5. Distinguish between social stability and social change

Hard Core-303 : WESTERN POLITICAL THOUGHT-I

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After reading out the course, the students will be competent to

CO1. Discover new insights for making an inquiry into not just political questions but also to expand the horizon of knowledge

CO2. Critically assess the social contract theory of Thomas Hobbes, John Locke and J. J. Rousseau

CO3. Compare and contrast between Hobbesian and Rousseau notion of sovereignty

CO4. Discuss the Aristotle's ideas of revolution

CO5. Analyse the John Locke's philosophy of liberalism

Core Elective-301

GLOBAL POLITICS-CONTEMPORARY CHALLENGES ANDISSUES

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After completing the course, the students will have the capacity to

CO1. Examine the cases of humanitarian interventions as a means to protect the human rights

CO2. Discuss the role of the United Nations in resolving global conflicts and restoring world peace

CO3. Identify certain threats to the global community like international terrorism and environmental crisis, and recommend some necessary measures for their prevention

CO4. Critically assess whether the American hegemony is still prevalent in the contemporary world

CO5. Analyse the role of multilateral institutions in maintaining the global order

Core Elective-301

PEACE AND CONFLICT IN INTERNATIONAL STUDIES

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After pursuing the course, the students will be able to

CO1. Define the concept of security, and other threat perceptions in the contemporary international scenario.

CO2. Distinguish between traditional and non-traditional, and internal and transnational security issues.

CO3. Spell out the potential advantages of nuclear energy; and contrarily, the notorious

effect of weapons of mass destruction.

CO4. Discuss the alternative perspectives on security viz. human security, comprehensive security, common security, feminist critique, collective security, and so on.

CO5. Assess the role of United Nations Peace-Keeping Force in the maintenance of peace and security across the globe.

Core Elective-302: WORKING OF DEMOCRACY IN INDIA

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After pursuing the course, the students will be competent to

CO1. Define democracy, and its evolution in India's electoral arena

CO2. Describe the developmental and coercive nature of Indian State

CO3. Explain the identity politics in India through the tools of caste, religion, language and ethnicity

CO4. Examine to what extent the political participation and various movements including women's movements, tribal movements, peasant and workers movements have been able to make the India's democracy a mature one

CO5. Discuss the role and impact of major democratic institutions on India's political landscape

FOURTH SEMESTER

Hard Core-401 : WESTERN POLITICAL THOUGHT-II

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After pursuing the course, the students will be competent to

CO1. Distinguish between Hegelian and Gramscian concept of civil society

CO2. Define Marxian notion of dialectical materialism and historical materialism in relation to Hegelian concept of dialectics

CO3. Compare and contrast the idea of revolution of Marx, Lenin and Mao

CO4. Describe Marxian theory of alienation

CO5. Critically assess whether the Marxian idea of communism is utopian in nature or practically feasible

Hard Core-402: INDIA'S FOREIGN POLICY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completing the course, the students will be able to

- CO1. Describe the evolution and changing dynamics of India's foreign policy
- CO 2. Explain India's diplomatic, economic and strategic relations with USA, Russia and China
- CO3. Spell out the India's nuclear doctrine and its no-first-use principle
- CO4. Elucidate the necessary reasons for the expansion of United nations Security Council and inclusion of India as a permanent member of such powerful organ
- CO5. Analyse India's diplomatic, strategic, economic, technological and cultural relationship with BIMSTEC and ASEAN

Hard Core-403 : DISSERTATION

(CREDITS:5) (End-Sem:100)

Course Outcomes

Students will be able to

- CO1. Independently prepare a research design to carry out a research project
- CO2. Review the related research papers to find out a research problem and relevant hypotheses
- CO3. Understand the dynamics of citizen - administrative interface and administrative behaviours.
- CO4. Learn the use of statistical techniques for the interpretation of data.
- CO5. Learn the APA style of reporting a research project.

Core Elective -401

(CONTEMPORARY INTERNATIONAL STUDIES (CONCEPTS AND CHALLENGES)

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After going through the course, the students will have the knowledge to

- CO1. Explain numerous challenges encountered by the state in the wake of globalization
- CO2. Develop an understanding of the world system analysis
- CO3. Describe the alternative perspectives on security like environmental security and human security
- CO4. Discuss major paradigmatic debates of international relations
- CO5. Distinguish between liberalism and neo-liberalism

Core Elective-401

INTERNATIONAL SECURITY

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After completing the course, the students will be enabled to

CO1. Discuss various theoretical approaches to international security viz. Structural Realism, Feminist Conception, Copenhagen School, and etc.

CO2. Highlight the security problems of third world countries.

CO3. Identify the suitable mechanisms/principles for ensuring the regional and global security in best possible manner.

CO4. Elaborate the concept of human security, and means/instruments to achieve the intended objectives.

CO5. Define the South-Asian conceptions of security, and inter South-Asian conflict.



Ph.D. IN POLITICAL SCIENCE

Programme Outcomes (PO)

PO 1: Scholars will be able to conduct thorough research on any relevant issue in the fields of social sciences in conformity with appropriate research methods.

PO 2: Enable the scholar to become an independent researcher in the future, and develop his or her capacity for contributing new insights and dimensions to the discourse of knowledge.

PO 3: Gain a depth understanding of various themes of Indian polity and its institutions, and explain them analytically from historical, social, economic, and political perspectives.

PO 4: Get an awareness of research ethics, research integrity, publication ethics, and predatory publication

PO 5: Expose the undisclosed truth or reality to the public and ensure that the research will suffice the larger interest of society.

PO 6: Enhance the researcher's theoretical understanding, critical thinking, and descriptive and analytical skill on a particular subject.

PO 7: Pursue interdisciplinary research in contemporary times by linking their area of interest with other branches of knowledge.

PO 8: Apply the research findings, theoretical discourse, and enriching experience for the solution of any societal issues.

PO 9: Enable the researchers to become self-reliant as well as valuable assets for society and the country as a whole.

PO 10: Augment the capacity and research skills of scholars through seminars, symposiums, workshops, and special lecture series.

Programme Specific Outcomes (PSO)

PSO 1. The scholars will be able to undertake a detailed study on any relevant theme in the areas of social sciences in consonance with appropriate research methods.

PSO 2. The scholars while pursuing their research will develop a theoretical understanding, critical thinking, analytical and descriptive skill on a particular subject.

PSO3. The scholars get an awareness on research ethics, research integrity, publication ethics and predatory publication.

PSO 4. The scholars can be able to disclose the hidden realities or concealed information to the public, and able to apply their research findings for the solution of any contemporary issues of the society.

PSO 5. The scholars will be enabled to conduct their research independently, and further develop their capacity for contributing certain new things to the discourse of knowledge.

PAPER-I: RESEARCH METHODOLOGY AND COMPUTER APPLICATION

Course Outcomes

- CO1. Select the appropriate method/s for a research study
- CO2. Conduct a review of relevant literature
- CO3. Prepare a research proposal and write a research report
- CO4. Identify and access various sources of computerized databases for quantitative and qualitative methods of research
- CO5. Carry out different software analyses of data

PAPER-II:(INDIAN POLITICAL PROCESS)

Course Outcomes

- CO1. Analyze different themes and conceptual categories for applying to understand different specificities of Indian politics
- CO2. Analyze the current political process in India
- CO3. Understand the relationship between social, political and economic process in Indian politics
- CO4. Understand the relationship between the government institutions and political process
- CO5. Develop different institutional frameworks for the understanding of various themes of Indian politics

PAPER- III: REVIEW OF RELATED LITERATURE

Course Outcomes

- CO1. Identify the research gap and write the review in a synchronized manner
- CO2. Select a research area of their interest
- CO3. Write a thematic paper on any contemporary issue in the subject
- CO4. Present a thematic paper
- CO5. Contribute to the research writing

PAPER-IV : RESEARCH AND PUBLICATION ETHICS

Course Outcomes

- CO1. Identify research misconduct and predatory publications
- CO2. Understand the basics of the philosophy of science and ethics, research integrity, and publication ethics
- CO3. Comprehend indexing and citation, open access publications, research metrics
- CO4. Use plagiarism tools for a valid and ethical research report
- CO5. Contribute to research on the subject

B.A. PSYCHOLOGY

Program Outcomes

PO 1. Demonstrate fundamental knowledge and comprehension of the major concepts, theoretical perspectives, historical trends, empirical findings to discuss the ways in which psychological principles apply to behavioral phenomena.

PO 2. Develop scientific reasoning and problem solving, including effective research methods.

Students would learn basic skills and concepts in interpreting behaviour, studying research, and applying research design principles to draw conclusions about behaviour.

PO 3. Developing positive attributes such as empathy, compassion, optimism, social participation, and accountability.

PO 4. Acquire the skill for self-presentation and self-management, communicating effectively in writing and orally, asking questions, conveying information to others in a simple and unambiguous way, active listening, giving and receiving feedback, making presentations, and report writing.

PO 5. Learn the application of psychology-specific content and skills, effective self-reflection skills, project management skills, teamwork skills, and career preparation. These skills would be developed and refined both in traditional academic settings as well as through extracurricular involvement.

PO 6. Cultivating an ethical mindset, including a strong work ethic, avoiding unethical behaviours such as data fabrication and plagiarism, being mindful of implications of research using human participants.

PO 7. Preparing students for state-level entrance examinations in psychology.

PO 8. Developing basic professional skills such as data analysis, computer literacy, psychological testing and measurement, observation, technological application and conceptual growth.

PO 9. Holistic development of students to create responsible citizenship through social, moral, ethical, and professional code of conduct.

PO 10. Enabling the students to use advanced range of generic skills that are helpful in Employment, internships, and social activities.

Program Specific Outcomes

PSO1. To develop a multi-disciplinary approach in understanding behavior from the perspective of other social sciences like political science, economics, sociology, logic and mathematics etc., further inculcating a holistic learning experience that fosters professional, and vocational courses in higher education.

PSO2. Understand, analyse and evaluate individual differences based on various perspectives and theories of personality and intelligence. As well as, apply and test individual differences in real life outcomes.

PSO3. To understand the statistical concepts of how data are classified, organized, measured and analysed using different statistical methods and develop the ability to draw inferences about variables under study.

PSO4. Investigate different aspects of human behaviour with an understanding of various

research methods and demonstrate their application in psychosocial and professional settings.

FIRST SEMESTER

Core-I: INTRODUCTORY PSYCHOLOGY

(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Acquaint and enrich students' understanding of major psychological concepts and theoretical perspectives, with an emphasis on applications of psychology in everyday life.

CO2. Help students learn the scientific discipline of psychology; the advantages, limitations and applications of various research methods used in the field of psychology.

CO3. Students will develop critical thinking to use scientific techniques for biological psychology and develop awareness of brain and behaviour inter-relationships.

CO4. Understand the nature of consciousness, sleep-wake cycle, hypnosis, hallucinations, and meditation

CO5. Experimentally determine the R.L. for two-point tactual sensation by applying the method of limits of psychophysics.

CO6. Experimentally determine the D.L. for lifted weights by applying the method of constant stimuli of psychophysics.

Core-II: BASIC DEVELOPMENTAL PROCESSES.

(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Understand the foundational principles and theories of human development and apply them to examine and evaluate the bio-psychosocial bases of human behaviour throughout the lifespan.

CO2. Investigate, apply, and analyse the formulation of change that occurs through physical, cognitive, and socio-emotional factors as people evolve from conception to birth.

CO3. Develop an understanding into issues related to culture, gender, sexual identity, environmental and genetic factors that pertain to physical and psychological development.

CO4. Students learn to envision issues of self and identity from different points of view, within different disciplinary frameworks, and through different theoretical conceptions.

CO5. Practically assess the locus of control of four college students by applying the Rotter's Locus of Control Scale.

CO6. Practically measure the emotional intelligence of four college students by applying the Schutte's Emotional Intelligence Scale.

AECC – 1 ENVIRONMENTAL STUDIES & DISASTER MANAGEMENT

(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Students understand about problems of environmental pollution and Impact of pollution on human and ecosystem and control measures.

CO2. Students will learn about increase in population growth and understand the issues of use of resources in proper manner leading to sustainable development.

CO3. Learn about causes and impacts of Disasters and Case studies of National and Global disasters and risk reduction approaches of Disasters with safety issues in mitigating Industrial disasters.

CO4. Basic idea about the mode of transmission and course of some communicable and non communicable diseases and knowledge on the importance and methods of prevention of epidemics and pandemics

SECOND SEMESTER

Core-III : BASIC PSYCHOLOGICAL PROCESSES

(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Learn the scientific bases of reasoning about the mechanisms of sensory abilities and perceptual processes in humans

CO2. Evaluate how knowledge of the theories and principles of learning and memory is applied in the practical context and its potential areas of research.

CO3. Demonstrate an ability to identify practical applications and social relevance of current theories and empirical work in the area of language and communication.

CO4. Develop thinking and reasoning skills to arrive at reasoned decisions, evaluate the credibility of different sources of evidence, and acquire the flexibility and confidence to transfer and apply these skills across a range of contexts.

CO5. Experimentally demonstrate the learning curve as a function of learning trials by applying the list of non-sense syllables.

CO6. Experimentally demonstrate the serial position effect in learning a list of nonsense syllables by the method of anticipation and prompting.

Core –IV : PROCESSES OF HUMAN EMPOWERMENT

(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Understand, analyse and evaluate individual differences in intelligence, as well as test and measure intelligence using various psychological tools.

CO2. Understand, analyse and evaluate individual differences in personality, as well as test and measure personality using various projective and non-projective psychological tools.

CO3. Critically evaluate the theories of motivation and emotion; synthesize the understanding about the cognitive, affective processes involved in human behaviour and their applications

CO4. Understand the various pathways through which cognitive states and processes influence self-efficacy, optimism, and well-being; and learn the application of positive psychology.

CO5. Practically test the non-verbal intelligence of two college students using Raven's Standard Progressive Matrices.

CO6. Practically assess the personality type of a student obtaining responses from the student and two other significant persons in his/her life by using Glazer's test of Personality Type.

AECC-II: MIL ALTERNATIVE ENGLISH

(4 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Demonstrate high-level proficiency in writing and speaking English

CO2. Develop skills in organizing and expressing ideas and viewpoints with clarity and coherence in writing and speech

CO3. Enumerate skills in narration, description, and argumentation

CO4. Develop an acumen for a better understanding of the diversity of human experiences

CO5. Acquire an openness to new ideas, perspectives, and ways of thinking

CO6. Enhance literary and critical thinking

THIRD SEMESTER

Core- V : PSYCHOLOGICAL STATISTICS

(6CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Develop an understanding of the nature of psychological variables and measure them using appropriate scales of measurement. Learning graphical presentations of statistical data.

CO2. Learn the processes of describing and reporting descriptive statistical data through measures of central tendency and variability.

CO3. Learn the methods of drawing inferences and conclusions based on statistical analyses of parametric and non-parametric statistical tests. Understand the use of these measures in the application of research studies.

CO4. Understand critically the problems faced in testing a hypothesis, and apply the statistical tests to analyse real life problems studies under research.

CO5. Reporting of descriptive statistical data, analysis and results using SPSS.

CO6. Familiarise with software used in statistical analysis and its applications in the field of research.

Core –VI : SOCIAL PSYCHOLOGY

(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Develop an understanding of the basic social psychological concepts and learn the various research methods applied in social psychological research.

CO2. Learn the theories of attitude formation, attitude change, and roles of attitude in intergroup situations. Understand the factors leading to prejudice against specific groups and outline different ways of reducing prejudice.

CO3. Identify and evaluate the factors impacting group cohesiveness and conflict, and analyse the theories to understand leadership in group settings.

CO4. Analyse the theories of prosocial behaviour and aggression, and learn the ways to

CO5. Practically assess the ethical values of five adolescents by using the Donelson's Ethical Position Questionnaire.

CO6. Practically measure the attitude of three boys and three girls towards women by using Spence, Helmrich & Stapps' Attitude towards Women scale.

Core- VII :ENVIRONMENTAL PSYCHOLOGY
(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

- CO1. Understand the inter-relationship between environment and behaviour.
- CO2. Understand the hazards to ecology and environment.
- CO3. Analyse different psychological approaches in the study of man-environment relationship.
- CO4. Understand the dimensions of environmental impact assessments, consequences of environmental deprivation; demonstrate the methods of creating environmental awareness analyse the environmental movements of In
- CO5. Practically assess the environmental literacy of four college students using Bob Simpson's Environmental Literacy and Awareness questionnaire.
- CO6. Assess the environmental attitude, concern, and sensitivity of four college students using Bob Simpson's Environmental Literacy and Awareness questionnaire.

SEC I: COMMUNICATIVE ENGLISH

(4 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

- CO1. Demonstrate high-level proficiency in writing and speaking English
- CO2. Develop skills in organizing and expressing ideas and viewpoints with clarity and coherence in writing and speech
- CO3. Enumerate skills in narration, description, and argumentation
- CO4. Develop an acumen for a better understanding of the diversity of human experiences
- CO5. Acquire an openness to new ideas, perspectives, and ways of thinking
- CO6. Enhance literary and critical thinking

GE –I : INTRODUCTORY PSYCHOLOGY

(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

- CO1. Acquaint and enrich students' understanding of major psychological concepts and theoretical perspectives, with an emphasis on applications of psychology in everyday life.

CO2. Help students learn the scientific discipline of psychology; the advantages, limitations and applications of various research methods used in the field of psychology.

CO3 .Students will develop critical thinking to use scientific techniques for biological psychology and develop and awareness of brain and behaviour inter - relationships.

CO4. Understand the nature of consciousness, sleep - wake cycle, hypnosis, hallucinations, and meditation

CO5 . Experimentally determine the R.L. for two - point tactual sensation by applying the method of limits of psychophysics.

CO6. Experimentally determine the D.L. for lifted weights by applying the method of constant stimuli of psychophysics

FOURTH SEMESTER

Core-VIII : PSYCHOPATHOLOGY

(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Acquiring knowledge and skills for assessing maladaptive behaviours using various psychometric tools, understand the theoretical perspectives of psychopathological disorders, learn the skills of diagnostic systems from Diagnostic and Statistical Manual of Mental Disorders – 5th edition

CO2. Understand the diagnostic criteria, etiological factors, and psychotherapeutic management techniques for treating patients with anxiety and mood disorders in a clinical setting.

CO3. Understand the diagnostic criteria, etiological factors, and psychotherapeutic management techniques for treating patients with personality disorders in a clinical setting.

CO4. Understand the diagnostic criteria, etiological factors, and psychotherapeutic management techniques for treating patients with schizophrenia in a clinical setting.

CO5. Practically assess the levels of anxiety using the Hamilton Anxiety Rating Scale.

CO6. Practically formulate the profile and assess the level of depression using the Beck Depression Inventory.

Core -IX :EDUCATIONAL PSYCHOLOGY

(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Acquire knowledge about the historical background, methods of educational psychological research, and various skills and aspects required for

effective teaching-learning process.

CO2. Understand the role of positive learning environment, learn to create positive learning environment and develop the abilities of a good communicator and qualities of an effective teacher.

CO3 .Analyse aptitude, interest and creativity as contributing factors to learning. Learn the various types of assessment tools used in measuring aptitude, interest of learners in classroom settings.

CO4. Gain knowledge about exceptional learners, understand different learning disabilities and develop skills to manage children with disabilities in a 30 classroom setting.

CO5. Practically assess the academic attitude and behaviour of college students by using Sia's Academic Behaviour Scale.

CO6. Practically assess the academic stress of two higher secondary students using Rao's Academic Stress Scale.

Core -X : PSYCHOLOGICAL ASSESSMENT
(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Develop an understanding of parameters of assessment, learn the types of scaling, and techniques of developing scales in formulating psychological tools of assessment.

CO2. In-depth understanding of the principles of test construction and test standardization, learn the classification of psychological tests along with its uses, advantages, limitation, and applications.

CO3. Extensive knowledge about the assessment tools of intelligence and personality testing, its applications in varied settings.

CO4. Comprehensive understanding of tools of assessment used in classroom settings, learn the techniques of grading and reporting classroom performance, and learn the application of computer assessment in classrooms.

CO5. Practically assess the empathetic behaviour of five college students using the Toronto Empathy Questionnaire by Spreng.

CO6. Practically assess the sense of humor of four college students using the McGhee's Scale of Sense of Humor.

SEC II : LOGICAL AND MATHEMATICAL REASONING
(4 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Use their logical thinking and analytical abilities to solve Quantitative aptitude questions from company specific and other competitive tests.

CO2. Solve questions related to Time and distance and time and work etc. from company specific and other competitive tests.

CO3. Understand solve puzzle related questions from specific and other competitive tests.

CO4. Solve questions related to permutation & combinations and probabilities from company specific and other competitive tests.

CO5. Detect errors of grammar and usage in a given sentence/text and rectify them by making appropriate changes.

CO6. Solve questions based on critical reasoning.

CO7. Analyze reading passages and quickly find out the correct responses to questions asked by using reading skills like skimming, scanning, reading between the lines, etc.

CO8. To use idiomatic expressions in writing and speaking and to solve questions based on them.

GE- II BASIC: DEVELOPMENTAL PROCESSES

(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Understand the foundational principles and theories of human development and apply them to examine and evaluate the bio-psycho-social bases of human behaviour throughout the lifespan.

CO2. Investigate, apply, and analyse the formulation of change that occurs through physical, cognitive, and socio-emotional factors as people evolve from conception to birth.

CO3. Develop an understanding into issues related to culture, gender, sexual identity, environmental and genetic factors that pertain to physical and psychological development.

CO4. Students learn to envision issues of self and identity from different points of view, within different disciplinary frameworks, and through different theoretical conceptions.

CO5. Practically assess the locus of control of four college students by applying the Rotter's Locus of Control Scale.

CO6. Practically measure the emotional intelligence of four college students by applying the Schutte's Emotional Intelligence Scale.

FIFTH SEMESTER

Core –XI : ORGANIZATIONAL BEHAVIOR

(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Understand the different concepts, historical accounts, and perspectives of organizational behaviour.

CO2. Understand the structure, functions, roles of organizations; learn the processes of group decision-making and leadership functions in organizations.

CO3. Understand the theories of work motivation and related issues of power and politics in the organizational setup; learn the effective managerial intervention methods to motivate employees.

CO4. Help students demonstrate professional skills in the evaluation, management, and development of human resources in the organization.

CO5. Practically measure the basic leadership style of four college students using the Greenberg's scale of Basic Leadership Style.

CO6. Practically measure the conflict-handling style of four college students using the Rahim's scale of Conflict-Handling Style.

Core-XII : HEALTH PSYCHOLOGY

(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Understand the concepts and scope of health psychology, learn the bio-psychosocial model of health and illness, demonstrate an understanding of the concepts of stress and coping, and practice the skills in administering relaxation techniques.

CO2. Understand the significance of behavioural and psychological correlates of health and illness, demonstrate an understanding of the models of health

CO3. Identify and analyse the methods of symptom perception, compliance behaviour, coping with the crises of illness; and demonstrate an application of health promoting and enhancing behaviour

CO4. Extensive analysis of health issues among children, women, and elderly.

CO5. Practically assess the sleep quality of four college students by applying Pittsburgh's Sleep Quality Index (PSQI)

CO6. Practically assess the coping strategies of four college students by applying Tobin's Coping Strategy Inventory (TCSI)

DSE-I : PSYCHOLOGICAL RESEARCH AND MEASUREMENT

(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Demonstrate an understanding of the scientific methods, types of psychological research,

and sampling techniques; applying this knowledge to conduct quantitative research

CO2. Demonstrate the purpose and methods of psychological scaling; explain the concept of

test construction

CO3. Explain the types of pre and post-test, factorial, and randomized block design applied in research; demonstrate the process of standardization of tests using reliability, validity, norms

CO4. Explain the techniques of assessment of personality using projective and psychometric

CO5. Study the personality dynamics of an individual by administering the Thematic Apperception Test

CO6. Practically administer the Jung/Kent-Rosan off list of Word Association Test on a participant and present a psychological report on the areas of emotional difficulties

DSE-II : PSYCHOLOGY AND SOCIAL ISSUES

(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Understand the structure and characteristics of the social systems in India through family, caste, class, power, religion; and the theories of poverty, sources of deprivation, inequality, and social justice

CO2. Demonstrate an understanding of the role of behaviour in health and illness, prevention techniques, health scenario in India; development of politics using ideologies, small groups; issues of quality of life, human and social development

CO3. Understand the psychology of corruption, bribery, juvenile delinquency, terrorism, criminal behaviour, alcoholism, and psychopaths

CO4. Explain the concepts of social integration and categories of violence, and apply the intervention techniques to handle conflicts, prejudices, achieve social integration,

CO5. Practically assess the quality of life of four families using the Beach Centre Family Quality of Life Scale

CO6. Practically assess the community integration of a village by using Barry Willer's Community Integrity Questionnaire

SIXTH SEMESTER

Core Paper XIII COUNSELING PSYCHOLOGY

(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Understand the concept, scope, purpose of counselling psychology in India; explain the characteristics of a good counsellor; learn the ethics, values, process, education and

training methods of counsellors

CO2. Understand the techniques and applications of psychodynamic and cognitive approaches to counselling along with the Indian contribution of yoga and meditation in the field of counselling psychology

CO3. Demonstrate the procedures of working in a counselling relationship; learn the emphases, roles, and activities of school and college counsellors

CO4. Explain the process and techniques of family and marriage counselling; alcohol and drug abuse counselling; counselling persons with suicidal tendencies and victims of harassment and violence.

CO5. Practically assess the marital relationship of two couples applying the Lerner's Couple Adjustment Scale

CO6. Practically demonstrate four case studies of high school students with problem behaviours in a case record format

Core – XIV: POSITIVE PSYCHOLOGY
(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to:

CO1. Demonstrate an understanding of the history and scope of positive psychology and its cross-cultural perspectives; extensive knowledge of the contributions of the pioneers of positive psychology.

CO2. Understand the concepts of flow and happiness; study the related theories and models explaining happiness behaviour and its consequences; develop the skill to apply the strength based approach of flow and happiness in psychotherapeutic interventions.

CO3. Develop the skills to understand learn the application skill of attaining and promoting psychological well-being, altruism, hope, resilience, positive thinking, character strengths.

CO4. Comprehensive knowledge and skills of increasing optimism, discovering strength, practicing mindfulness, building healthy relationships, practicing yoga, meditation and test. developing spiritual intelligence applied in psychotherapeutic interventions.

CO5. Practically measure the happiness of four adults using the Oxford Happiness Questionnaire.

CO6. Practically measure the spiritual intelligence of four adults using the King's Spiritual Intelligence Test.

DSE-III : PSYCHOLOGY OF DISABILITY

(6 CREDITS)

(FM:100)

Course Outcomes

After completion of this paper student would be able to

CO1. Demonstrate an understanding of concept, types, assessment, and diagnostic criteria of disabilities; in-dept knowledge on the disability policy of India, rehabilitation council of India, national trust, Equal opportunities bill and its application in the profession of clinical and rehabilitation psychologist

CO2. Explain the theoretical models of disability, its advantages, limitations, and applications in dealing with persons with disability

CO3. Understand the social and familial support structures of disability, the belief and attitude towards disability; the psychological, educational, and employment issues faced by disabled persons

CO4. Demonstrate an understanding and application of the techniques of psychotherapeutic and rehabilitative intervention plans for disabled persons; and critically analyse the contemporary debates around euthanasia and prenatal selection

CO5. Practically assess the attitude of eight college students, including two boys and two girls, towards disability by applying the Attitude towards Disabled Persons Scale developed by Yuker, Block & Young

CO6. Practically assess the knowledge and awareness of four college students about the state of affairs of disability in India using multiple choice questionnaire

DSE—IV : DISSERTATION / RESEARCH PROJECT

(6 CREDITS)

(FM:100)

Course Outcomes

After completion of this paper student would be able to

CO1. Independently prepare a research design to carry out a research project

CO2. Review the related research papers and discover a research problem for the study, and formulate the hypothesis

CO3. Understand and apply the process of administration, scoring, and interpretation of the instrument to be used to measure the variables under study

CO4. Learn and apply the use of statistical techniques for interpretation of data

CO5. Learn the APA style of reporting a research study

CO6. Prepare the report as per the guidelines of APA

DSE-IV :Alternative to dissertation PSYCHOLOGY OF CRIME

(6 CREDITS) (FM:100)

Course Outcomes

After completion of this paper student would be able to

CO1. Gain knowledge about the basics of criminology and become familiar with the psychosocial factors leads to criminal behaviour

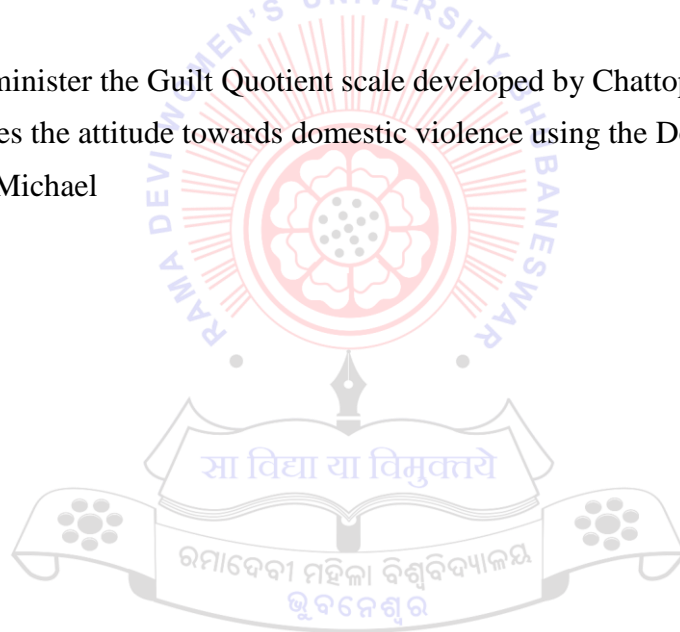
CO2. Explain the theories of criminal behaviour and learn its application in the field of psychology

CO3. Demonstrate an understanding of the crime prevention and control models used in the field of criminal psychology

CO4. Learn the application of psychological interventions while dealing with the victims of rape and sexual assault, domestic violence, bullying, school and workplace violence, and terrorism

CO5. Practically administer the Guilt Quotient scale developed by Chattopadhyay

CO6. Practically assess the attitude towards domestic violence using the Domestic Violence Scale developed by Michael



M.A. IN PSYCHOLOGY

Program Outcomes

- PO 1. Cultivating a scientific perspective to understand the complexities of human behavior and experiences at individual and group levels.
- PO 2. Providing students with the opportunities for work experience in organizations dealing with psychopathological disorders and disadvantaged conditions.
- PO 3. Developing basic professional skills pertaining to psychological testing, assessment, and counselling techniques.
- PO 4. Developing the ability to use skills in specific areas related to chosen specialization such as cognitive, organizational, clinical, counselling, health, educational, social, community settings
- PO 5. Developing computer literacy, including the ability to use various e-resources, technology, and statistical software usages.
- PO 6. Acquiring a range of analytical and field-based skills on gender perspectives and apply in the professional field of women studies.
- PO 7. Cultivating an ethical mindset, including a strong work ethic, avoiding unethical behaviours such as data fabrication and plagiarism, being mindful of implications of research using human participants.
- PO 8. Developing skills of communication, negotiation, team work, effective presentation, group discussions.
- PO 9. Developing basic professional skills such as data analysis, psychological testing and measurement, observation, technological application to conceptual growth.
- PO 10. Enabling the students to use advanced range of generic skills that are helpful in social and community activities.

Program Specific Outcomes

- PSO 1. To provide an opportunity to expand the knowledge base to the world of practice with a view to promote healthy interface between academic and society.
- PSO 2. To identify the social and cultural influences on human behavior and demonstrate the skill to use psychological tools and tests to examine the variations in human behavior in clinical, organizational, and educational settings.
- PSO 3. Identify, classify and diagnose different psychological disorders; examine and apply the different treatment programs for various psychological disorders so that students can opt for professional career choices in clinical and other applied branches of psychology.
- PSO 4. To develop a multi-disciplinary approach in understanding behaviour from the perspectives of psychology and develop skills that would foster professional and vocational career choices in the near future.

FIRST SEMESTER

HARD CORE 101: ADVANCED GENERAL PSYCHOLOGY

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Demonstrate an understanding of the functions and theories of attention and perception and learn its application in the area of psychological assessment

CO2. Gain knowledge of the important processes, types and principles of learning and the application of the theories of classical and operant conditioning, observational and social learning in behaviour therapy

CO3. Learn the types, stages, and models of memory and forgetting; apply these theoretical principles in the assessment and intervention of memory-related dysfunctions

CO4. Develop an insight into the nature, theories, and stages of language development; understand the types, process, and barriers to communication; apply these concepts in the formulation and analysis of speech dysfunctions and achieving effective communication in classroom and counselling settings

CO5. Comprehend the theories and measurement of intelligence, emotional and artificial intelligence; learn the application of measurement of intelligence in therapeutic assessment of children and adults

HARD CORE 102: PHYSIOLOGICAL PSYCHOLOGY

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Demonstrate an understanding of the structure functions and types of neurons, process of Generation and degeneration of neurons, types and functions of neurotransmitters; and learn its application to the field of neuropsychological assessment

CO2. Identify the working of, structure and functions of autonomic and somatic nervous system, spinal cord, hindbrain and midbrain; and learn its application to the field of neurocognitive assessment

CO3. Understand the working of, structure and functions of fore brain; and learn its application to the field of neurocognitive assessment

CO4. Develop an insight into the principles of hormonal actions, hormonal influence on growth and activity; the structure and functions of endocrine glands and the hormones secreted and learn the application of hormonal behavioral influence on the interventions of disorders due to hormonal imbalance

CO5. Explain the physiological bases of sleep, arousal, activity, emotional motivational and sexual behaviour; learn the mechanisms of neural bases to apply in the management of sleep emotional motivational and sexual dysfunctions Course Content

HARD CORE 103: LIFESPAN DEVELOPMENTAL PSYCHOLOGY

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Explain the phases and perspectives of life-span development; learn the different research methods used in the field of developmental psychology

CO2. Explain the theories and models of psychological principles to developmental processes; learn the application of the theories to cross-cultural analysis and interventions in developmental research

CO3. Understand the stages during prenatal infancy and childhood, learn the areas of physical cognitive psychosocial physiological and its impact on the course of development; apply the concepts to the psychotherapeutic management.

CO4. Understand the domains of the period of adolescence, adulthood and its challenges in the Course of life; learn its applications for the management of crisis in midlife, gender roles and differences, self and identity, sexuality

CO5. Understand the various challenges, theories of old age, and demonstrate the ability to deal with the crises and health risks faced during old age

HARD CORE 104: PRACTICAL

(CREDITS:5)(Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Practically determine the effect of extraneous and irrelevant stimuli on the work efficiency of students

CO2. Practically assess the level of intelligence of two college students using the Raven's Standard Progressive Matrices to analyse their IQ

CO3. Assess the creativity of four class VIII students by using the Teachers' Rating of Children's Creativity Scale and comment on their traits of creativity

CO4. Practically assess the level of adaptation and coping strategies of four college students using a standard adaptation questionnaire and coping checklist

CO5. Practically assess and examine the gender difference in the locus of control of four college students, two boys and two girls

CO6. Assess the gender difference in attitude towards women among adolescents using the short version of attitude towards women scale developed by Spence, Helm Reich and Stapp

CO7. Identify the critical words of the participant using Jung's Word Association Test form and analyse the clusters of complexes

CO8. Approximately estimate the IQs of four children in the age group of 10 to 14 years using the coding subtest in the performance scale of the Weschler Intelligence Scale of Children-Revised

Course Code: AC-101

Course Title: COMPUTER APPLICATIONS IN TEACHING LEARNING

(CREDITS:5)(Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Demonstrate basic understanding of computer applications with reference to MS Windows,MS excel and MS PowerPoint. (Applying)

CO2. Generate spreadsheets, charts and presentations (Creating); Explain different OERs, MOOCs available for effective learning. (Understanding)

CO3. Develop learners' e-portfolios. (Creating); Determine similarity index of the various documents like dissertations, theses through plagiarism testing software. (Evaluating)

SECOND SEMESTER

HARD CORE 201: RESEARCH METHODOLOGY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Gain knowledge about the concept of research, its objectives, and understand the different types of research used in behaviour science in order to demonstrate its application in conducting research studies

CO2. Understand the concept and formulation of research problem, hypothesis and gain knowledge about the steps involved in conducting research; develop the skill to follow the format of writing a research proposal and report using the APA guidelines for demonstrating its application in the conduction of research studies

CO3. Understand the sampling techniques, errors involved and learn its applications in different areas of conducting research

CO4. Understand the concept principles and classification of research designs, develop an insight into the internal and external validity of research designs, and develop the skill of formulating designs in research studies

CO5. Demonstrate an understanding of the concept types and qualities of research tools, its reliability and validity, the construction and standardization procedures, and the development of norms for research tools

HARD CORE 202: COGNITIVE PSYCHOLOGY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Develop an insight into the foundations of cognitive psychology, its brief history, physiological mechanisms, and research methods used in this field; demonstrate the ability to

develop the skills of conducting cognitive science research

CO2. Understand the concept theories functions of consciousness, and develop an insight into the Indian perspectives on consciousness and its implications in the field of psychotherapeutic intervention

CO3. Understand the concepts process methods of language, thinking, reasoning, decision-making, and problem-solving; demonstrating the skills to apply these methods in real life events

CO4. In-depth understanding of the applications of cognitive psychology in the areas of behavioural economics, consumer behaviour, social and clinical psychological interventions

CO5. Understand the models and theories of decision making and problem solving; develop the skills to apply them in real life events

HARD CORE 203: APPLIED SOCIAL PSYCHOLOGY

(CREDITS:5)(Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Develop an insight into the foundations of applied social psychology, its historical context, the needs to expand this field, and develop the skill to apply its roles in social cultural organizational community economical and criminal settings

CO2. Learn the applications of social psychology to different arenas of life in community settings and achieving a positive well-being

CO3. Learn the applications of social psychology in addressing and handling social diversities across cultures and countries

CO4. Learn the applications of social psychology in the study of Indian caste, class, gender, politics, developmental policies, poverty reduction techniques, and the socialization of children in Indian families

CO5. Develop the skill of applications of social psychology to the field of criminal justice system through the modes of responding to the police investigation, courtroom, and prison settings

HARD CORE 204: PRACTICAL

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Evaluate the motivational and value profiles of four college students (two boys and two girls) using „What motivates you?“ questionnaire

CO2. Compare the decision-making styles of three boys and three girls in the age group 18 to 20 years using „What is your decision-making style?“ questionnaire

CO3. Assess the ethical values of five adolescents by using the Donelson“s Ethical Position Questionnaire and place them in quadrants

CO 4. Assess the level of anxiety of a college student using the Hamilton Anxiety Rating Scale

CO5. Assess the Emotional Intelligence of four girls (two from U.G. 1st year and two from U.G. 2nd year) belonging to the age group 18-20 years, and examine the influence of age on the development of emotional intelligence during adolescence

CO6. Assess the level of depression of a college student using the Beck Depression Inventory

CO7. Assess the academic stress of two higher secondary students in terms of academic frustration, conflict, pressure, and anxiety using the Rao's Academic Stress Scale

CO8. Assess the academic attitude and behaviour of two college students, study the gender difference in respect of their engagement, perception of teacher support and academic expectations using the Student's Academic Attitude and Behaviour Rating Scale

CORE ELECTIVE 201: APPLIED PSYCHOLOGY

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Develop an in-depth understanding of the applications of psychology to the field of education, learn the skills involved in handling specially-abled students in a classroom, develop the skills of training students for improving memory and academic achievements, develop the skill to use psychological tests in classroom assessments

CO2. Learn the applications of psychological principles and methods in training and human resource development, leadership and participatory management, advertising and marketing; and develop the skills of using psychological interventions in the field of military selection, recruitment, and training of personnel

CO3. Develop the skills of applying psychological principles and methods in handling issues surrounding community settings and political behaviours

CO4. Understand the role of psychologists in the field of information technology, mass media boom, economic development, and women entrepreneurs

CO5. Develop the skills of primary secondary and tertiary prevention techniques in the rehabilitation of mental and socially challenged persons; learn psychotherapeutic management skills for applying to patients suffering from substance abuse, juvenile delinquency, and the victims of violence, rape, and abuse

CORE ELECTIVE 201: PSYCHOPATHOLOGY

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Develop an in-depth understanding of the symptom criteria, assessment tools, diagnosis, treatment strategies, research methods for child psychopathology

CO2. Explain the disorders of childhood, communication, and motor skills; understand their

clinical pictures, causal attributions, classifications, and psychotherapeutic management skills

CO3. Outline the classification of anxiety disorders and pervasive developmental disorders, the clinical picture, causal factors, and explain therapeutic interventions to deal with them in a clinical setting

CO4. Explain the substance use disorders, their clinical symptoms, causal factors, and therapeutic interventions

CO5. Learn the major biological, psycho-social, and socio-cultural causal attributions of abnormal behaviour

OPEN ELECTIVE 201: PSYCHOLOGY OF INDIVIDUAL AND SOCIAL ISSUES

(CREDITS:4) (End-Sem:50)

Course Outcomes

After completion of this paper student would be able to:

CO1. Develop an extensive knowledge of psychological measurement of individual differences, standardization and construction of psychological tests, ethical issues in the use of psychological tests

CO2. Learn the techniques and applications of psychotherapeutic approaches for intervention and management of psychosocial dysfunctions

CO3. Learn the applications of psychological interventions to the socially deprived and disadvantaged groups

CO4. Demonstrate an understanding of the applications of psychological bases for social change

THIRD SEMESTER

Hard Core 301: Statistics

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Develop an extensive knowledge of the concept and applications of the normal probability curve, hypothesis testing, levels of significance, confidence interval, effect size, and power of statistical test

CO2. Develop an in-depth understanding of the assumptions of parametric statistical tests – its computations, assumptions, and uses in research work

CO3. Develop an in-depth understanding of the assumptions of non-parametric statistical tests – its computations, assumptions, and uses in research work

CO4. Develop an in-depth understanding of the assumptions of correlational methods in statistics -its computations, assumptions, and uses in research work

CO5. Understand the concept, assumptions, equations, and interpretations of regression and its types; learn the application of regression statistics in research designs

HARD CORE 302: HEALTH PSYCHOLOGY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

- CO1. Develop an insight into the nature models and scope of health psychology
- CO2. Understand the role of behavioural factors in disease and disorder prevention, control, and management
- CO3. Understand the psychological interventions and assessments underlying health promoting and compromising behaviours; learn the skills of pain management
- CO4. Learn the skills of seeking and using health care services
- CO5. Understand the psychotherapeutic techniques and applications of management of chronic and terminal illnesses

HARD CORE 303: PRACTICAL

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

- CO1. Study the mean difference in the academic performance of boys and girls in four school students namely English, mathematics, history and geography for essay type examinations
- CO2. Self-administer two questionnaires to learn about personal affinity towards one group and the primary mode of conflict-handling intention in the group
- CO3. Examine the self-concept by self-administering the “How accurate is your self-concept?” Scale
- CO4. Collect the case history of one high school student in standard format and formulate a case Report
- CO5. Determine the personality type of a student by obtaining responses from him/her and also about him/her from two of his/her close friends using Glazer’s „Are you stress-prone Type A personality?” scale
- CO6. Assess the extent of physical neglect and physical abuse of two primary school students on the basis of teachers’ rating on the „Indicators of Child Abuse” checklist
- CO7. Assess the spiritual intelligence of four adults including two men and two women, using the King’s Spiritual Intelligence questionnaire and find out the gender difference in spiritual intelligence during early adulthood
- CO8. Determine the modes of adjustment, general levels of adjustment and areas of adjustments such as marital, social, and vocational

CORE ELECTIVE 301: SCHOOL COUNSELLING

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Develop an understanding of the history, nature, scope, and requirements of counselling inschool settings

CO2. Develop the skills for the management of scholastic, emotional, conduct, sexuality problemareas in childhood and adolescence, as well as counselling parents and teachers

CO3. Develop the skills for managing social and personal problems in school setting

CO4. Understand and learn to apply the skills for managing and guiding special learners and underachievers in school

CO5. Demonstrate the skills and abilities to provide psychological interventions in victims ofphysical, verbal, sexual, emotional abuse

CORE ELECTIVE 301: GUIDANCE & COUNSELLING

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Understand the concept, processes, techniques, and challenges of guidance and counselling

CO2. Understand the characteristics of different areas and stages of development, learn the skillsof handling problems of childhood, adolescence, adulthood, and old age

CO3. Develop basic counselling skills, interview and history taking techniques, collecting and documenting case histories, and working with other health professionals

CO4. Develop ethical understanding and codes of conduct in practicing counselling in professionalsetting

CO5. Develop the skills and techniques of providing counselling services to special groups such asocially and economically disadvantaged, destitute, orphans, drop-outs, drug addicts, suicidal

CORE ELECTIVE 302: THEORETICAL SYSTEMS IN PSYCHOLOGY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Develop an understanding of the evolution of scientific method in psychology as a scienceand social science

CO2. Gain knowledge about the evolution of contemporary psychology through post-modern andmulticultural movements

CO3. Develop an extensive understanding of functionalism, behaviorism, gestalt, and cognitivismas the foundational approaches in the field of psychology

CO4. Develop an understanding of constructivism and social constructivism as the contemporaryapproaches in psychology

CO5. Gain knowledge about the developmental initiatives and the call of indigenization towards achieving a global psychological paradigm

CORE ELECTIVE 302: APPLIED SOCIAL PSYCHOLOGY II

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Learn the application of social psychology in Indian caste, class, gender, population, and policy systems

CO2. Learn the social psychological aspects of language in India, and the deficiencies of learning in disadvantaged children

CO3. Understand the psychology of deprivation, poverty, and human development

CO4. Understand the role of psychology in nation building

CO5. Develop an in-depth understanding of the types, causes, consequences, prevention, and interventions for violence against children in India

FI-201: FIELD INTERNSHIP

(CREDITS:3)

(End-Sem:50)

Course Outcomes

After completion of this paper student would be able to:

CO1. First hand training and exposure to work culture, ethical conducts, and professional practice of psychotherapeutic interventions in a clinical setting

CO2. This field experience gained in a clinical setup allows for better employment opportunities in the future

FOURTH SEMESTER

Hard Core 401: Social Psychology

(CREDITS:5)(Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

CO1. Develop an understanding of the basic social psychological concepts and learn the various research methods applied in social psychological research.

CO2. Learn the theories of attitude formation, attitude change, and roles of attitude in inter-group situations. Understand the factors leading to prejudice against specific groups and outline different ways of reducing prejudice.

CO3. Identify and evaluate the factors impacting group cohesiveness and conflict, and analyse the theories to understand leadership in group settings.

CO4. Analyse the theories of pro-social behaviour and aggression, and learn the ways to enhance pro-social behaviour and reduce aggression as cited from the research findings.

CO5. Practically assess the ethical values of five adolescents by using the Donelson's Ethical Position Questionnaire.

HARD CORE 402: PRACTICAL
(CREDITS:5)(Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

- CO1. Practically assess the basic leadership styles of four college students including two boys and two girls and observe gender difference in leadership style using the Greenberg Basic Leadership Styles Questionnaire.
- CO2. Evaluate the pattern of development of empathy among the adolescent girls in the age group of 14 to 18 years using the Toronto Empathy Questionnaire.
- CO3. Determine and compare the quality of sleep of academically better and poor college students using the "Pittsburgh Sleep Quality Index".
- CO4. To measure the marital relationship of two couples using Learner's Couple Adjustment Scale and find out the effect of aging on couple adjustment.
- CO5. Assess the conflict-handling style of four college students including two boys and two girls and observe gender differences in conflict-handling by using Rahim's Scale for Interpersonal Conflict-Handling Style.
- CO6. Determine the sense of humor of four college students including two boys and two girls and observe gender differences in sense of humor using the Sense of Humor Questionnaire.
- CO7. Assess the quality of life in two nuclear and two joint families by obtaining responses from their adolescent sons using „The Beach Center Family Quality of life Scale.“
- CO8. Measure the level of happiness of four adults, 2 each belonging to low and high income level, using Oxford Happiness Questionnaire.

HARD CORE 403: DISSERTATION
(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

- CO1. Independently prepare a research design to carry out a research project
- CO2. Review the related research papers and discover a research problem for the study, and formulate the hypothesis
- CO3. Understand and apply the process of administration, scoring, and interpretation of the instrument to be used to measure the variables under study
- CO4. Learn and apply the use of statistical techniques for interpretation of data
- CO5. Learn the APA style of reporting a research study
- CO6. Prepare the research report as per the guidelines of APA

CORE ELECTIVE 401: POSITIVE PSYCHOLOGY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to

- CO1. Develop an in-depth knowledge of the perspectives of positive psychology
- CO2. Learn the skills and applications of developing resilience in childhood, positive youth development, and life tasks of adulthood
- CO3. Understand the concepts of positive emotional states and processes of attaining psychological well-being
- CO4. Develop an extensive knowledge of the mindfulness, flow, and spirituality; learn its practical applications in treating psychopathology
- CO5. Demonstrate an understanding of the concepts and applications of attachment, love and flourishing relationships; learn its application in building positive and health relationship

CORE ELECTIVE 401: COUNSELLING PSYCHOLOGY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

- CO1. Develop a foundational knowledge on the concept, history, and current trends in counselling; learn the comparative analysis between counselling, guidance, and psychotherapy
- CO2. Develop an understanding of the structure, settings, and processes of the counselling sessions; learn the roles and qualities of an effective counsellor
- CO3. Develop an in-depth knowledge of the theoretical approaches and their applications used in counselling process
- CO4. Develop an understanding and practical applications of counselling the victims of children from – abused, alcoholic, divorced parents
- CO5. Learn the ethical considerations, rules, and issues involved in the counselling process

ALLIED CORE 401: WOMEN & SOCIETY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After completion of this paper student would be able to:

- CO1. Familiarize with the women lead environmental movements and women's participation in the climate resilience natural resources management.
- CO2. Acquire knowledge on the differential impact of climate change disasters.
- CO3. Be familiar with the role of technology and how has ICT brought about a change in on women's everyday lives and livelihoods.

CO4. It will enhance students' critical thinking in the use and management of technology in different productive sectors across different category of women.

CO5. Gain an insight into the women and law from rights and equality of opportunity in the access to justice as well as the nuances involved in it.

CO6. Entrust with the duties of framing reports, conducting research and development activities and solving the issues of injustice imparted to the public.



B.A. SANSKRIT

PROGRAMME OUTCOMES

After becoming graduate students can:

PO1. CHARACTER DEVELOPMENT: Developing personal and behavioural competence through moral and ethical teachings of stories and some popular texts.

PO2. COMMUNICATION SKILL: Understanding Basic communication skills in Sanskrit with LSRW (Listening, Speaking, Reading and Writing) through knowledge of Paninian Grammar.

PO3. SOCIAL VALUES: Enhancing social competence and transformation through learning values and social concerns reflected in ancient Sanskrit treatises and Ornate Prose and Poetry in Classical Sanskrit Literature.

PO4. CRITICAL THINKING: Developing knowledge of fundamental principles of literary criticisms of both ancient and modern Sanskrit poetics.

PO5. VEDIC WISDOM: Contextualizing the ancient Indian wisdom reflected in Vedic Literature which is timeless and still applicable to the society.

PO6. ANCIENT SOCIO-POLITICAL THOUGHTS: Analyzing social problems and understanding social dynamics through socio-political thoughts of ancient India and ethical literature in Sanskrit.

PO7. PERSONAL PROBLEMS AND SOLUTION: Facilitating life skills like self-respect, safe-development, and competency in communicating, interacting, listening, speaking and observing.

PO8. MEDICINE AND ENGINEERING KNOWLEDGE: Enhancing technical abilities in Medicine, Astrology, Architecture and making Sanskrit learners self-sufficient.

PO9. INTELLECTUAL DEVELOPMENT: Developing the basic approach to study Indian Philosophy and research work for intellectual, analytical and critical thinking capacities.

PO10. SKILL OF TRANSLATION: Providing learners' competence level through Translation, Transliteration, Proof Correction, usage of various e-resources, social media, computer literacy etc.

PROGRAMME SPECIFIC OUTCOMES:

After becoming graduate students can:

PSOS -1. Make them eligible for higher education.

PSOS -2. Pursue project works independently.

PSOS-3. Understand and develop holistic approach of the Core Areas of the subject.

PSOS-4. Develop a concept of ancient Indian history, philosophy and literature.

PSOS-5. Enhance communication skill of Listening, Speaking, Reading and Writing in Sanskrit.

PSOS-6. Make the Sanskrit Literature (Prose and Poetry) melodious and lucid with the knowledge of Prosody & Figures of Speech.

PSOS-7. Understand and work for multidisciplinary activities with other disciplines.

PSOS-8. Enhance their skills in fields of Plant life, Medicine, Astrology, Architecture etc.

SEMESTER-I: C-I:MORAL TEACHINGS AND BASICS OF SANSKRIT

(4 CREDITS)

(FM:100)

Course Outcomes

CO1.Ability to develop a strong sense of ethical and moral values in personal and professional life.

CO2.A solid foundation of students' positive mind-set through lofty teachings of Hitopadesa.

CO3.A solid foundation of students' positive mind-set through lofty teachings of Yaksaprasna.

CO4.Awareness of communication skills in understanding Sanskrit Grammar with knowledge of basic words and roots.

CC-II:DRAMA-I AND HISTORY OF SANSKRIT LITERATURE –I

Course Outcomes (COs)

CO1. Through understanding of love and romance by youths through the popular drama of Kalidasa i.e. Abhijnanasakuntalam.

CO2.Negotiation of texts independently and appreciation for Sanskrit Learning.

CO3. General outlines of Classical Sanskrit Literature (Ramayana, Mahabharata,Puranas.).

CO4. General outlines of Classical Sanskrit Literature (Poetry and Dramas)

GE-1:MORAL TEACHINGS AND BASICS OF SANSKRIT

Course Outcomes (COs)

CO1.Ability to develop a strong sense of ethical and moral values in personal and professional life.

CO2.A solid foundation of students' positive mind-set through lofty teachings of Hitopadesa.

CO3.A solid foundation of students' positive mind-set through lofty teachings of Yaksaprasna.

CO4.Awareness of communication skills in understanding Sanskrit Grammar with knowledge of basic words and roots.

AECC-I: ENVIRONMENTAL STUDIES AND DISASTER MANAGEMENT

Course Outcome (COs):

On Completion of this course;

CO1. Students understand about problems of environmental pollution and Impact of pollution on human and ecosystem and control measures.

CO2. Students will learn about increase in population growth and understand the issues of use of resources in proper manner leading to sustainable development.

CO3. Learn about causes and impacts of Disasters and Case studies of National and Global disasters and risk reduction approaches of Disasters with safety issues in mitigating Industrial disasters.

CO4. Basic idea about the mode of transmission and course of some communicable and non-communicable diseases and knowledge on the Importance and methods of prevention of epidemics and pandemics.

Semester-II

CC-III:DRAMA II AND DRAMATURGY

Course Outcomes (COs)

CO 1.Through understanding of love and romance by youths through the popular drama of Kalidasa i.e. Abhijnanasakuntalam.

CO 2.Negotiation of texts independently and appreciation for Sanskrit Learning.

CO3. Acquaintance with the keynote essentials of the rhetorical work Sahityadarpana of Viswanath Kaviraja.

CO4. Knowledge of Aesthetic values by reading Sanskrit Literature.

CC-IV:AN INTRODUCTION TO THE TECHNIQUE OF PANINIAN GRAMMAR AND PROSODY

Course Outcomes (COs)

CO1. Idea of Linguistics through Paniniangrammer of Phonology, Morphology, Syntaxand Semantics.

CO2. Idea of vocabulary relevant to Sanskrit Grammar and Arrangement of PaninianGrammar.

CO3. Awareness of Sanskrit language through technical ideas of Paninian rules.

CO4. Realisation of the styles of various meters to get pleasure from Sanskrit Slokas.

AECC-II: MIL – ALTERNATIVE ENGLISH

Course Outcome (COs):

On Completion of this course;

CO1. Demonstrate high-level proficiency in writing and speaking English.

CO2. Employ effectively the language of their discipline.

CO3. Develop skills in organizing and expressing ideas and viewpoints with clarity and coherence in writing and speech.

CO4. Formulate and defend original arguments.

CO5. Enumerate skills in narration, description, and argumentation.

CO6. Ascertain insight into different cultures.

CO7. Gain good knowledge that includes understanding recent developments inlanguage and literature.

CO8. Develop an acumen for a better understanding of the diversity of humanexperiences.

CO9. Acquire an openness to new ideas, perspectives, and ways of thinking.

CO10. Enhance literary and critical thinking.

GE-II: KHANADAKAVYA AND DARSANAKAVYA

Course Outcomes (COs)

CO1. Inquisitiveness for knowing geographical ideas about boundary and various places of India, cultural values, relationship etc.

CO2. Awareness of Indian age-old heritage exercising: inexpressible impact on the life and culture of the India.

CO3. Development of a strong concept of character –building through Purusottama Yoga (Chap-XV) of Bhagavadgita.

CO4. Knowledge of Self-management like self-control, control over emotions, consistency and persistency, perseverance etc. to excel in every walk of life.

Semester-III

CC-V: POETRY AND HISTORY OF SANSKRIT LITERATURE-II

Course Outcomes (COs)

CO1. Inquisitiveness for knowing geographical ideas about boundary and various places of India, cultural values, relationship etc.

CO2. Skill of Explanation and Translation from Sanskrit to Odia.

CO3. Awareness of Indian age-old heritage exercising: inexpressible impact on the life and culture of the India.

CO4. General outlines of Classical Sanskrit Literature (Champu & Gadya Kavya)

CC-VI: META RULES OF PANINIAN GRAMMER, POETICS & FIGURE OF SPEECH.

Course Outcomes (COs)

CO1. Enhancement of Knowledge of meta-rules of Panini which is supposed to enrich the grammatical base of students.

CO2. Basic knowledge of kavyas in Sanskrit Literature.

CO3. Basic knowledge of making sentence and three powers.

CO4. Affirmation of reciting Sanskrit slokas with figure speech and Poetics that develop clarity and lucidity in Sanskrit learning.

CC-VII: CASE ENDINGS IN PANINIAN GRAMMAR AND TRANSLATION.

Course Outcomes (COs)

CO1. Basic ideas about cases and case-endings in Paninian grammar to develop tips to write, speak translate in Sanskrit.

CO2. Enhancement of skill to translate Sanskrit text to other languages like English, Odia, Hindi etc.

CO3. Basic ideas about cases and case-endings in Paninian grammar to develop tips to write, speak translate in Sanskrit.

CO4. Basic ideas about cases and case-endings in Paninian grammar to develop tips to write, speak translate in Sanskrit.

Course Outcome (COs):

On Completion of this course;

CO1.enhance their ability to build and enrich their communication skills

CO2.be able to build up the four primary skills in students in the academic as well as in the wider domains of use like public offices.

CO3.acquire analytical and comprehension reading skills

CO4.identify basic principles of communication

CO5.build speaking and listening skills

CO6. learn beyond the conventional syllabus and be prepared to meet challenges while seeking a job

CO7.be able to synthesize knowledge and use it creatively to better understand and improve themselves

CO8.be able to communicate effectively through written reports, presentations, and discussions

CO9. develop a neutral accent and improve general standard of pronunciation

CO10. speak globally intelligible English

Semester-IV

CC-VIII:UPANISAD , RAMAYAN AND BHAGAVADGITA

Course Outcome (COs):

CO1.Development of a strong concept of character –building through Upanisadic story of Nachiketa.

CO2.Skill of explanation & Translation of Mantras.

CO3.Inculcation of human values like non-violence, kindness etc. as instructed by Devi Sita to Lord Ram in the epic Ramayana. This also develops gender sensitization like how to show respect to ladies in society.

CO4.Knowledge of Self-management like self-control, control over emotions, consistency and persistency, perseverance etc. to excel in every walk of life.

CC-IX:CASES AND CASE-ENDINGS OF PANINIAN GRAMMER, TRANSLATION AND LEXICON.

Course Outcome (COs):

CO1.Basic ideas about cases and case-endings in Paninian grammar to develop tips to write, speak translate in Sanskrit.

CO2.Enhancement of skill to translate Sanskrit text to other languages like English, Odia, Hindi etc.

CO3.Basic ideas about cases and case-endings in Paninian grammar to develop tips to write, speak translate in Sanskrit.

CO4.Basic ideas about Lexicon of Amarakosha.

CC-X : ORNATE PROSE IN CLASSICAL SANSKRIT

Course Outcome (COs):

CO1.The students will have also character development through the popular books of Dasakumarcharitam.

CO2.Knowledge of various inscriptions found in India, which help students to know about the Ancient Indian history, literature, art, religion etc.

CO3.Knowledge about vastness and variety of the scope of Sanskrit literature specifically civilisation and culture in prose like Sukanasopadesa.

CO4.Development of skill in Explanation and Translation in Prose Texts.

SEC-II: QUANTITATIVE APTITUDE AND LOGICAL REASONING

Course Outcome

I. QUANTITATIVE APTITUDE & DATA INTERPRETATION

After completion of the course the students shall be able to:

CO1. Use their logical thinking and analytical abilities to solve Quantitative aptitude questions from company specific and other competitive tests.

CO2. Solve questions related to Time and distance and time and work etc. from company specific and other competitive tests.

CO3. Understand and solve puzzle related questions from specific and other competitive tests.

CO4. Solve questions related to permutation & combinations and probabilities from company specific and other competitive tests.

II. LOGICAL REASONING

After completion of the course the students shall be able to:

1. Detect errors of grammar and usage in a given sentence/text and rectify them by making appropriate changes.

2. Solve questions based on critical reasoning.

3. Analyze reading passages and quickly find out the correct responses to questions asked by using reading skills like skimming, scanning, reading between the lines, etc.

4. To use idiomatic expressions in writing and speaking and to solve questions based on them.

Course Outcome (COs):

I. QUANTITATIVE APTITUDE & DATA INTERPRETATION

On Completion of this course;

CO1.Use their logical thinking and analytical abilities to solve Quantitative aptitude questions from company specific and other competitive tests.

CO2.Solve questions related to Time and distance and time and work etc. from company specific and other competitive tests.

CO3. Understand and solve puzzle related questions from specific and other competitive tests.

CO4.Solve questions related to permutation & combinations and probabilities from company specific and other competitive tests.

II. LOGICAL REASONING

On Completion of this course;

CO1.Detect errors of grammar and usage in a given sentence/text and rectify them by making appropriate changes.

CO2.Solve questions based on critical reasoning.

CO3.Analyze reading passages and quickly find out the correct responses to questions asked by using reading skills like skimming, scanning, reading between the lines, etc.

CO4.To use idiomatic expressions in writing and speaking and to solve questions based on them.

Semester-V

CC-XI:ORNATE POETRY IN SANSKRIT

Course Outcomes (COs):

CO1.The students will have also character development through the popular books of Sisupalabhadham.

CO2.Development of skill in Translation and Explanation of the texts.

CO3.The knowledge of role of a lady in society from the text of Kiratarjuniyam.

CO4.The students will have development of Translation and Explanation of the texts through the popular books of Kiratarjuniyam.

CC-XII:VEDA,VEDAIC GRAMMAR AND HISTORY OF VEDIC LITERATURE

Course Outcomes (COs):

CO1.Knowledge of Vedas, Upanishads etc. the actual Intellectual Property of Ancient India in this paper explicitly inspires and uplifts human lives socially, morally and spiritually.

CO2.Acquaintance with knowledge of explanation and translation of Vedic mantras.

CO3.Knowledge of Vedic Grammar to understand Vedic texts.

CO4.Knowledge of History of Vedic Literature.

(DSE-I):Socio-Political thought in Ancient India

Course Outcomes (COs):

CO1.Knowledge of various ancient Indian knowledge system, duties of kings for good governance, punishment policy, tax policy, war policy, etc. from the famous book of Kutilya i.e. Arthashastra.

CO2.Expansion of Ancient Indian Polity from Arthashastra.

CO3.Knowledge of Dharmashastra literature in which ancient Indian social institutions and Indian polity are highlighted. The treatise of Yajnavalkyasmruti highlights law and conduct of Ancient India.

CO4.Expansion of Ancient Indian Laws from Dharmashastra.

(DSE-II): ETHICAL LITERATURE IN SANSKRIT

Course Outcomes (COs):

CO1.Acquaintance of a collection of moral teachings in Sanskrit literature.

CO2.Knowledge of Verses which are full of wit and wisdom related to family, social,economic, political and mental life of human beings.

CO3.Knowledge of advice to conquer wicked and falls friend, son, servant, ruler oradministration from Nitisataka.

CO4.Students can follow the path of righteousness for a happy and contented life.

Semester-VI

CC-XIII:AYURVEDA AND VRKSAYURVEDA

Course Outcomes (COs):

CO1.Enhancement of knowledge of plants life and their contribution to human healthand wellbeing.

CO2.Knowledge of Ayurveda in Charaka Samhita, alternative medicine system ofancient Indian Risis

CO3.Impact of herbal life in Wellness Industry.

CO4.Knowledge of Vrkseyurveda regarding medicinal plants, process of plantation,their remedial measures for diseases etc.

CC-XIV:TECHNICAL LITERATURE (JYOTISA&VASTU)

Course Outcomes (COs):

CO1.The knowledge of Planetary world in Indian Astrology.

CO2. Enhancement skill in the field of Hindu Astrology.Thebook Jyotisara-ratnavali describes the planetary bodies in the solar system and forecasts futureevents.

CO3.Knowledge of Vastu Shastra which impacts the universal need for peace and harmony.

CO4.The text book of Vasturatnakar impacts knowledge of perfectly balanced home,which invites positive energy and keeps out negative energy.

(DSE-III): TRANSLATION, EDITING AND WRITING SKILL

Course Outcomes (COs):

CO1.Enhancement of skill in translation of any valuable Odia/English text to Sanskritlanguage, which is very necessary for spreading new information and knowledgeto all.

CO2.Knowledge of precise writing in Sanskrit.

CO3.Knowledge of editing and proof reading which can enhance their mastery overSanskrit language and style of righting.

CO4.Knowledge of Transliteration to study Sanskrit texts easily.

DSE-IV: Indian Philosophy: General Ideas/ Project works

Indian Philosophy**

Course Outcomes (COs):

CO1.Knowledge of Indian philosophy of Samkhya and Yoga which help one to achieve intellectual and behavioural competence

CO2.Knowledge of Vaisesika philosophy which is the right instrument and formulation of all actions and duties.

CO3.Knowledge of Vedanta philosophy which develops of an inquisitive mind and sense of self confidence to produce research work independently.

CO4.Knowledge of Nastika, Carvaka and Boudha philosophy.

Project*

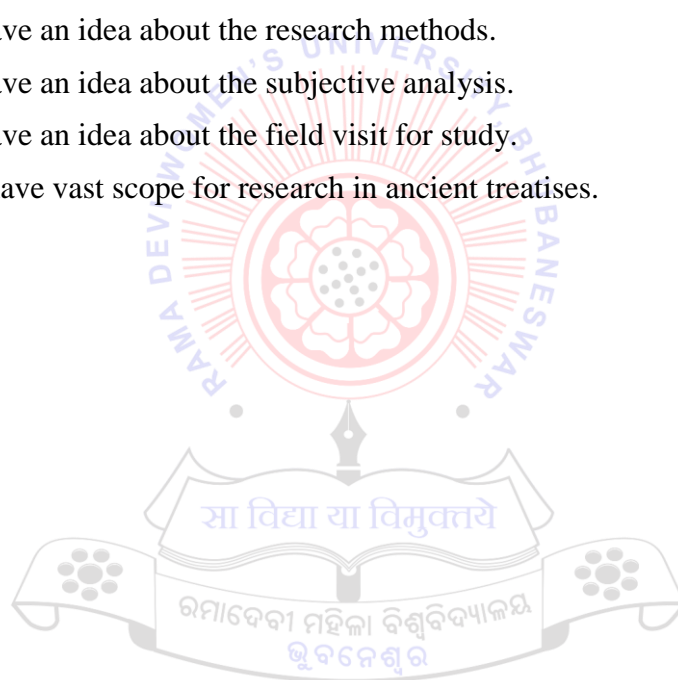
On Completion of this course;

CO1.Student will have an idea about the research methods.

CO2.Student will have an idea about the subjective analysis.

CO3.Student will have an idea about the field visit for study.

CO4.Students will have vast scope for research in ancient treatises.



B.A. SOCIOLOGY

Programme Outcomes

PO1: Develop a holistic understanding of various sociological concepts, social processes and social institutions that man encounters as a member of society.

PO2: Gain knowledge about the interrelationship between individual and society, its types and various social processes that contribute to sustain the society over a period of time.

PO3: Examine the theoretical relevance and analytical utility of the premises, methodology and conclusion of the diverse perspectives in understanding society and change.

PO4: Enable the students to comprehend the heterogeneities in culture, institutions and their functions, changes seen in these institutions in contemporary times, and the contrasts found between different societies.

PO5: Acquaint the students with the scientific ways of studying social phenomena and enable them to capture the most relevant data in an objective manner.

PO6: Gain insight into emerging issues and contemporary debates within the development discourse.

PO7: Help develop rational thinking, critical temper and scientific outlook to enhance productivity and demand of the learner in the market.

PO8: Learners will be more sensitive, socially responsible, endowed with humane values and creativity.

PO9: Will reinforce cultural heritage, ethical values and moral standards in the thought process and behaviour of the learner.

PO10: Equip the students with conceptual, theoretical and empirical clarity about various social structures and help them plan, monitor and evaluate various developmental programmes at the local and national level.

Programme Specific Outcomes

PSO1 The students will become well-versed with various research methods, both qualitative and quantitative, that is highly demanded in academics, fundamental research and policy research undertaken both by Government and Non-Government agencies.

PSO2: Sociology provides an intellectual background for students considering careers in business, social services, public policy, government service, nongovernmental organizations, foundations, or academia.

PSO3: Comprehend the various features of Indian Society and culture, including unity in diversity; Indian social structure and have better understanding about rural, urban and tribal India.

PSO4: It prepares an individual to become a useful member of society and nation at large. It will help the students identify various problems prevalent in society and think of measures to eradicate them.

FIRST SEMESTER

CORE 1: INTRODUCTION TO SOCIOLOGY- I

(CREDITS: 6)

(FM: 100)

Course Outcomes

After studying this paper, the students can

CO1. Develop knowledge about the emergence, nature and scope of the subject.

CO2. Can get to know the convergence and divergence of Sociology with other social sciences.

CO3. Can get to know about the basic concepts used in the subject.

CO4. Can generate ideas about the social processes and social institutions that man encounters as a member of the society.

CORE 2: INTRODUCTION TO SOCIOLOGY-II

(CREDITS: 6)

(FM: 100)

Course Outcomes

After studying this paper, the students can

CO1. Develop knowledge about the subject matter, nature and scope of the key topics and its subject matter.

CO2. Develop knowledge about individual and society.

CO3. Can get acquainted with the basic concepts used in the subject.

CO4. Can generate ideas about the social processes and social institutions.

SECOND SEMESTER

CORE- 3: INDIAN SOCIETY

(CREDITS: 6)

(FM: 100)

Course Outcomes

After studying this paper, the students can

CO1. Become familiar with the diverse composition of Indian society-racial, religious, linguistic and

CO2. Identify various factors which contributes to unity in diversity.

CO3. Understand the very bases of Hindu society which sustains it.

CO4. Gain insights into the working of important social institutions and deciphering changes in the functioning of these institutions in contemporary times.

CO5. Decode a complex social institution like caste system and identifying the changes in the system in contemporary times.

CORE-4: SOCIOLOGY OF ENVIRONMENT

(CREDITS: 6)

(FM: 100)

Course Outcomes:

After studying this paper, the students can

CO1. Understand the interaction between different components of environment and society.

CO2. Acquire knowledge about specific environmental movements in India.

CO3. Gain awareness about the current and critical environmental issues.

CO4. Get familiarized with environmental protection efforts at different levels and by different stakeholders.

THIRD SEMESTER

CORE-5 : CLASSICAL SOCIOLOGICAL THINKERS

(CREDITS: 6)

(FM: 100)

Course Outcomes:

After studying this paper, the students can

CO1. Broaden understanding and knowledge about theoretical and methodological contributions of classical sociological thinkers.

CO2. Realise the contemporary relevance of the classical sociological theories.

CO3. Acquire the ability to make comparative analysis of different classical sociological theoretical perspectives.

CO4. Have a strong grasp over sociological theory on the foundation of which modern sociological theory is built.

CORE -6 : SOCIAL CHANGE AND DEVELOPMENT

(CREDITS: 6)

(FM: 100)

Course Outcomes:

After studying this paper, the students can

CO1. Have a clear understanding about meaning and nature and various factors of social change

CO2. Get familiarized with various theories of social change

CO3. Able to critically analyse different models of social development.

CO4. Distinguish different processes of social change and their impact on Indian society.

CORE-7: SOCIOLOGY OF GENDER

(CREDITS: 6)

(FM: 100)

Course Outcomes

After studying this paper, the students can

CO1. Develop sensitivity towards gender.

CO2. Work towards creation of a gender-neutral social world.

CO3. Learn to integrate gender aspects with development practices.

CO4. Become aware of the changing status of women in Indian society and relate it to their status in contemporary times.

FOURTH SEMESTER
CORE-8 : RURAL SOCIOLOGY
(CREDITS: 6) (FM: 100)

Course Outcomes:

After studying this paper, the student can

CO1. Understand the meaning, scope and significance of rural sociology.

CO2. Comprehend the rural social structure and analyze changes in the structure.

CO3. Develop sensitivity towards those who are affected by various rural social problems including poverty, unemployment, rural factionalism, etc.

CO4. Gain awareness about various past and current rural development programs implemented by the government while gaining an insight as to how the programs address the rural social problems.

CORE- 9: GLOBALISATION & SOCIETY
(CREDITS: 6) (FM: 100)

Course Outcomes:

By going through this paper, the student can

CO1. Understand the meaning nature, and historical moorings of globalization.

CO2. Gain knowledge about various dimensions of globalization.

CO3. Analyze impact of globalization on environment and society

CO4. Acquire the ability to logically study the impact of globalization on different institutions and groups of Indian society.

CORE-10 : MARRIAGE, FAMILY & KINSHIP
(CREDITS: 6) (FM: 100)

Course Outcomes:

By going through this paper, the student can

CO1. Gain knowledge about the institution of marriage, the principles governing this institution and factors responsible for bringing changes in this institution in contemporary times.

CO2. Understand the importance of the institution of family, norms sustaining this institution and various forces at work responsible for changes in this institution.

CO3. Get acquainted with the meaning of kinship and various terminologies and usages associated with it.

CO4. Reflect on contemporary social issues like migration, domestic violence, dowry and divorce.

FIFTH SEMESTER

CORE- 11 : RESEARCH METHODOLOGY

(CREDITS: 6)

(FM: 100)

Course Outcomes:

By going through this paper, the student can

CO1. Get acquainted with scientific ways to analyse social phenomena.

CO2. Understand the meaning, types, characteristics of different kind of hypotheses and will be able to use various sampling techniques while undertaking research.

CO3. Will be able to put in practice different tools and techniques of data collection during fieldwork.

CO4. Gain knowledge about some statistical methods to analyze data and prepare reports.

CORE- 12: SOCIAL MOVEMENTS IN INDIA

(CREDITS: 6)

(FM: 100)

Course Outcomes:

By going through this paper, the student can

CO1. Comprehend the concept, nature and characteristics, causes and various types of social movement.

CO2. Get critical insights into causes and consequences of various peasant movements in India.

CO3. Gain a broader understanding of the backward castes and tribal movements in India.

CO4. Relate women's movement in India down the ages with overall growing women's empowerment.

SIXTH SEMESTER

CORE- 13 : POPULATION & SOCIETY

(CREDITS: 6)

(FM: 100)

Course Outcomes:

After going through this paper, the student can

CO1. Understand the meaning, scope and importance of population studies.

CO2. Acquire knowledge about various population theories apply those theories in contemporary times.

CO3. Able to identify determinants of population growth and suggest measures to curb population growth.

CO4. Learn about population composition in India.

CORE-14 : SOCIAL DISORGANIZATION & DEVIANCE

(CREDITS: 6) (FM: 100)

Course Outcomes:

After going through this paper, the student can

CO1. Understand the concept of deviant behaviour leading to social disorganization.

CO2. Get acquainted with various theoretical frameworks designed to comprehend deviant behavior.

CO3. Probe into various types of crime, their causes, consequences and get familiarized with different forms of punishment.

CO4. Become aware about various social problems plaguing the society and suggest measures to overcome those problems.

DSE-1 : SOCIOLOGY HEALTH

(CREDITS: 6) (FM: 100)

Course Outcomes:

After studying this paper, the student can

CO1. Gain knowledge on the Sociology of health and medicine.

CO2. Can get an insight on socio-cultural dimension in the construction of illness and medical knowledge.

CO3. Can gain understanding on health sector reforms of Government of India.

CO4. Gain knowledge on medical pluralism for treatment of disease.

DSE-2 : SOCIOLOGY OF EDUCATION

(CREDITS: 6) (FM: 100)

Course Outcomes:

After going through this paper, the student can

CO1. Understand concept relating to sociology of education and gain insight into interrelationship between education and society.

CO2. Internalize different theoretical perspectives on sociology of education and apply them to the current issues and challenges in the field of education.

CO3. Gain ability to relate education to social processes like socialization, social mobility and development.

CO4. Acquire factual knowledge about laws, policies and programs relating to education, and be in a position to critically analyze them.

DSE-3 : URBAN SOCIOLOGY
(CREDITS: 6) (FM: 100)

Course Outcomes:

After going through this paper, the student can

- CO1. Understand the specific traits of urban areas and its historical patterns of growth.
- CO2. To critically study the urban sociological theories.
- CO3. Develop knowledge about urban social institutions and problems.
- CO4. Gain insight into urban developmental plans, programmes and efforts.

DSE-4 : FIELD WORK AND DISSERTATION

(CREDITS: 6) (FM: 100)

Course Outcomes:

After going through this paper, the student can

- CO1. Get exposed to field visits and equip her with skills required for doing research.
- CO2. Enhance their capacity to collect data from secondary sources and sharpen their ability to review existing literature.
- CO3. Improve their capability to collect the right kind of data.
- CO4. Write a report after having analysed data thoroughly.

DSE-4 : TRIBES OF INDIA

(CREDITS: 6) (FM: 100)

Course Outcomes:

After going through this paper the student can

- CO1. Gets an idea about distribution of different tribes in India, their characteristics, including demography.
- CO2. Gain understanding about different institutions of tribal society and status of women.
- CO3. Identify various challenges faced by the tribal societies.
- CO4. Have a strong grounding in constitutional safeguards for tribes, flagship programmes and changes taking place in tribal societies.

GE I /(A1/B1) SOCIOLOGY INTRODUCTION TO SOCIOLOGY

(CREDITS: 6) (FM: 100)

Course Outcomes:

After studying these two papers, the student can

- CO1. Get to know the convergence and divergence of Sociology with other social science
- CO2. Disciplines in terms of the subject matter, nature and scope of the discipline and its approach.
- CO3. Develop knowledge about its historicity.
- CO4. Can get acquainted with the basic concepts used in the subject.

CO5. Can generate ideas about the social processes and social institutions man encounters as a member of the society.

GE-II / (A2/B2) INDIAN SOCIETY

(CREDITS: 6) (FM: 100)

Course Outcomes:

After studying this paper, the students can

CO1. Become familiar with the diverse composition of Indian society-racial, religious, linguistic and identify various factors which contribute to unity in diversity.

CO2. Understand the very bases of Hindu society which sustains it.

CO3. Gain insights into the working of important social institutions and deciphering changes in the functioning of these institutions in contemporary times.

CO4. Decode a complex social institution like caste system and identifying the changes in the system in contemporary times.

GE- II ; SOCIAL CHANGE AND DEVELOPMENT

(CREDITS: 6) (FM: 100)

Course Outcomes:

After studying this paper, the students can

CO1. Have a clear understanding about meaning and nature and various factors of social change

CO2. Get familiarized with various theories of social change

CO3. Able to critically analyse different models of social development.

CO4. Distinguish different processes of social change and their impact on Indian society.

GE-IV : RURAL SOCIOLOGY

(CREDITS: 6) (FM: 100)

Course Outcomes:

After studying this paper, the student can

CO1. Understand the meaning, scope and significance of rural sociology.

CO2. Comprehend the rural social structure and analyze changes in the structure.

CO3. Develop sensitivity towards those who are affected by various rural social problems including poverty, unemployment, rural factionalism, etc.

CO4. Gain awareness about various past and current rural development programs implemented by the government while gaining an insight as to how the programs address the rural social problems.

M.A. IN SOCIOLOGY

Programme Outcomes

PO1: The students will have a preliminary understanding of the discipline, the context of its emergence and knowledge of the concepts used.

PO2: The students will get to know about the ideas of various sociological thinkers, the theories built up by them to study the social phenomena and get a macro perspective of the discipline.

PO3: It enable the students to comprehend the heterogeneities in culture, institutions and their functions, changes seen in these institutions in contemporary times, and the contrasts found between different societies.

PO4: Help develop rational thinking, critical temper and scientific outlook to enhance productivity and demand of the learner in the market.

PO5: The students are enabled to comprehend the politics of development, and understand how development can be quantified, theorized and explained globally.

PO6: It help the students go beyond sociological boundaries and get oriented with the theoretical perspectives of other social science disciplines, humanities, art and cultural studies.

PO7: It enable students to visualize the dynamics of social institutions, secondary institutions, informal sector and problem in the rural and urban areas.

PO8: The programme will help students to be gender sensitive both at home and in the public sphere, and enhances their employability as well.

PO9: Learners will be more sensitive, socially responsible, endowed with humane values and creativity.

PO10: Equip the students with conceptual, theoretical and empirical clarity about various social structures and help them plan, monitor and evaluate various developmental programmes at the local and national level.

Programme Specific Outcomes

PSO1: The programme would help the students evolve as social scientists where they would learn the techniques of research and be employable.

PSO2: The programme will greatly help the students preparing for UGC-NET/JRF, national scholarship, civil services and related competitive exams.

PSO3: Sociology provides an intellectual background for students considering careers in business, social services, public policy, government service, non governmental organizations, foundations, or academia.

PSO4: It prepares an individual to become a useful member of society and nation at large. It will help the students identify various problems prevalent in society and think of measures to eradicate them.

FIRST SEMESTER

HC- 101 : FOUNDATIONS OF SOCIOLOGY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

- CO1. Develop knowledge about the emergence, nature and scope of the subject.
- CO2. Understand various concepts which would give us an understanding on the social reality.
- CO3. Get acquainted with different theories and agencies of socialization.
- CO4. Can generate ideas about the social processes and social institutions that man encounters as a member of the society
- CO5. Understand the importance of social control in maintaining social solidarity.

HC-102 : PERSPECTIVES ON INDIAN SOCIETY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

- CO1. To know the contributions of Indian Sociologists in the development of sociological thought.
- CO2. To study and understand the Indian society through different perspectives/approaches
- CO3. To reflect upon diverse essence and relevance of Indian social structures/institutions
- CO4. To get an insight of compositions of Indian society permeated with multifaceted diversities and democratic pluralism.
- CO5. To develop analytical and critical mind set about the continuity and change of Indian Society

HC-103 : RURAL SOCIOLOGY

(CREDITS:5)(Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

- CO1. To understand the nature scope and relevance of rural sociology.
- CO2. To study village communities in contemporary times.
- CO3. Comprehend the rural social structure and analyze changes in the structure.
- CO4. Develop sensitivity towards those who are affected by various social problems
- CO5. Gain awareness about various past and current rural development programs

HC-104 : CLASSICAL SOCIOLOGICAL TRADITION

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

- CO1. Induct the students with the sociological ideas of founding fathers of Sociology.
- CO2. To elaborate the seminal ideas of the thinkers who brought the subject to the forefront of academic discussions.
- CO3. To unfold before the students their vision of the social conditioning of various phenomena as envisioned and analysed by these thinkers and to provide them a perspective to look into the social processes and progress.
- CO4. To en skill the students with a theoretical base to critically think, and analyse the social scenario around them.
- CO5. Have a strong grasp over sociological theory on the foundation of which modern sociological theory is built.

SECOND SEMESTER

HC- 201: SOCIOLOGY OF CHANGE AND DEVELOPMENT

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

- CO1. To examine different forms of change.
- CO2. To study different theories of development
- CO3. To understand the different parameters to examine the global scenario in terms of development.
- CO4. Be able to critically analyze different models of development.
- CO5. To understand the Indian experience of development.

HC-202 : RESEARCH METHODOLOGY

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

- CO1. To differentiate between sociological knowledge and common sense knowledge and their use of critical thinking.
- CO2. To get acquainted with the ways to scientifically analyze social phenomena.
- CO3. Help the students understand different approaches to social reality.
- CO4. To learn about the quantitative and qualitative methods of social research.
- CO5. To learn about different tools and techniques used in social research.

HC- 203 : SOCIOLOGY OF ENVIRONMENT AND CLIMATE CHANGE

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

CO1. Establish before the students the reciprocal relationship between environment and society, the scope and subject matter of Sociology of environment, the approaches to environment developed by various schools.

CO2. Provide substantial idea about the environmental degradation process, their markers and the movements launched to protect the environment in India.

CO3. Accumulate ideas about the ideological currents, issues that drive environment movements.

CO4. Make the students sensitized about the great global environmental catastrophes and their consequences.

CO5. Give a stock knowledge on the various international efforts undertaken and strategies adopted to conserve environment

HC-204 : GLOBALIZATION AND SOCIETY

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

CO1. Giving a fair idea to the students on the meaning, features, dimensions of this process and its historicity.

CO2. Making them understand, the ideological currents that are shaping and the institutional transformations that are taking place under the process of globalisation.

CO3. Help understand various theoretical approaches to globalization.

CO4. Apprising the students with the consequences of globalisation on various groups of individuals and institutions of the society.

CO5. Generating a clear-cut impression about its recent courses and the new form it is taking.

CE-201 INDIAN SOCIETY AND CULTURE

(CREDITS:5)

(Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

CO1. Understand the diversities of Indian society and challenges to National Integration.

CO2. Understand the very bases of Hindu society which sustains it.

CO3. Study the impact of invading religions on Indian society and the history of nationalism in India.

CO4. To analyse the problems faced by the marginalized communities and the theoretical approaches to them.

CO5. Study the problems of the minorities and their rights.

CE-201 APPLIED RESEARCH METHODOLOGY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

CO1. Generating an understanding among the students about research, its types, designs to be adopted for various types of research.

CO2. Learn about the ethics to be followed in research.

CO3. Providing ideas about the needs of reviewing literature, the techniques of reviewing, getting them acquainted with the various referencing styles.

CO4. Explaining and making them used to various types of research writing styles.

CO5. Allowing them to have experiential knowledge in research from problem identification to application of various tools in the field situation and bringing solutions and deriving conclusions.

OE-201 : UNDERSTANDING SOCIAL CHANGE

(CREDITS:4) (End-sem:50)

COURSE OUTCOMES:

After studying this paper, the students can

CO1. Understand social change and the related concepts.

CO2. Learn various theories related to social change.

CO3. Analyse the factors responsible for social change.

CO4. Learn about various obstacles to social change

THIRD SEMESTER

HC- 301 : ADVANCED SOCIOLOGICAL THEORIES

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

CO1. To understand the context and concerns of advanced sociological theories.

CO2. Discuss the theoretical perspectives in evolution of the discipline

CO3. Discuss the role of Functionalism, Neo-Functionalism, Structuralism, PostStructuralism, Neo-Marxism, Phenomenology, Ethno-Methodology and Symbolic Interactionism.

CO4. Assess the role of context in rise of social theory.

CO5. Discuss the relevance of advanced sociological theories in contemporary society.

HC-302 : SOCIOLOGY OF GENDER
(CREDITS:5)(Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

- CO1. To learn about the social construction of gender.
- CO2. Evaluate how patriarchy shapes our ideas
- CO3. To understand the context of different waves of feminism and the theories
- CO4. To learn about the status of Indian women at different historical junctures and the different movements for improving their status.
- CO5. To learn different approaches on gender and development.

HC 303 : SOCIOLOGY OF TRIBES
(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

- CO1. This paper helps understand the diverse tribal distribution across the country and helps us learn that tribes do not make a monolithic culture.
- CO2. It helps the students understand the culture, economy of the tribes and addresses the basic issues of the tribes.
- CO3. Helps students examine and understand the different nature of tribal lives across the nation.
- CO4. Study tribal development in India with a special reference to tribal women
- CO5. Evaluate the problems faced by tribal women and suggest measures to overcome them.

CE 301

SOCIOLOGY OF DISPLACEMENT, REHABILITATION AND RESETTLEMENT
(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

- CO1. Get acquainted with the concepts of displacement, compensation, rehabilitation and resettlement.
- CO2. To gain insights of rehabilitation and resettlement policies with regard to development-induced development.
- CO3. To develop an analytical framework of rehabilitation and resettlement issues
- CO4. To analyse the quintessence of displacement caused impoverishment risk and reconstruction.
- CO5. To assess the dynamics of displacement caused resettlement and resilience.

CE 301 : POLITICAL SOCIOLOGY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

- CO1. Discuss the nature, scope and emergence of political sociology.
- CO2. Learn about various concepts used in political sociology.
- CO3. Study various theoretical approaches in political sociology
- CO4. Understand contemporary challenges to state and democracy

CE – 301 : SOCIOLOGY OF HEALTH AND GERONTOLOGY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

- CO1. Students will be able to differentiate between a common sense perception of health and the sociological perception of health.
- CO2. Understand various concepts associated with health.
- CO3. Detailed analysis of health policies and programmes in India.
- CO4. Study in detail the various perspectives of gerontology.
- CO5. Examine the elderly problems and ways to address them.

CE- 301 : VOLUNTARY SECTOR STUDIES

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

- CO1. Understand the meaning, nature and types of volunteering and the issues involunteering
- CO2. Witness the evolution of voluntary development organizations
- CO3. Understand voluntary action and social work
- CO4. Key challenges to voluntary action
- CO5. Role of voluntary organizations in third world countries

FOURTH SEMESTER

HC 401 : URBAN SOCIOLOGY

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

- CO1. Understand basic concepts used in Urban Sociology.
- CO2. Evaluate various approaches in Urban Sociology.

- CO3. Study the trend of urbanization in India.
- CO4. Study various urban problems
- CO5. Study institutional structure in urban areas

HC 402 : GENDER, SOCIETY AND DEVELOPMENT

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

- CO1. Understand various concepts in gender and development.
- CO2. Study various perspectives in gender and development
- CO3. Analyse the policies and programmes for women
- CO4. Understand the strategies adopted for development of women
- CO5. Examine state intervention in women's development

HC 403 : DISSERTATION AND SEMINAR PRESENTATION

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

- CO1. Understand industrial relations and approaches to industrial relations
- CO2. Study the origin and structure of trade unions
- CO3. Study trade union movements in India
- CO4. Discuss workers participation in management and necessity of collective bargaining.
- CO5. Understand industrial conflicts and disputes.

CE-401 : SOCIAL WORK

(CREDITS:5) (Int :20+10 End-Sem:70)

Course Outcomes

After studying this paper, the students can

- CO1. Study the history of social work in India
- CO2. Understand the nature and social work and study its application.
- CO3. Discuss social action and social work.
- CO4. Discuss voluntary action in India.
- CO5. Study social work ethics in India.

B.A./B.Sc. STATISTICS

Programme Outcomes

PO1: Enhanced Critical Thinking: This course aims to cultivate students' critical thinking abilities by providing them with a logical and methodical approach to analysing fundamental statistical issues. Through computational and analytical exercises, students will strengthen their reasoning skills.

PO2: Improved Analytical Reasoning: Students will develop the capacity to identify logical flaws and inconsistencies in the arguments put forth by statisticians. They will learn to analyse and synthesize data from diverse sources, enabling them to draw well-founded conclusions.

PO3: Enhanced Mathematical Thinking: This course aims to enhance students' mathematical abilities, enabling them to make more logical and informed decisions. By strengthening their computational and analytical skills, students will develop a solid foundation for applying mathematics in various contexts.

PO4: Comprehensive Statistical Knowledge: The curriculum will provide students with a comprehensive understanding of statistics, covering a wide range of topics. As a result, students will not only grasp important statistical techniques but also be able to apply them to different fields.

PO5: Research Proficiency: Students will develop original thinking skills, enabling them to formulate new problems and provide innovative solutions. This ability to think critically will benefit both their own field of study and those practicing statistics.

PO6: Effective Problem Solving: Students will learn to examine various hypotheses systematically and seek relevant resources to find rational answers. This problem-solving approach will enable them to tackle complex statistical challenges with confidence.

PO7: Proficient Data Handling: Students will gain the ability to analyse, interpret, and draw meaningful conclusions from quantitative and qualitative data. They will critically evaluate ideas, evidence, and experiences using an unbiased and consistent approach.

PO8: Polished Presentation Skills: The course will develop students' presentation skills, enabling them to effectively communicate statistical results through clear and visually appealing graphs, figures, histograms, and mathematical models. These skills will prove valuable in their future careers.

PO9: Mathematical and Programming Proficiency: The course will enhance students' mathematical problem-solving abilities and equip them with diverse programming skills. They will learn to mathematically formulate problems and utilize programming techniques to solve them effectively.

PO10: Effective Communication: Upon completion of the course, students will develop strong and confident communication skills. They will be able to articulate statistical concepts and findings clearly and effectively, fostering effective communication in both academic and professional settings.

Programme Specific Outcomes

PSO1: A student will have an idea about the basics of Statistics.

PSO2: Students get equipped with statistical model developing ability, problem solving capability along with development of creative talent and communication skill that is essential for Employment.

PSO3: Students will be able to apply their skill and knowledge in various fields like Education, Research, Business Analytics and Data Science.

PSO4: Students get adequate exposure to global and local concerns that explore many aspects of mathematical sciences.

PSO5: The students are enabled to develop a positive attitude towards statistics as an interesting and valuable subject of study.

FIRST SEMESTER

AECC-1 :ENVIRONMENTAL SCIENCE & DISASTER MANAGEMENT

(4 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper, students will be able to

CO1. Problems of environmental pollution and Impact of pollution on human and ecosystem and control measures.

CO2. Learn about increase in population growth and understand the issues of use of resources in proper manner leading to sustainable development.

CO3. Learn about causes and impacts of Disasters and Case studies of National and Global disasters and risk reduction approaches of Disasters with safety issues in mitigating Industrial disasters.

CO4. Acquire basic idea about the mode of transmission and course of some communicable and non-communicable diseases and knowledge on the Importance and methods of prevention of epidemics and pandemics.

CORE I: DESCRIPTIVE STATISTICS

(6 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper, students will be able to

CO1: Understand the fundamental concepts of statistics, including population, sample, and the scope of statistics.

CO2: Differentiate between quantitative and qualitative data, and grasp the scales of measurement.

CO3: Learn effective methods for presenting data using tables and graphs, and analyse Data consistency and independence.

CO4: Acquire knowledge and skills in measures of central tendency and dispersion, including range, standard deviation, skewness, and kurtosis.

CO5: Develop proficiency in analysing bivariate data through scatter diagrams, correlation analysis, and simple linear regression.

CC II: ALGEBRA

(6 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper, students will be able to

CO1. Develop a solid understanding of the theory of equations, including the fundamental theorem of Algebra and its implications. Explore the relationship between the roots and coefficients of Polynomial equations. Gain proficiency in vector spaces, subspaces, and related concepts such as the sum of subspaces, span of a set, linear dependence and independence, dimension, and basis.

CO2. Review and apply the algebra of matrices, including theorems related to triangular, symmetric, and skew-symmetric matrices. Explore properties of idempotent, Hermitian, skew Hermitian, orthogonal, singular, and non-singular matrices. Understand concepts like trace of a matrix, unitary matrices, involutory matrices, and nilpotent matrices.

CO3. Gain a comprehensive understanding of determinants of matrices, including their definition, properties, and applications for 3rd and higher orders. Learn techniques for evaluating determinants of order 3 and above using transformations. Explore the concepts of the adjoint and inverse of a matrix and their properties. Apply determinants in solving systems of linear equations, row reduction, echelon forms, and matrix equations of the form $AX = B$. Understand solution sets of linear equations and their applications.

CO4. Study the concept of rank in matrices, including row-rank and column-rank. Explore Standard theorems on ranks, as well as the rank of the sum and product of two matrices.

CO5. Understand characteristic roots and characteristic vectors, their properties, and the Cayley-Hamilton theorem. Gain knowledge of quadratic forms and their properties.

CO6. Apply the learned concepts to various practical applications, emphasizing the importance of linear equations and matrices in real-world scenarios such as engineering, physics, and computer science. Develop the ability to analyse and solve problems using matrix techniques and understand the significance of characteristic roots and vectors in practical situations.

GE I: STATISTICAL METHODS

(6 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper, students will be able to learn

CO1. Different Statistical methods.

CO2. Data types and different methods of presenting data.

CO3. The students learn to measure the central tendencies of data.

CO4. The students learn about Bivariate data and its characteristics.

CO5. The students are taught about theory of attributes.

ETHICS AND VALUES

Course Outcome:

After reading this paper the students will be able to

CO1. Have changes in their perceptions and practices towards women and value their work and contribution.

CO2. Come forward to challenge the unethical treatments against women.

CO3. End gender-based hierarchy and hegemony, remove the feeling that women are counter to men and bring about a complementarity among the hitherto existing gender binary.

CO4. Pioneer in creating a gender equal society where the well-being, happiness and security of the women will be well protected & contributing towards a better and happier society

AECC-2 : MIL

(4 CREDIT) (FM: 100)

Course Outcome

After reading this paper the students will be able to

CO1. Students of other departments of the University can easily present their theoretical knowledge in Odia by studying Odia Grammar and Communication skills in the course AECC-II.

CO2. Students of Science, Commerce and Humanities can fluently discuss their research findings in their mother tongue (ODIA)

CO3. Though we receive higher education in various subjects and media of instruction, it is always more convenient to express oneself in one's Mother tongue. It is an enriching experience for both the knowledge giver and the receiver.

CO4. Odia language is essential for Professionals like a doctor, scientist or educator to become intelligible as well as amiable for others.

MIL (ALTERNATIVE ENGLISH)

(4 CREDIT) (FM: 100)

Course Outcomes:

After reading this paper the students will be able to

CO1. Demonstrate high-level proficiency in writing and speaking English and employ effectively the language of their discipline.

CO2. Develop skills in organizing and expressing ideas and viewpoints with clarity and coherence in writing and speech

CO3. Enumerate skills in narration, description, and argumentation, ascertain insight into different cultures and gain good knowledge that includes understanding recent developments in language and literature.

CO4. Develop acumen for a better understanding of the diversity of human experiences and acquire openness to new ideas, perspectives, and ways of thinking.

MIL – HINDI

(4 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper the students will be able to

CO1. Gain knowledge on Hindi poets and their poems and understand the variations in ancient, medieval and modern poetry.

CO2. Acquire knowledge on different perspectives of writers through their prose.

CO3. Gain understanding of basic structure of Hindi sentence and grammar.

CO4. Develop a skill of essay writing.

SECOND SEMESTER

CC III: PROBABILITY AND PROBABILITY DISTRIBUTIONS

(6 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper the students will be able to

CO1. This course introduces the students basic definitions and concepts of probability.

CO2. This course teaches the students how to deal with continuous and discrete Random variables.

CO3. This course teaches students to calculate the essential statistics like expectation, pgf, CDF and conditional expectation.

CO4. This course introduces students to standard discrete distributions and its application.

CO5. This course teaches how to calculate joint distribution, marginal distribution and independence of random variables.

CC IV: CALCULUS

(6 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper the students will be able to

CO1. This course teaches students basic concepts of calculus like limit, continuity and properties of continuous functions.

CO2. This course teaches students how to calculate Maxima and Minima in two variables. This has numerous applications.

CO3. This course teaches students how to do integration and differentiation. This is used to calculate area under any curve and maximum and minimum of the curve respectively.

CO4. This course introduces First order Differential equations and its real life application.

CO5. This course introduces Partial Differential Equations and its real life application.

GE II: INTRODUCTORY PROBABILITY

(6 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper the students will be able to

- CO1. The students are Introduced to the concepts of probability so that they can apply it in real life.
- CO2. The students learn conditional probability and how to apply it.
- CO3. The students learn the Bayes Theorem and it's application.
- CO4. The students are introduced to the concept of Random Variables.
- CO5. The students learn Standard Probability Distributions and how to apply them to real life.

ETHICS AND VALUES

Course Outcomes:

After reading this paper the students will be able to

- CO1. Have changes in their perceptions and practices towards women and develop Proper attitude towards women and value their work and contribution.
- CO2. Come forward to challenge the unethical treatments against women.
- CO3. End gender-based hierarchy and hegemony, remove the feeling that women are counter to men and bring about a complementarity among the hitherto existing gender binary.
- CO4. Pioneer in creating a gender equal society where the well-being, happiness and security of the women will be well protected & contributing towards a better and happier society

THIRD SEMESTER

CC V: SAMPLING DISTRIBUTIONS

(6 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper the students will be able to

- CO1. This course introduces students to concepts of Limit and convergence in probability.
- CO2. This course introduces students to concepts like Chebyshev's inequality, WLLN and CLT.
- CO3. In this course students learn Hypothesis testing and its real life applications.
- CO4. This course introduces students to Chi square distribution and it's properties.
- CO5. This course teaches students how to perform statistical tests like t-test, chi-square, FTest, their applications and relationships.

CC VI: SURVEY SAMPLING & INDIAN OFFICIAL STATISTICS

(6 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper the students will be able to

CO1. This course introduces basic concepts of survey sampling.

CO2. The students in this course are taught principles of survey sampling and mainSteps involved in selecting a sample.

CO3. The students learn different types of sampling techniques and its application.

CO4. The students are taught the Ratio and Regression method of estimation.

CO5. This course introduces the student to the Indian Official Statistical System.

CC VII: MATHEMATICAL ANALYSIS

(6 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper the students will be able to

CO1. This course introduces students to basic concepts of Real Analysis.

CO2. This course introduces students to proofs of important theorems of Calculus.

CO3. The students are taught Numerical Analysis and different methods of interpolation.

CO4. The students are taught Numerical integration using different methods.

CO5. This course introduces students to Stirling's approximation to factorial n and solution of differential equation of first order.

SKILL ENHANCEMENT COURSES (SEC OPTION-I)

ENGLISH COMMUNICATION

(4 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper the students will be able to

CO1. Enhance their ability to build and enrich their communication skills and buildup the four primary skills in students in the academic as well as in the wider domains of use like public offices.

CO2. Acquire analytical and comprehension reading skills, identify basic principles of communication, build speaking and listening skills

CO3. Learn beyond the conventional syllabus and be prepared to meet challenges while seeking a job and synthesize knowledge and use it creatively to better understand and Improve themselves

CO4. Communicate effectively through written reports, presentations and Discussions and develop a neutral accent and improve general standard of Pronunciation

ETHICS AND VALUE

Course Outcomes:

After reading this paper the students will be able to

CO1. Have changes in their perceptions and practices towards women and value their work and contribution.

CO2. Come forward to challenge the unethical treatments against women.

CO3. End gender-based hierarchy and hegemony, remove the feeling that women are counter to men and bring about a complementarity among the hitherto existing gender binary.

CO4. Pioneer in creating a gender equal society where the well-being, happiness and security of the women will be well protected & contributing towards a better and happier society.

FOURTH SEMESTER

CC VIII: STATISTICAL INFERENCE

(6 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper the students will be able to

CO1. The students are introduced to the concept of point estimation and criterion of a good estimator.

CO2. The students are taught important concepts like MVUE, Rao-Blackwell theorem, Lehmann-Scheffe theorem and Cramer-Rao inequality.

CO3. This course teaches students Different methods of estimation.

CO4. The course introduces students Principles of test of significance.

CO5. Sequential Analysis and its application to real life is taught to the students.

CC IX: LINEAR MODEL

(6 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper the students will be able to

CO1. The students are introduced to the Gauss-Markov set-up and its application.

CO2. The students are taught Regression analysis and its application in real life.

CO3. The students are introduced to the concept of Analysis of variance and its applications to real life.

CO4. The students in this course learn to check the Model adequacy.

CO5. Application of Linear model and regression to real life situations.

CC X: STATISTICAL QUALITY CONTROL

(6 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper the students will be able to

- CO1. The students are introduced to the Basics about Quality.
- CO2. The students are taught how to check Quality and standards of the system.
- CO3. The students are taught to draw Control charts.
- CO4. The students learn about the criteria for the Acceptance of a sampling plan.
- CO5. The students learn to use and apply Six-Sigma in different industrial processes.

SEC-2 QUANTITATIVE APTITUDE AND LOGICAL THINKING

(4 CREDIT)

(FM: 100)

Course Outcomes:

After studying this paper, the students can

- CO1. Use their logical thinking and analytical abilities to solve Quantitative aptitude questions from company specific and other competitive tests and Solve questions related to Time and distance and time and work etc. from company specific and other competitive tests.
- CO2. Understanding solve puzzle related questions from specific and other competitive tests and Solve questions related to permutation & combinations and probabilities from company specific and other competitive tests.
- CO3. Detect errors of grammar and usage in a given sentence/text and rectify them by making appropriate changes and Solve questions based on critical reasoning.
- CO4. Analyze reading passages and quickly find out the correct responses to questions asked by using reading skills like skimming, scanning, reading between the lines, etc.



ETHICS AND VALUE

Course Outcomes:

After reading this paper the students will be able to

- CO1. Have changes in their perceptions and practices towards women and develop attitude towards women and value their work and contribution.
- CO2. Come forward to challenge the unethical treatments against women.
- CO3. End gender-based hierarchy and hegemony, remove the feeling that women are counter to men and bring about a complementarity among the hitherto existing gender binary.
- CO4. Pioneer in creating a gender equal society where the well-being, happiness and security of the women will be well protected & contributing towards a better and happier society.

FIFTH SEMESTER
CC XI: STOCHASTIC PROCESS & QUEUING THEORY
(6 CREDIT) (FM: 100)

Course Outcomes:

After reading this paper the students will be able to

- CO1. The students are introduced to basic Probability Distributions.
- CO2. The students are introduced to Stochastic Process and stationary process.
- CO3. The students are taught how to model real life problems using Markov Chains and how to solve them.
- CO4. The students are taught about the Poisson Process and its real life applications.
- CO5. The students are taught about the Queuing System and its applications.

CC XII: STATISTICAL COMPUTING USING C & R PROGRAMMING
(6 CREDIT) (FM: 100)

Course Outcomes:

After reading this paper the students will be able to

- CO1. The students are introduced to the basics of computer and programming.
- CO2. The students are introduced to the basics of C.
- CO3. The students are taught how to do Looping in C.
- CO4. The students are introduced to User- defined functions.
- CO5. The students are introduced to R. They can use R programming in different areas of research and industry.

DSE I: OPERATIONS RESEARCH
(6 CREDIT) (FM: 100)

Course Outcomes:

After reading this paper the students will be able to

- CO1. Introduction to Operations Research and LPP methods.
- CO2. Transportation Problem and Assignment Problem.
- CO3. The students are introduced to basic concepts of Game theory and its application.
- CO4. The students are introduced to Graph theory networking problems.
- CO5. The students are introduced to Inventory Management.

DSE-II: TIME SERIES ANALYSIS

(6 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper the students will be able to

- CO1. Time series introduction, application and components.
- CO2. The students learn to find trends in time series data.
- CO3. The students learn to find trend count in time series.
- CO4. The students learn to find seasonal components and count in time series.
- CO5. The students learn about stationary time series.

ETHICS AND VALUE

Course Outcomes:

After reading this paper the students will be able to

- CO1. Have changes in their perceptions and practices towards women and evolve proper attitude towards women and value their work and contribution.
- CO2. Come forward to challenge the unethical treatments against women.
- CO3. End gender-based hierarchy and hegemony, remove the feeling that women are counter to men and bring about a complementarity among the hitherto existing gender binary.
- CO4. Pioneer in creating a gender equal society where the well-being, happiness and security of the women will be well protected & contributing towards a better and happier society.

SIXTH SEMESTER

CCXIII: DESIGN OF EXPERIMENTS (6 CREDIT) (FM: 100)

Course Outcomes:

After reading this paper the students will be able to

- CO1. The students are introduced to Analysis of variance (ANOVA).
- CO2. The students are exposed to the concepts of Experimental designs.
- CO3. The students are introduced to Basic designs.
- CO4. The students are introduced to Factorial experiments.
- CO5. The students are introduced to Balanced Incomplete Block Design (BIBD).

CCXIV: MULTIVARIATE ANALYSIS AND NON PARAMETRIC METHODS

6 CREDIT)

(FM: 100)

Course Outcomes:

After reading this paper the students will be able to

- CO1. The students are introduced to concepts of Bivariate Normal Distribution (BVN).
- CO2. The students are exposed to the concept of Multivariate Data.
- CO3. The students learn about Multivariate Normal distribution and its properties.
- CO4. The students learn Nonparametric Tests.

CO5. The students learn Two sample and ranked tests.

DSE –III: DEMOGRAPHY AND VITAL STATISTICS

(6 CREDIT) (FM: 100)

Course Outcomes:

After reading this paper

CO1. The students learn about different population theories.

CO2. The students are Introduced to sources of collecting data on vital statistics.

CO3. The students learn different ways of measuring mortality.

CO4. The students learn how to make tables in demography and vital statistics.

CO5. The students learn different ways of Measurements of Fertility and Growth.

DSE-IV: ECONOMETRICS (ECONOMETRICS/ PROJECT)

(6 CREDIT) (FM: 100)

Course Outcomes:

After reading this paper

CO1. The students are Introduced to concepts of Econometrics.

CO2. The student learns to make and analyze the General Linear Model

CO3. The students learn how to identify and eradicate multicollinearity from data.

CO4. The students learn how to deal with autocorrelation in data.

CO5. The students learn how to tackle Hetero scedastic disturbances.

Project (Optional) (6 CREDIT) (FM: 100)

Course Outcomes:

After studying this paper, the students can

CO1. Helps the students to undertake research in systematic way in their higher studies.

CO2. Helps them in selecting a topic with social relevance for writing a research article.

CO3. Helps them to become critical in their thought and actions.

CO4. Teaches the students to apply their theoretical knowledge in real life situations.

ETHICS AND VALUE

Course Outcomes:

After reading this paper the students will be able to

CO1. Have changes in their perceptions and practices towards women and develop proper attitude towards women and value their work and contribution.

CO2. Come forward to challenge the unethical treatments against women.

CO3. End gender-based hierarchy and hegemony, remove the feeling that women are counter to men and bring about a complementarity among the hitherto existing gender binary.

CO4. Pioneer in creating a gender equal society where the well-being, happiness and security of the women will be well protected & contributing towards a better and happier society.

B.Sc. ZOOLOGY

Program Outcomes

After completion of this programme , the students will be able to:

PO 1: Disciplinary Knowledge: Demonstrate comprehensive knowledge and skills in areas related to Animal Kingdom, Ecology, Cell biology, Physiology ,Biochemistry Comparative Anatomy, Molecular Biology, Genetics , Developmental Biology, Evolution, Immunology, Animal Behavior, Chronobiology, Fisheries, Economic Zoology and Nutritional Biology.

PO 2: Communication Skills: Various research and seminar themes of Zoology conducted during the Bachelor's degree helps to communicate and publish the results of studies undertaken in the field(s) of accurately in a range of different contexts using the main concepts, constructs and techniques of the subject(s).

PO 3: Critical Thinking and Problem solving: Students are trained in various specialized subjects from the first semester onwards for evidence-based evaluation of practices, policies and theories using well-defined scientific approach to knowledge development.

PO 4: Analytical Reasoning: Students are trained to improve the ability to evaluate the reliability and relevance of evidence, identify logical flaws in the arguments of others, analyse and synthesize data from a variety of sources, and draw valid conclusions.

PO 5: Research related skills: Students are trained to demonstrate a sense of inquiry and capability for asking relevant/appropriate questions; the ability to recognise cause-and effect relationships, define problems, formulate hypotheses, test hypotheses, analyse, interpret and draw conclusions from data; plan, execute and report the results of an experiment or investigation. Training in frontier areas of zoology helps the students to use knowledge and skills required for identifying problems and issues, collection of relevant quantitative and/or qualitative data, analysis and evaluation using methodologies as appropriate to the subject(s) for formulating evidence-based solutions and arguments.

PO 6: Collaboration/Cooperation/Team work: Practical and high-end techniques based B.Sc. courses train the students to demonstrate ability to work effectively with diverse teams, facilitate cooperative or coordinated effort on the part of a group, and act together as a group for a team in the interests of a common cause.

PO 7: Information/Digital Literacy: Practical and certain taught courses in Zoology train the students to demonstrate capability to use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources and to use appropriate software for analysis.

PO 8: Moral and Ethical Awareness/Reasoning: Students acquire the ability to identify ethical issues related to research work, avoid unethical behavior such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights, appreciate environmental and sustainability issues, and adopt objective, unbiased and truthful actions in all aspects of work.

PO 9: Leadership Readiness/Qualities: Students of Animal Biology can demonstrate capability for mapping out where one needs to go to "win" as a team or an organization, formulate an inspiring vision, build a team who can help achieve the vision, motivate and inspire team members to engage with that vision, and use management skills to guide the team to the right destination.

PO 10: Self Learning and Lifelong Learning: Students of Zoology can demonstrate to acquire knowledge and skills, including 'learning how to learn' that are necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development and to meet the changing trades and demands of work place.

PROGRAM SPECIFIC OUTCOMES :

PSO-1: Students can pursue professional courses like M.Sc, DMLT courses, Graduate Diploma/Certificate courses and PhD.

PSO-2: Develop passion for research in various fields like molecular Biology immunology, genetics, cell biology, developmental biology, chronobiology, biochemistry etc

PSO-3: Acquire practical learning from projects, field visits and seminars.

PSO-4: Improve the observational, computational, and analytical ethical skills required for evolved trends in genetics, molecular biology, cell biology, etc.

FIRST SEMESTER

CORE I: NON-CHORDATES I: PROTISTA TO PSEUDOCOELOMATES

(CREDITS : 6)

(FM:100)

Course Outcomes

Upon completion of the course, students should be able to:

CO1. Learn about the importance of general characteristics, classification and structural organization of different non chordate phyla.

CO2. Appreciate the diversity of non-chordates living in varied habit and habitats. The course will also make the students aware about the characteristic morphological and anatomical features of diverse animals; economic, ecological and medical significance of various animals in human life; and will create interest among them to explore the animal diversity in nature.

CO3. The students will learn about the structure, life cycle and control of Plasmodium, Entamoeba, Fasciola hepatica, Taenia solium, Ascaris lumbricoides and Wuchereria bancrofti.

CO4. Understand evolutionary history and relationships of different non-chordates through functional and structural affinities.

CORE PAPER II: PRINCIPLES OF ECOLOGY

(CREDITS : 6)

(FM:100)

Course Outcomes

Upon completion of the course, students should be able to:

CO1. Demonstrate an understanding of key concepts in ecology with emphasis on historical perspective, role of physical factors and concept of limiting factors. Know about the types of ecosystems, food chains, food webs, energy models. Apply the basic principles of ecology in wildlife conservation and management.

CO2. Comprehend the population characteristics, dynamics, growth models and interactions.

CO3. Understand the community characteristics, ecosystem development and climax theories.

CO4. The students gain knowledge and experience on handling biological, environmental, ecological data. The students gain knowledge on formulating and testing hypotheses. Students design sampling methods. Students extract genomic data and analyze it.

SECOND SEMESTER

CORE PAPER III:NON- CHORDATES II: COELOMATES

(CREDITS : 6)

(FM:100)

Course Outcomes

Upon completion of the course, students should be able to:

CO1. Learn about the characteristics of higher invertebrates. They should be able to represent the invertebrates of different categories which affect the ecosystem in various ways.

CO2. Learn about the metamerism in Annelids,

CO3. Analyze and learn the concept and types of metamorphosis in Arthropoda.

CO4. Describe the social life in insects, torsion in Gastropods and water vascular system in Asterozoa.

CORE PAPER IV:CELL BIOLOGY

(CREDITS : 6)

(FM:100)

Course Outcomes

Upon completion of the course, students should be able to:

CO1. Gain the knowledge about the organization in the prokaryotic and eukaryotic cell and explain structure and functions of cell organelles involved in diverse cellular processes.

CO2. Know the structure and function of cytoskeleton and endomembrane system.

CO3. Realize about the power house of cell and peroxisomes.

CO4. Comprehend the process of cell signalling and its role in cellular functions.

THIRD SEMESTER

CORE PAPER V: DIVERSITY AND DISTRIBUTION OF CHORDATES

(CREDITS : 6)

(FM:100)

Course Outcomes

Upon completion of the course, students should be able to:

CO1. Understand about hemichordates, urochordates and cephalochordates, their larval forms and concept of origin of chordates.

CO2. Comprehend the general characteristics, classification of cyclostomes, fishes, their migration, parental care in fishes and amphibians, evolutionary significance of Dipnoi and origin of Tetrapoda.

CO3. Know the general characteristics, classification of Reptiles and Birds, poisonous apparatus of Snakes, flight adaptation and migration in Birds.

CO4. Appreciate general characters, classification of Mammals, their adaptive radiations and distribution of vertebrates in different zoogeographical realms.

CORE PAPER VI: PHYSIOLOGY: CONTROLLING AND COORDINATING SYSTEMS

(CREDITS : 6) (FM:100)

Course Outcomes

Upon completion of the course, students should be able to:

- CO1. Know the structure ,classification and function of different tissues.
- CO2. Comprehend the molecular basis of muscle contraction,structure of muscles andneurons, synaptic transmission and physiology of hearing and vision.
- CO3. Appreciate the physiology of male and female reproductive systems, methods ofcontraception in male and female.
- CO4. Comprehend the endocrine glands, their secretions and mechanism of hormone action.

Core Paper VII: Fundamentals of Biochemistry

(CREDITS : 6) (FM:100)

Course Outcomes

Upon completion of the course, students should be able to:

- CO1. Understand the biological importance of carbohydrates and fats.
- CO2. Realize the building blocks of protein, their physiological importances and structureand function of different important proteins.
- CO3. Know about different components of nucleic acids and their properties.
- CO4. Comprehend about the biocatalysts, their types, mechanism of their action, graphical representation, regulation of their action.

FOURTH SEMESTER

CORE PAPER VIII: COMPARATIVE ANATOMY OF VERTEBRATES

(CREDITS : 6) (FM:100)

Course Outcome

Upon completion of the course, students should be able to:

- CO1. Understand the pattern of vertebrate evolution, organisation and functions of various systems.
- CO2. Learn the comparative account of integument, skeletal components, their functionsand modifications in different vertebrates.
- CO3. Understand the evolution of heart, modification in aortic arches, structure of respiratory organs used in aquatic, terrestrial and aerial vertebrates; and digestivesystem and its anatomical specializations with respect to different diets and feedinghabits.
- CO4. Learn the evolution of brain, sense organs and excretory organs to a complex, highlyevolved form in mammals;

CORE PAPER IX PHYSIOLOGY: LIFE SUSTAINING SYSTEMS

(CREDITS : 6) (FM:100)

Course Outcomes

Upon completion of the course, students should be able to:

- CO1. Understand the structure, function of digestive system and associated glands, process of digestion, absorption and hormonal control of gastric secretions.
- CO2. Comprehend the mechanism of respiration, transport of oxygen, carbon dioxide, dissociation curve and control of respiration.
- CO3. Realize the structure, function of kidney, regulation of acid base balance, blood components and blood groups.
- CO4. Know the structure, working of conducting myocardial fibers, cardiac cycle, cardiac outputs and its regulation and also blood pressure and its regulation.

CORE PAPER X: BIOCHEMISTRY OF METABOLIC PROCESSES

(CREDITS : 6) (FM:100)

Course Outcomes

Upon completion of the course, students should be able to:

- CO1. Understand the catabolism, anabolism, compartmentalization of metabolic pathways, energy currency of cell and regulatory mechanisms.
- CO2. Realize the different carbohydrate metabolisms like glycolysis, citric acid cycle, gluconeogenesis and glycogenesis.
- CO3. Comprehend the oxidation and biosynthesis of fatty acids, catabolism of amino acids and fate of the carbon skeletons of different amino acids.
- CO4. Know the mitochondrial respiratory chain and inhibitors of electron transport chain.

FIFTH SEMESTER

CORE PAPER XI: MOLECULAR BIOLOGY

(CREDITS : 6) (FM:100)

Course Outcomes

Upon completion of this course, students will be able to:

- CO1. Compare and contrast DNA replication machinery and mechanisms in prokaryotes and eukaryotes.
- CO2. Describe the basic structure and chemistry of nucleic acids, DNA and RNA
- CO3. Explain post-transcriptional modification mechanisms for the processing of eukaryotic RNA.
- CO4. Gain knowledge about gene silencing through RNA interference and its application.

CORE PAPER XII: PRINCIPLES OF GENETICS

(CREDITS : 6)

(FM:100)

Course Outcomes

Upon completion of this course, students will be able to:

CO1. Have a deeper understanding of principles of inheritance, linkage, crossing over and chromosomal mapping.

CO2. Know the mechanisms of mutations and its molecular basis and methods of detection of mutations.

CO3. Explain Sex Determination in Drosophila and Man and Extra-chromosomal inheritance.

CO4. Elucidate Recombination in bacteria and viruses and learn about transposable genetic elements.

SIXTH SEMESTER

CORE PAPER XIII : DEVELOPMENTAL BIOLOGY

(CREDITS : 6)

(FM:100)

Course Outcomes

Upon completion of this course, students will be able to:

CO1. Understand the events in gametogenesis and fertilization and historical perspective of phases of development.

CO2. Describe early embryonic development in terms of cleavage and types of blastula.

CO3. Discuss the fate of germ layers and late embryonic development.

CO4. Learn importance of latest techniques like stem cell therapy and concepts of ageing, teratogenesis and regeneration

CORE PAPER XIV: EVOLUTIONARY BIOLOGY

(CREDITS : 6)

(FM:100)

Course Outcomes

Upon completion of this course, students will be able to:

CO1. Gain knowledge about evolutionary concept of Lamarckism, Darwinism and extinctions.

CO2. Acquire problem solving and high order analytical skills by attempting numerical problems on population genetics related evolutionary changes.

CO3. Know the species concept and how adaptation led to evolution using Galapagos finches.

CO4. Discuss the origin and evolution of man, about phylogenetic trees its construction and interpretation.

Discipline Specific Elective Paper-1
ANIMAL BEHAVIOUR AND CHRONOBIOLOGY
(CREDITS : 6) (FM:100)

Course Outcomes

Upon completion of this course ,students will be able to:

- CO1. Know about history of ethology and types of behaviour and stimulus filtering.
- CO2. Discuss about patterns of behaviours , learning and conditioning.
- CO3. Find out about communication and senses ,foraging in honey bees and sexual selection.
- CO4. Have a deeper understanding of biological oscillation. Circadian rhythm photoperiod and reproductive regulation in vertebrates.

DISCIPLINE SPECIFIC ELECTIVE PAPER-1: IMMUNOLOGY

(CREDITS : 6) (FM:100)

Course Outcomes

Upon completion of this course, students will be able to:

- CO1. Describe the basic mechanisms, distinctions and functional interplay of innate and adaptive immunity.
- CO2. Explain the properties of antigenicity and immunogenicity and study about antigen-antibody interactions.
- CO3. Define the cellular pathways of humoral responses including role of Major Histocompatibility Complex.
- CO4. Integrate knowledge of each subsystem of hypersensitivities and types of vaccines and their advancement.

DISCIPLINE SPECIFIC ELECTIVE PAPER-III: FISH AND FISHERIES

(CREDITS : 6) (FM:100)

Course Outcomes

Upon completion of this course, students will be able to:

- CO1. Describe locomotion in fishes, role of gills and gas exchange and know phenomenon of schooling and migration.
- CO2. Know about different types of fisheries and about depletion of fisheries resources.
- CO3. Learn about sustainable aquaculture management and maintenance of fish aquarium and hatcheries.
- CO4. Understand and about different pathogens causing fish diseases and relevance of zebra fish as model organism in research.

DISCIPLINE SPECIFIC ELECTIVE PAPER-IV:ECONOMIC ZOOLOGY

(CREDITS : 6)

(FM:100)

Course Outcomes

Upon completion of this course, students will be able to:

CO1. Describe varieties of honeybee and procedures of apiculture.

CO2. Know about different types of silk and techniques involved in rearing and harvesting silk from silkworms.

CO3. Describe about breeding techniques, preparation and maintenance of ponds and prawn farming.

CO4. Understand the commercial importance of dairy and poultry, and learn about its management and business plan.

GENERIC ELECTIVE PAPER I/(A1/B1): ANIMAL DIVERSITY

(CREDITS : 6)

(FM:100)

Course Outcomes

Upon completion of this course, students will be able to:

CO1. Appreciate the diversity of non-chordates living in varied habit and habitats.

CO2. Critically analyse the organisation, complexity and characteristic features of chordates making them familiar with the morphology and anatomy of representatives of different classes.

CO3. Understand different adaptive features and special techniques of each phyla.

CO4. Getting familiarized with the morphology and anatomy of representatives of different phyla.

GENERIC ELECTIVE PAPER II/(A2/B2): FOOD, NUTRITION AND HEALTH

(CREDITS : 6)

(FM:100)

Course Outcomes

Upon completion of this course, students will be able to:

CO1. Have a better understanding of the association of food and nutrition in promoting healthy living.

CO2. Think more holistically about relationship between nutrition science ,social and health issues

CO3. Know about cause, prevention and treatment of various diseases.

CO4. Describe pathways and mode of transmission of infections and food related diseases.

RAMA DEVI WOMEN'S UNIVERSITY

ODIA DEPARTMENT (UG)



RAMA DEVI WOMEN'S UNIVERSITY
BHOI NAGAR, BHUBANESWAR, ODISHA, PIN- 751022

**FINAL Structure for Under Graduate Programme (B.A)
Under Utkal University Bhubaneswar
(As per CBCS System)**

ARTS (HONOURS)

Group	Subjects	No. of Papers	Total Credits	Total Marks
Core	Core-1 to Core-14	14	14 x 6 = 84	1400
DSE	DSE-1 to DSE-4	4	4 x 6 = 24	400
AECC		2	2 x 4 = 8	200
SEC		2	2 x 4 = 8	200
GE		4	4 x 6 = 24	400
GRAND TOTAL		26	148	2600

N.B:- Arts (Hons.) course has Total Credits = 148, Total Marks = 2600.

Abbr. –

DSE – Discipline Specific Elective

AECC – Ability Enhancement Compulsory Course

SEC – Skill Enhancement Course

GE – Generic Elective

Stipulations:

- 1) An Arts (Hons.) student has to opt two different subjects as GE-A and GE-B other than core subject.
- 2) GE-A to be opted for Semester-I & III (as Paper-1 & 2) and GE-B Semester-II & IV (as Paper-1 & 2)
- 3) An Arts (Hons.) Student can opt maximum of two Practical Subjects.

SEMESTER – I

SI No	Name of the Course	Paper	CP (Credit Point)	CH (Credit Hour)	Full Marks
1	CORE	I	6	60	100
2	CORE	II	6	60	100
3	GE - A	I	6	60	100
4	AECC (Environmental Studies)	I	4	40	100
TOTAL		4	22	220	400

SEMESTER – II

SI No	Name of the Course	Paper	CP (Credit Point)	CH (Credit Hour)	Full Marks
1	CORE	III	6	60	100
2	CORE	IV	6	60	100
3	GE – B	I	6	60	100
4	AECC MIL(Communication) (Odia/Hindi/Urdu/A.E.)	II	4	40	100
TOTAL		4	22	220	400

SEMESTER – III

SI No	Name of the Course	Paper	CP (Credit Point)	CH (Credit Hour)	Full Marks
1	CORE	V	6	60	100
2	CORE	VI	6	60	100
3	CORE	VII	6	60	100
4	GE - A SEC	II	6	60	100
5	(English Communication)	I	4	40	100
TOTAL		5	28	280	500

SEMESTER – IV

SI No	Name of the Course	Paper	CP (Credit Point)	CH (Credit Hour)	Full Marks
1	CORE	VIII	6	60	100
2	CORE	IX	6	60	100
3	CORE	X	6	60	100
4	GE - B SEC	II	6	60	100
5	(Modern Office Management)	II	4	40	100
TOTAL		5	28	280	500

SEMESTER – V

SI No	Name of the Course	Paper	CP (Credit Point)	CH (Credit Hour)	Full Marks
1	CORE	XI	6	60	100
2	CORE	XII	6	60	100
3	DSE	I	6	60	100
4	DSE	II	6	60	100
TOTAL		4	24	240	400

SEMESTER – VI

SI No	Name of the Course	Paper	CP (Credit Point)	CH (Credit Hour)	Full Marks
1	CORE	XIII	6	60	100
2	CORE	XIV	6	60	100
3	DSE	III	6	60	100
4	DSE	IV	6	60	100
TOTAL		4	24	240	400

ପାଠ୍ୟକ୍ରମର ସାରାଂଶ – ସ୍ଵରଚନା
Structure of B.A. Honours Odia Under CBCS

ପ୍ରଧାନ ପାଠ୍ୟକ୍ରମ (Core Course) : ୧୪

ପ୍ରତ୍ୟେକ ପଢ଼ର କ୍ରେଡ଼ିଟ୍ସ / ଆସ୍ଥାନୁଲ୍ୟାଙ୍କ = ୪ + ୨ = ୬

ପ୍ରଥମ ପର୍ଯ୍ୟାୟ :

ପ୍ରଧାନ ପାଠ୍ୟକ୍ରମ - ୧ (Core Course - 1)	ଓଡ଼ିଆ ସାହିତ୍ୟର ଇତିହାସ
୧ମ ପଢ଼ - ଆସ୍ଥାନୁଲ୍ୟାଙ୍କ = ୪ + ୨ = ୬	ପ୍ରାଚୀନ ଓଡ଼ିଆ ସାହିତ୍ୟର ଇତିହାସ : (ଚର୍ଯ୍ୟାପଦଠାରୁ ପଞ୍ଚସଖା ପର୍ଯ୍ୟନ୍ତ)
ପ୍ରଧାନ ପାଠ୍ୟକ୍ରମ - ୨ (Core Course - 2)	ମଧ୍ୟଯୁଗୀୟ ଓଡ଼ିଆ ସାହିତ୍ୟର ଇତିହାସ
୨ୟ ପଢ଼ - ଆସ୍ଥାନୁଲ୍ୟାଙ୍କ = ୪ + ୨ = ୬	(ପ୍ରାକ୍‌ରୀତି , ରୀତି ଓ ଉତ୍ତର ପର୍ଯ୍ୟାୟ ରୀତି)

ଦ୍ଵିତୀୟ ପର୍ଯ୍ୟାୟ :

ପ୍ରଧାନ ପାଠ୍ୟକ୍ରମ - ୩ (Core Course - 3)	ଆଧୁନିକ ଓଡ଼ିଆ ସାହିତ୍ୟ (ସ୍ଵାଧୀନତା ପର୍ଯ୍ୟନ୍ତ)
୩ୟ ପଢ଼ - ଆସ୍ଥାନୁଲ୍ୟାଙ୍କ = ୪ + ୨ = ୬	
ପ୍ରଧାନ ପାଠ୍ୟକ୍ରମ - ୪ (Core Course - 4)	ସ୍ଵାଧୀନତା ପରବର୍ତ୍ତୀ ଓଡ଼ିଆ ସାହିତ୍ୟ
୪ର୍ଥ ପଢ଼ - ପୂଲ୍ୟାଙ୍କ = ୪ + ୨ = ୬	(୨୦୦୦ ମସିହା ପର୍ଯ୍ୟନ୍ତ)

ତୃତୀୟ ପର୍ଯ୍ୟାୟ :

ପ୍ରଧାନ ପାଠ୍ୟକ୍ରମ - ୫ (Core Course - 5)	ଓଡ଼ିଆ ଭାଷାର ଐତିହାସିକ ବିକାଶକ୍ରମ
୫ମ ପଢ଼-ଆସ୍ଥାନୁଲ୍ୟାଙ୍କ ୪ + ୨ = ୬	
ପ୍ରଧାନ ପାଠ୍ୟକ୍ରମ - ୬ (Core Course - 6)	ଓଡ଼ିଆ ଭାଷାର ସ୍ଵରୂପ
୬ଷ୍ଠ ପଢ଼ ଆସ୍ଥାନୁଲ୍ୟାଙ୍କ ୪ + ୨ = ୬	
ପ୍ରଧାନ ପାଠ୍ୟକ୍ରମ - ୭ (Core Course - 7)	ଓଡ଼ିଆ ଭାଷାର ପ୍ରୟୋଗ ଓ ବ୍ୟାବହାରିକ ବ୍ୟାକରଣ
୭ମ ପଢ଼ - ଆସ୍ଥାନୁଲ୍ୟାଙ୍କ = ୪ + ୨ = ୬	

ଚତୁର୍ଥ ପର୍ଯ୍ୟାୟ :

ପ୍ରଧାନ ପାଠ୍ୟକ୍ରମ - ୮ (Core Course - 8)	ଲୋକଧାରା / ଓଡ଼ିଆ ଭାଷା-ସାହିତ୍ୟର ମୌଖିକ ପରମ୍ପରା
୮ମ ପଢ଼ - ଆସ୍ଥାନୁଲ୍ୟାଙ୍କ = ୪ + ୨ = ୬	
ପ୍ରଧାନ ପାଠ୍ୟକ୍ରମ - ୯ (Core Course - 9)	ସାହିତ୍ୟର ସ୍ଵରୂପ ଓ ତତ୍ତ୍ଵ
୯ମ ପଢ଼ - ଆସ୍ଥାନୁଲ୍ୟାଙ୍କ = ୪ + ୨ = ୬	
ପ୍ରଧାନ ପାଠ୍ୟକ୍ରମ - 10 (Core Course-10)	ଓଡ଼ିଆ ସାହିତ୍ୟ ସୂକ୍ଷ୍ମା : ବିଶେଷ ଅଧ୍ୟୟନ : ଲେଖକୀୟ ପାଠ (ବିଭିନ୍ନ ସମୟର ବିବିଧ ସାହିତ୍ୟ ବିଭାଗର ବିଶିଷ୍ଟ ଓ ଲେଖକ କବିପୟଙ୍କ ବିଷୟରେ ଅଧ୍ୟୟନ)
୧୦ମ ପଢ଼ - ଆସ୍ଥାନୁଲ୍ୟାଙ୍କ = ୪ + ୨ = ୬	

ପଞ୍ଚମ ପର୍ଯ୍ୟାୟ :

ପ୍ରଧାନ ପାଠ୍ୟାଂଶ-୧୧ (Core Course - 11) ଓଡ଼ିଆ ସାହିତ୍ୟର ସବିଶେଷ ଅଧ୍ୟୟନ : କାବ୍ୟ କବିତା
୧୧ଶ ପଢ଼ - ଆସ୍ଥାମୂଲ୍ୟାଙ୍କ = ୪ + ୨ = ୬ (ବିଭିନ୍ନ ସମୟର ପାଠକ ଆଦୃତ ଓ ବହୁ ପ୍ରକଳିତ
କେତେକ କବିତାର ଅଧ୍ୟୟନ)

ପ୍ରଧାନ ପାଠ୍ୟାଂଶ-୧୨ (Core Course -12) ଓଡ଼ିଆ ସାହିତ୍ୟର ଅଧ୍ୟୟନ : କଥା ସାହିତ୍ୟ ଓ ନାଟ୍ୟ
୧୨ଶ ପଢ଼ - ଆସ୍ଥାମୂଲ୍ୟାଙ୍କ = ୪ + ୨ = ୬ ସାହିତ୍ୟ

ଷଷ୍ଠ ପର୍ଯ୍ୟାୟ :

ପ୍ରଧାନ ପାଠ୍ୟାଂଶ-୧୩ (Core Course -13) ଓଡ଼ିଆ ସାହିତ୍ୟର ଅଧ୍ୟୟନ : ପ୍ରବନ୍ଧ ଓ ଗଦ୍ୟ ସାହିତ୍ୟ
୧୩ଶ ପଢ଼ - ଆସ୍ଥାମୂଲ୍ୟାଙ୍କ = ୪ + ୨ = ୬

ପ୍ରଧାନ ପାଠ୍ୟାଂଶ-୧୪ (Core Course- 14) ଓଡ଼ିଆ ଭାଷାର ବ୍ୟାବହାରିକ ପ୍ରୟୋଗ
୧୪ଶ ପଢ଼ - ଆସ୍ଥାମୂଲ୍ୟାଙ୍କ = ୪ + ୨ = ୬

PROGRAMME OUTCOMES (POs)

PO1. ସାହିତ୍ୟକୁ ନେଇ ସ୍ନାତକ ଶିକ୍ଷା ଲାଭ ଦ୍ୱାରା ଚେତନାର ବିକାଶ ହେବ ।

PO2. ଐତିହ୍ୟପୁର୍ଣ୍ଣ ଓଡ଼ିଆ ଭାଷା-ସାହିତ୍ୟର ଅଧ୍ୟୟନ ସହିତ ପ୍ରାଚ୍ୟ ଓ

ପାଶ୍ଚାତ୍ୟତତ୍ତ୍ୱ ସମ୍ପର୍କରେ ଜ୍ଞାନ ଆହରଣ ହୋଇପାରିବ ।

PO3. ସ୍ନାତକ ଶିକ୍ଷାଦ୍ୱାରା ମାତୃଭାଷାକୁ ନେଇ ବିବିଧ ପରୀକ୍ଷା-ନିରୀକ୍ଷା ସମ୍ଭବ ହେବ ।

PO4. ଯୁଗୋପଯୋଗୀ, ଯୋଗାଯୋଗ ସମର୍ଥ ଓ ଜ୍ଞାନୋପଯୋଗୀ କରାଯିବ।

ସହିତ ଭାଷା ସାହିତ୍ୟର ଅଧ୍ୟାୟନକୁ ଉନ୍ନତ ବ୍ୟକ୍ତିତ୍ୱର ଅଧିକାରୀ କରାଇ ହେବ ।

PO5. ଉନ୍ନତମାନର ଶୈକ୍ଷିକ ପରିମଣକୁ ସୃଷ୍ଟି ନିମନ୍ତେ ପ୍ରୋତ୍ସାହନ ଯୋଗାଇ ପାରିବ ।

PO6. ସାହିତ୍ୟ ଜୀବନ ଓ ଜଗତକୁ ବୃହତ୍ତର ମାନଦଣ୍ଡରେ ବିଚାର କରିବାକୁ ସୁଯୋଗ ଦେବ ।

PO7. ଓଡ଼ିଆ ଭାଷା ସାହିତ୍ୟ କ୍ଷେତ୍ରରେ ନୂତନ ଦୃଷ୍ଟିଭଙ୍ଗୀକୁ ନେଇ କିପରିଗବେଷଣା କରାଯିବ,

ସେଥିପ୍ରତି ଯତ୍ନବାନ ହୋଇପାରିବେ।

PO8. ସ୍ନାତକ ଶିକ୍ଷା ଦ୍ୱାରା ଅଧ୍ୟାୟନକୁ ଭିତରେ ଓଡ଼ିଆ ଭାଷା, ସାହିତ୍ୟ ଓ ସଂସ୍କୃତି ସମ୍ବନ୍ଧରେ ଧାରଣା

ସୃଷ୍ଟି ହେବା ସହ ସେମାନେ ଏ ସବୁର ସଂରକ୍ଷଣ, ପ୍ରଚାର ଓ ପ୍ରସାର ଦିଗରେ ଯତ୍ନବାନ

ହୋଇପାରିବେ।

PO9. ଓଡ଼ିଶା ରାଜ୍ୟରେ ଓଡ଼ିଆ ଭାଷାର ବହୁଳ ପ୍ରୟୋଗ ଭାଷାକୁ ସୁରକ୍ଷିତ-ସଂରକ୍ଷିତ ତଥା ପ୍ରତିଷ୍ଠା

ଦେଇପାରିବ ।

PO10. ଆର୍ଥିକ ମାନଦଣ୍ଡକୁ ସଜାଡ଼ିବାର ଏକମାତ୍ର ଶୈକ୍ଷିକ ମାଧ୍ୟମ ହେଉଛି ଓଡ଼ିଆ ଭାଷା-ସାହିତ୍ୟ ଶିକ୍ଷା।

PROGRAMME SPECIFIC OUT COMES (PSOs)

- PSO1. ତତ୍ତ୍ୱାଳୀନ ସମୟର ବରେଣ୍ୟ କବି ପ୍ରତିଭା ସାରଳା ଦାସ, ପଞ୍ଚସଖା ଯଥା- ବଳରାମ, ଜଗନ୍ନାଥ, ଅତ୍ୟୁତାନନ୍ଦ, ଯଶୋବନ୍ତ ଓ ଅନନ୍ତ ଦାସ ପ୍ରମୁଖଙ୍କ ରଚନାର ମୌଳିକତା ସମ୍ପର୍କରେ ଅବଧାରଣା ପ୍ରାପ୍ତ ହେବେ।
- PSO2. ମଧ୍ୟଯୁଗୀୟ ଓଡ଼ିଆ ସାହିତ୍ୟର ସମାଜିକ, ସାଂସ୍କୃତିକ, ରାଜନୈତିକ, ଧର୍ମୀୟ ଭାବଧାରାକୁ ଜାଣିବା ସହିତ କାବ୍ୟକବିତାର ମୌଳିକତା ସମ୍ପର୍କରେ ଅବଧାରଣା ପ୍ରାପ୍ତ ହେବେ ।
- PSO3. ଇଂରାଜୀ ଶିକ୍ଷା, ନବଜାଗରଣ, ଯୁଦ୍ଧ ଯନ୍ତ୍ରଣା ଇତିହାସ, ଭାଷା ସୁରକ୍ଷା ଆନ୍ଦୋଳନ ବାବଦରେ ଅବଧାରଣା ପ୍ରାପ୍ତ ହେବେ।
- PSO4. ସ୍ୱାଧୀନତା ପରବର୍ତ୍ତୀ ଓଡ଼ିଆ କବିତାର ପଠନ ଦ୍ୱାରା ବିଦ୍ୟାର୍ଥୀଗଣ ନିଜ ଭାବପ୍ରବଣତା ଆଧାରରେ ସାହିତ୍ୟ ସାଧନା କରିପାରିବେ ।

SEMESTER-I

CORE-1

(ପ୍ରାଚୀନ ଓଡ଼ିଆ ସାହିତ୍ୟର ଇତିହାସ)

COURSE OUTCOMES (Cos)

- CO1. ବିଦ୍ୟାର୍ଥୀମାନେ ନୀତିନିଷ୍ଠ, ବିବେକବାନ, ଜ୍ୟୋତିଷଶାସ୍ତ୍ରବିଦ୍, ଇତିହାସବିଦ୍, ଅଧ୍ୟାପକ, ଧର୍ମତତ୍ତ୍ଵବିଦ୍ ହୋଇପାରିବେ।
- CO2. ଏହି ପାଠ୍ୟକ୍ରମ ମାଧ୍ୟମରେ ଅଧ୍ୟାୟୀଙ୍କ ପ୍ରାକ୍ ସାରଳା, ସାରଳା, ପଞ୍ଚସଖା ସମୟର ସାମାଜିକ, ସାଂସ୍କୃତିକ ଓ ରାଜନୈତିକ ପୃଷ୍ଠପଟ୍ଟ ସମ୍ପର୍କରେ ବିସ୍ତୃତ ଜ୍ଞାନ ଆହରଣ କରିବେ।
- CO3. ପଞ୍ଚଦଶ ଓ ଷୋଡ଼ଶ ଶତାବ୍ଦୀରେ ପ୍ରଚଳିତ ଭାଷା ଓ ତତ୍କାଳୀନ ଐତିହ୍ୟ ସମ୍ପର୍କରେ ବିଶେଷ ଜ୍ଞାନ ଲାଭ କରିପାରିବେ।
- CO4. ତତ୍କାଳୀନ ସମୟର ଓଡ଼ିଆ ଭାଷା ଓ ସାହିତ୍ୟ ସାମାଜିକ, ସାଂସ୍କୃତିକ ଓ ରାଜନୈତିକ ପ୍ରସଙ୍ଗ ଉପରେ ଅବଧାରଣ ପାଇପାରିବେ ।

CORE-2

(ମଧ୍ୟଯୁଗୀୟ ଓଡ଼ିଆ ସାହିତ୍ୟ)

COURSE OUTCOMES (Cos)

- CO1. ଏହାକୁ ଅଧ୍ୟୟନକଲେ ବିଦ୍ୟାର୍ଥୀମାନେ ମଧ୍ୟଯୁଗୀୟ ଓଡ଼ିଆ ସାହିତ୍ୟର ସାମାଜିକ, ସାଂସ୍କୃତିକ ଓ ରାଜନୈତିକ ପୃଷ୍ଠପଟ୍ଟ ସମ୍ପର୍କରେ ଅବଗତ ହେବେ ।
- CO2. ମଧ୍ୟଯୁଗୀୟ କାବ୍ୟକବିତାର ବିଷୟବିନ୍ୟାସ, ବର୍ଣ୍ଣନା ବୈଚିତ୍ର୍ୟ ସମ୍ପର୍କରେ ଧାରଣା ପାଇପାରିବେ ।
- CO3. କାବ୍ୟ ନିର୍ମାଣ ଶୈଳୀ ସମ୍ପର୍କରେ ଅବଗତ ହୋଇପାରିବେ ।
- CO4. କ୍ଷୁଦ୍ରଗୀତିକାଗୁଡ଼ିକର ପ୍ରଭାବ ଦ୍ଵାରା ବିଦ୍ୟାର୍ଥୀ ସଂଗୀତ ନିର୍ଦ୍ଦେଶକ, ଗୀତିକାର, ଧ୍ଵରୀଣ ଗବେଷକ, ଭାଷାତତ୍ତ୍ଵବିତ୍, ସୁପ୍ରବଚକ, ପାଳାଗାୟକ ଆଦି ହୋଇପାରିବେ ।

AECC - I

Environmental studies and disaster management

COURSE OUTCOMES (Cos)

After completion of the course the students shall be able to:

1. Students understand about problems of environmental pollution and Impact of pollution on human and ecosystem and control measures.
2. Students will learn about increase in population growth and understand the issues of use of resources in proper manner leading to sustainable development.
3. Learn about causes and impacts of Disasters and Case studies of National and Global disasters and risk reduction approaches of Disasters with safety issues in mitigating Industrial disasters.
4. Basic idea about the mode of transmission and course of some communicable and non-communicable diseases and knowledge on the Importance and methods of prevention of epidemics and pandemics.

SEMESTER-II

CORE-3

(ଆଧୁନିକ ଓଡ଼ିଆ ସାହିତ୍ୟ)

COURSE OUTCOMES (Cos)

- CO1. ଉନବିଂଶ ଶତକଠାରୁ ଆରମ୍ଭ କରି ବିଂଶ ଶତକ ପର୍ଯ୍ୟନ୍ତ ପରିବ୍ୟାପ୍ତ ସାହିତ୍ୟର ପୃଷ୍ଠଭୂମି ଏବଂ ସାହିତ୍ୟିକ ମାନଙ୍କର ଚେତନାଗତ ପରିବର୍ତ୍ତନ ଏବଂ ନୂତନତାର ଆବାହନ ସମ୍ପର୍କରେ ବିଦ୍ୟାର୍ଥୀ ଅବଗତ ହେବେ ।
- CO2. ଜ୍ଞାନ ଅର୍ଜନ କରିବାସହ ଛାତ୍ରୀମାନେ ଅଧ୍ୟାପକ/ଅଧ୍ୟାପିକା, ଲିତିହାସବିଦ୍, ସମାଜ ସଂସ୍କାରକ, ଗବେଷକ, ସାମ୍ବାଦିକ ଆଦି ହୋଇପାରିବେ ।
- CO3. ଉନବିଂଶ ଏବଂ ବିଂଶ ଶତକର ଓଡ଼ିଆ ସାହିତ୍ୟକୁ ପୁଞ୍ଜୀନୁପୁଞ୍ଜ ଭାବେ ବୁଝି ନିଜର ସର୍ଜନଶୀଳତାକୁ ଅଭିବୃଦ୍ଧି କରିପାରିବେ ।
- CO4. ଅତୀତକୁ ଜାଣି ବର୍ତ୍ତମାନର ସାମୁହିକ କଲ୍ୟାଣ ନିମନ୍ତେ ବିଦ୍ୟାର୍ଥୀ ନିଜକୁ ପ୍ରସ୍ତୁତ କରିପାରିବେ ।

Syllabus

CORE-4

(ସ୍ଵାଧୀନତା ପରବର୍ତ୍ତୀ ଓଡ଼ିଆ ସାହିତ୍ୟ)

COURSE OUTCOMES (Cos)

CO1. ସ୍ଵାଧୀନତା ପରବର୍ତ୍ତୀ ସାହିତ୍ୟର ସ୍ଵରୂପ ଓ ବିକାଶକ୍ରମ ସମ୍ପର୍କରେ ଅବବୋଧପୂର୍ବକ ସାହିତ୍ୟ ପ୍ରତି ଆଗ୍ରହ ସୃଷ୍ଟିପାଇଁ ବିଦ୍ୟାର୍ଥୀ ପ୍ରେରଣା ପାଇପାରିବେ ।

CO2. ନିଜକୁ ଜଣେ ସଫଳ କବିରୂପେ ପ୍ରତିଷ୍ଠା ଦେବା ନିମନ୍ତେ ବିଦ୍ୟାର୍ଥୀର ସର୍ଜନଶୀଳ ଦୃଷ୍ଟିଭଙ୍ଗୀ ଉନ୍ନତ ହୋଇପାରିବ ।

CO3. ନାଟ୍ୟନିର୍ଦ୍ଦେଶକ, ଚଳଚ୍ଚିତ୍ର ନିର୍ଦ୍ଦେଶକ ହେବା ନିମନ୍ତେ କଳାତ୍ମକ ଜ୍ଞାନ ପାଇପାରିବେ ।

CO4. ସ୍ତମ୍ଭକାର, ସାମ୍ବାଦିକ, ବିବରଣୀ ଲେଖକ, ଜୀବନୀ ଲେଖକ ଆଦି କ୍ଷେତ୍ର ପାଇଁ ବିଦ୍ୟାର୍ଥୀ ନିଜକୁ ଦକ୍ଷ ବିବେଚିତ କରିପାରିବେ ।

ETHICS AND VALUES

(AECC E & V- II)

COURSE OUTCOMES (Cos)

After completing the course students will be able to:

- 1. Have changes in their perceptions and practices towards women**
- 2. Develop proper attitude towards women and value their work and contribution**
- 3. Come forward to challenge the unethical treatments against women**
- 4. End gender-based hierarchy and hegemony, remove the feeling that women are counter to men and bring about a complementary among the hitherto existing gender binary**
- 5. Be pioneer in creating a gender equal society where the well-being, happiness and security of the women will be well protected & contributing towards a better and happier society.**

AECC - II

ଯୋଗାଯୋଗ ଅନୁବିଧି, ରୀତି ଓ ମାଧ୍ୟମ (ଓଡ଼ିଆ)

COURSE OUTCOMES (Cos)

୧. ବିଶ୍ୱବିଦ୍ୟାଳୟରେ ଅନ୍ୟାନ୍ୟ ବିଭାଗର ଛାତ୍ରଛାତ୍ରୀ AECC-II ଭାବରେ ଓଡ଼ିଆର ଯୋଗାଯୋଗ ଅନୁବିଧି, ରୀତି ଓ ମାଧ୍ୟମକୁ ସବିଶେଷ ପାଠ୍ୟ ଭାବରେ ଅଧ୍ୟୟନ କରିବା ଫଳରେ ନିଜ ନିଜ ବିଷୟର ତାତ୍ତ୍ୱିକ ପ୍ରସଙ୍ଗକୁ ଖୁବ ସହଜରେ ଓଡ଼ିଆ ଭାଷାରେ ଉପସ୍ଥାପନ କରିପାରିବାର ଦକ୍ଷତା ବିକାଶ କରିପାରିବେ ।
୨. ବିଜ୍ଞାନ, ବାଣିଜ୍ୟ, ଦର୍ଶନ ଅଥବା ମନସ୍ତତ୍ତ୍ୱର ଛାତ୍ରଛାତ୍ରୀମାନେ ନିଜର ଗବେଷଣାକୁ ଓଡ଼ିଆ ଭାଷାରେ ଦଳଗତ ଆଲୋଚନାଭିତ୍ତିକ କରିପାରିବେ ।
୩. ବିବିଧ ବିଷୟରେ ଉଚ୍ଚଶିକ୍ଷା ଲାଭକଲେ ମଧ୍ୟ ନିଜ ମାତୃଭାଷାରେ ଆତ୍ମପ୍ରକାଶ କରିବା ନିହାତି ପକ୍ଷେ ସୁବିଧାଜନକ, ଅର୍ଥାତ ନିଜ ବିଷୟରେ ଆହରଣ ହୋଇଥିବା ଜ୍ଞାନକୁ ବହୁ ପ୍ରଚଳିତ ଓଡ଼ିଆ ଭାଷାରେ ଆଲୋଚନା କଲାବେଳେ ଉତ୍ତମପକ୍ଷ ସମୃଦ୍ଧ ହୁଏ ।
୪. ଜଣେ ତାତ୍ତ୍ୱର, ବୈଜ୍ଞାନିକ କିମ୍ବା ଶିକ୍ଷାବିତ୍ ସର୍ବଜନସ୍ୱୟ କିମ୍ବା ସର୍ବଜନାଦୃତ ହେବାପାଇଁ ଓଡ଼ିଆ ଭାଷା ଜରୁରୀ ।

SEMESTER-III

CORE-5

(ଓଡ଼ିଆ ଭାଷା ଓ ଲିପିର ଐତିହାସିକ ବିକାଶକ୍ରମ)

COURSE OUTCOMES (Cos)

- CO1. ଭାଷାର ରୂପତାତ୍ତ୍ୱିକ ଅଧ୍ୟୟନ ଦ୍ୱାରା ପ୍ରାଚୀନ ଓଡ଼ିଆର ସ୍ୱରୂପକୁ ଜାଣିହେବ ।
- CO2. ବିଦ୍ୟାର୍ଥୀ ପ୍ରାଚୀନ ଓଡ଼ିଆ ଲିପିର ଉତ୍ପତ୍ତି ସମ୍ପର୍କରେ ଜାଣି ଜଣେ ଦକ୍ଷ ବ୍ୟାକରଣିକ ହୋଇପାରିବେ ।
- CO3. ଓଡ଼ିଆ ଗଦ୍ୟର ବିକାଶକ୍ରମ ପରିପ୍ରେକ୍ଷୀରେ ଶିଳାଲେଖର ପ୍ରାଚୀନ ଗଦ୍ୟ ବିଷୟରେ ଯଥେଷ୍ଟ ଜ୍ଞାନ ହାସଲ କରିପାରିବେ ।
- CO4. ପ୍ରାକ-ସାରଳା ସାହିତ୍ୟର ଭାଷାତାତ୍ତ୍ୱିକ ଅନୁଶୀଳନ ଦ୍ୱାରା ଓଡ଼ିଆ ଭାଷାର ପ୍ରାଚୀନ ସ୍ୱରୂପକୁ ଜାଣିହେବ ।

CORE-6

(ଭାଷାର ସଂଜ୍ଞା ସ୍ୱରୂପ, ଓଡ଼ିଆ ଭାଷାର ବୈଶିଷ୍ଟ୍ୟ ଓ ବିବିଧତା)

COURSE OUTCOMES (Cos)

- CO1. ବିବିଧତା ମଧ୍ୟରେ ଓଡ଼ିଆ ଭାଷାର ସମୃଦ୍ଧ ପରିସରକୁ ଜାଣିପାରିବେ ।
- CO2. ଭାଷାବିତ୍ ତଥା ଶୁଦ୍ଧ ଲିଖନ, ପଠନ , କଥନର ଦକ୍ଷତା ପାଇପାରିବେ ।
- CO3. ଭାଷା କ୍ଷେତ୍ରରେ ଉଚ୍ଚତର ଗବେଷଣା ପାଇଁ ଏ ପତ୍ର ବିଦ୍ୟାର୍ଥୀଙ୍କ ପାଇଁ ଲାଭପ୍ରଦ ହୋଇପାରିବ ।
- CO4. ଭାଷା ସମ୍ପର୍କରେ ସାଧାରଣ ପରିଭାଷିକ ଜ୍ଞାନ ଏବଂ ଗଠନଗତ ବିବିଧତାକୁ ବିଦ୍ୟାର୍ଥୀ ଜାଣିବେ ।

CORE-7

(ଓଡ଼ିଆ ବ୍ୟାବହାରିକ ବ୍ୟାକରଣ)

COURSE OUTCOMES (Cos)

- CO1. ବନ୍ଧାକରଣିକ,ଭାଷାବିତ୍ ହେବାପାଇଁ ସାଧାରଣ ଜ୍ଞାନ ଅର୍ଜନ କରିପାରିବେ ।
- CO2. ପ୍ରଶ୍ନାସନ,ଅଧ୍ୟାପନା ,ଗବେଷଣା ତଥା ସରକାରୀ-ବେସରକାରୀ ସ୍ତରରେ କାର୍ଯ୍ୟ କରିବାର ସାମର୍ଥ୍ୟ ଯୋଗାଡ଼ିପାରିବେ ।
- CO3. ଭାଷା ଉପରେ ଉଚ୍ଚମାନର ଗବେଷଣା ପାଇଁ ଏହା ଲାଭଦାୟକ ହେବ ।
- CO4. ବହୁଶବ୍ଦର ଆୟତ୍ତ, ଭାଷା କୌଶଳରେ ସୁଧାର, ବହୁ ସଂସ୍କୃତି ସହ ଜଡ଼ିତ ହୋଇପାରିବେ ।

GE-A - II

(ଗଣମାଧ୍ୟମ, ବେତାର କଳା ଓ ବିଜ୍ଞାପନ କଳା)

COURSE OUTCOMES (Cos)

- CO1. ଗଣମାଧ୍ୟମ ସାମାଜ, ସଂସ୍କୃତି ଓ ସାହିତ୍ୟକୁ ଗତିଶୀଳ କରାଇଥାଏ ।
- CO2. ବିଜ୍ଞାପନ ଉତ୍ତମ କଳା ଓ ସାହିତ୍ୟ ପର୍ଯ୍ୟାୟଭୁକ୍ତ ହୋଇଥିବାରୁ ଏହା ଉପସ୍ଥାପନାର ସାମର୍ଥ୍ୟ ସୃଷ୍ଟି କରିଥାଏ ।
- CO3. ସାମ୍ବାଦିକତା, ଫିଚର ଲିଖନ, ସାକ୍ଷାତକାର, ଅଧ୍ୟାପନା ତଥା ପ୍ରଶାସନ କ୍ଷେତ୍ରରେ ଯୋଗାଯୋଗମୂଳକ ଜ୍ଞାନ ବିଦ୍ୟାର୍ଥୀଙ୍କୁ ପ୍ରାପ୍ତ ହୋଇଥାଏ ।
- CO4. ପତ୍ରଲିଖନ (ବାଣିଜ୍ୟିକ, କାର୍ଯ୍ୟାଳୟୀ, ବ୍ୟକ୍ତିଗତ, ସମ୍ପାଦକୀୟତା) ସମ୍ପର୍କରେ ବିଶେଷ ଜ୍ଞାନ ଆହରଣ କରିପାରିବେ ।

Skill Enhancement Course- I
(ENGLISH COMMUNICATION)

COURSE OUTCOMES (Cos)

After completion of the course the students shall be able to:

CO1:enhance their ability to build and enrich their communication skills

CO2:be able to build up the four primary skills in students in the academic
as well as in the wider domains of use like public offices.

CO3:acquire analytical and comprehension reading skills

CO4:Identify basic principles of communication

CO5:build speaking and listening skills

CO6:learn beyond the conventional syllabus and be prepared to meet challenges
while seeking a job

CO7:be able to synthesize knowledge and use it creatively to better understand
and improvise themselves

CO8:be able to communicate effectively through written reports, presentations,
and discussions

CO9:develop a neutral accent and improve general standard of pronunciation

CO10:speak globally intelligible English.

SEMESTER -IV

CORE-8

(ଓଡ଼ିଆ ଲୋକସଂସ୍କୃତି ଓ ଲୋକ ସାହିତ୍ୟ)

COURSE OUTCOMES (Cos)

- CO1. ବିଦ୍ୟାର୍ଥୀ ଲୋକ ସାହିତ୍ୟ ଏବଂ ଲୋକ ସଂସ୍କୃତିକୁ ଅଧ୍ୟୟନ କରିବା ଦ୍ୱାରା ଉତ୍କଳୀୟ ସଂସ୍କୃତିକୁ ହୃଦବୋଧ କରିପାରିବେ ।
- CO2. ଲୋକସାହିତ୍ୟର ବାହ୍ୟ ଏବଂ ଅନ୍ତଃସ୍ୱରୂପକୁ ଚିହ୍ନି ଏ କ୍ଷେତ୍ରରେ ଅଧ୍ୟୟନ, ଅଧ୍ୟାପନା ନିମନ୍ତେ ସୁଯୋଗ ପାଇପାରିବେ ।
- CO3. ଲୋକସାହିତ୍ୟକୁ ଆଧାରକରି ବିଦ୍ୟାର୍ଥୀ ଅନୁସନ୍ଧାନ ମୂଳକ ମହତ୍ତର କର୍ମପାଇଁ ନିଜକୁ ପ୍ରସ୍ତୁତ କରିପାରିବେ ।
- CO4. ପାଠକଙ୍କ ଜିଜ୍ଞାସା ନିମନ୍ତେ ପ୍ରାଚୀନ ଲୋକ ସଂସ୍କୃତି ବହୁ ଉପାଦାନ ପ୍ରଦାନ କରିଥାଏ ।

CORE-9

(ସାହିତ୍ୟ ତତ୍ତ୍ଵ- ପ୍ରାଚ୍ୟ ଓ ପାଶ୍ଚାତ୍ୟ)

COURSE OUTCOMES (Cos)

- CO1. ପାଶ୍ଚାତ୍ୟ ଦେଶର ବିଭିନ୍ନ ବାଦ ପ୍ରାଚ୍ୟ ସାହିତ୍ୟକୁ କିଭଳି ପ୍ରଭାବିତ କରିପାରିଛି ବିଦ୍ୟାର୍ଥୀ ଜାଣି ପାରିବେ ।
- CO2. ସାହିତ୍ୟ ଅନୁଶୀଳନ ତଥା ଅନୁସନ୍ଧାନ ବେଳେ ଆବଶ୍ୟକୀୟ ତତ୍ତ୍ଵଜ୍ଞାନ ଏଥିରୁ ମିଳିପାରିବ ।
- CO3. ଭାବପ୍ରବଣତା ଦ୍ଵାରା କେବଳ ନୁହେଁ, ଜୀବନକୁ ନୀତିନିଷ୍ଠ ଭାବରେ ବୁଝିପାରିବାର ସାମର୍ଥ୍ୟ ଯୋଗାଡ଼ି ପାରିବେ ।
- CO4. ଜୀବନ ଓ ପୃଥିବୀର ଚିତ୍ରାତ୍ମକ ଅନୁଭବକୁ ରୂପାୟିତ କରି ବିଦ୍ୟାର୍ଥୀ ଗୁଡ଼ତମ ଉପଲକ୍ଷକୁ ସାହିତ୍ୟ ଜରିଆରେ ପ୍ରକାଶ କରି ପାରିବେ ।

CORE-10

(ଓଡ଼ିଆ କବିତା ପ୍ରାଚୀନରୁ ଆଧୁନିକ)

COURSE OUTCOMES (Cos)

- CO1. ପ୍ରାଚୀନରୁ ଆଧୁନିକ ଓଡ଼ିଆ କାବ୍ୟ-କବିତା ଆଦିକୁ ପୁଞ୍ଜିକରି ଜ୍ଞାନ ବୃଦ୍ଧି କରିହେବ ।
- CO2. ପ୍ରାଚୀନ- ଆଧୁନିକ କାବ୍ୟ-କବିତା ମଧ୍ୟରେ ସାମଞ୍ଜସ୍ୟ ତଥା ମୌଳିକ ପାର୍ଥକ୍ୟକୁ ଜାଣିହେବ
- CO3. କବିତାରେ ଥିବା ସାହିତ୍ୟିକ ଉପାଦାନ ଏବଂ ଜୀବନାନୁଭୂତି ମିଶ୍ରିତ କଳାତ୍ମକ ପରିପାଟୀ ସହ ବିଦ୍ୟାର୍ଥୀ ପରିଚିତ ହୋଇପାରିବେ ।
- CO4. ସର୍ଜନାତ୍ମକ ଦିଗ ଆଡ଼କୁ ଅଗ୍ରସର ହୋଇପାରିବେ ।

GE- B -II
(ସାହିତ୍ୟ ଅଧ୍ୟୟନ)

COURSE OUTCOMES (Cos)

- CO1. ସାହିତ୍ୟ, ସମାଜ ତଥା ପରିବାର କ୍ଷେତ୍ରରେ ଉନ୍ନତ ଜୀବନଧାରଣର ଶୈଳୀ ସହିତ ଅନୁରାଗାତ୍ମକ ଦାୟବଜ୍ଞତା ଏବଂ ଭ୍ରାତୃଭାବ ସମ୍ପର୍କରେ ବିଦ୍ୟାର୍ଥୀ ଅବଗତ ହୋଇପାରିବେ ।
- CO2. ଜୀବନର ବୃହତ୍ତର ଅନୁଭବକୁ ସାହିତ୍ୟ ମାଧ୍ୟମରେ ପାଇପାରିବେ ।
- CO3. ଅଭିନେତା, ନାଟ୍ୟନିର୍ଦ୍ଦେଶକ, ଚଳଚ୍ଚିତ୍ର ନିର୍ଦ୍ଦେଶକ ହୋଇପାରିବେ ।
- CO4. ଶିକ୍ଷାର୍ଥୀମାନେ ରମ୍ୟରଚନାକାର ହେବାପାଇଁ ନିଜକୁ ପ୍ରସ୍ତୁତ କରିପାରିବେ ।

Skill Enhancement Course- II

(MODERN OFFICE MANAGEMENT)

COURSE OUTCOMES (Cos)

On completion of this course, students will be able to

1. have a good command over quantitative aptitude and logical thinking.
2. understand various quantitative methods.
3. understand data and draw inference from data.
4. improve their critical thinking skills.

SEMESTER- V

CORE-11

(ଓଡ଼ିଆ ନାଟକ ଓ ଏକାଙ୍କିକା)

COURSE OUTCOMES (Cos)

CO1. ସାହିତ୍ୟ, ସମାଜ ତଥା ପରିବାର କ୍ଷେତ୍ରରେ ଉନ୍ନତ ଜୀବନଧାରଣର ଉତ୍ସାହ, ଅନୁରାଗାତ୍ମକ ଦାୟବଦ୍ଧତା ସମ୍ପର୍କରେ ବିଦ୍ୟାର୍ଥୀ ଅବଗତ ହୋଇପାରିବେ ।

CO2. ସାହିତ୍ୟ ସମ୍ପର୍କରେ ନୈତିକ ତଥା ଦାର୍ଶନିକ ଜ୍ଞାନ ପାଇପାରିବେ ।

CO3 ଅଭିନେତା, ନାଟ୍ୟନିର୍ଦ୍ଦେଶକ, ଚଳଚ୍ଚିତ୍ର ନିର୍ଦ୍ଦେଶକ ହୋଇପାରିବେ ।

CO4. ଶିକ୍ଷାର୍ଥୀମାନେ ରମ୍ୟରଚନାକାର ହେବାପାଇଁ ନିଜକୁ ପ୍ରସ୍ତୁତ କରିପାରିବେ ।

CORE-12

(ଓଡ଼ିଆ କଥା ସାହିତ୍ୟ)

COURSE OUTCOMES (Cos)

- CO1. ବିଦ୍ୟାର୍ଥୀ ଉପନ୍ୟାସ, ଗଳ୍ପ ତଥା କଥା ସାହିତ୍ୟର ଅନ୍ୟାନ୍ୟ ରଚନାରେ ଥିବା ବିଧି ଓ ନିୟମଗୁଡ଼ିକ ସମ୍ପର୍କରେ ଅବଗତ ହୋଇପାରିବେ ।
- CO2. ଓଡ଼ିଆ କଥା ସାହିତ୍ୟର ସ୍ୱରୂପ, ବିକାଶ ଧାରା ଏବଂ ଗଳ୍ପ- ଉପନ୍ୟାସ ସମ୍ପର୍କରେ ଧାରଣା ପ୍ରାପ୍ତ ହୋଇପାରିବେ ।
- CO3. ଆଧୁନିକ ସାହିତ୍ୟ ସମ୍ପର୍କରେ ବିଦ୍ୟାର୍ଥୀ ଜ୍ଞାନ ପ୍ରାପ୍ତ ହୋଇପାରିବେ ।
- CO4. ଗାଳ୍ପିକ, ଔପନ୍ୟାସିକ, ଅଧ୍ୟାପିକା ତଥା ଗବେଷଣା ଆଦି କ୍ଷେତ୍ରରେ ବିଦ୍ୟାର୍ଥୀ ନିଜକୁ ଯୋଗ୍ୟ ବିବେଚିତ କରିପାରିବେ ।

DSE -I

(ଓଡ଼ିଶାର ସାଂସ୍କୃତିକ ଇତିହାସ ଓ ଓଡ଼ିଆ ସାହିତ୍ୟ)

COURSE OUTCOMES (Cos)

- CO1. ପ୍ରାଚୀନ ଓଡ଼ିଶାର ଗଠନ ଓ ସାମାଜିକ ଜୀବନ ସମ୍ବନ୍ଧରେ ବିଷୟ ବିବରଣୀ ପାଇପାରିବେ ।
- CO2. ସାଂସ୍କୃତିକ ସ୍ୱରୂପ ଓ ବୈଶିଷ୍ଟ୍ୟ ସମ୍ପର୍କରେ ଧାରଣା ମିଳିପାରିବ ।
- CO3. ଦାରୁଦେବତା ଶ୍ରୀଜଗନ୍ନାଥଙ୍କ ସାଂସ୍କୃତି ତଥା ଆଦିବାସୀ ସାଂସ୍କୃତିକ ପରମ୍ପରା ସମ୍ପର୍କରେ ଜାଣିହେବ ।
- CO4. ଓଷାବ୍ରତ ଓ ପର୍ବପର୍ବାଣୀ ସମ୍ପର୍କରେ ଜାଣିହେବ ।

DSE -II

(ଓଡ଼ିଆ ଶିଶୁ ସାହିତ୍ୟ ଓ ବିଜ୍ଞାନଭିତ୍ତିକ ସାହିତ୍ୟ)

COURSE OUTCOMES (Cos)

- CO1. ଶିଶୁ ସାହିତ୍ୟର ଶିଳ୍ପରୀତିକୁ ଜାଣିହେବ ।
- CO2. ବିଜ୍ଞାନଭିତ୍ତିକ ଶିଶୁ ସାହିତ୍ୟ, ଗଳ୍ପ ସାହିତ୍ୟ, ପ୍ରବନ୍ଧ ସାହିତ୍ୟକୁ ଜାଣିପାରିବେ ।
- CO3. ବୈଜ୍ଞାନିକ ଉପନ୍ୟାସର ତଥ୍ୟ ଓ ତତ୍ତ୍ୱ ବିଷୟରେ ଜାଣିପାରିବେ ।
- CO4. ସୌର ସଂସ୍କୃତି, ସୌର କେନ୍ଦ୍ର, ସୌରକଳଙ୍କ, ଭ୍ୟାନ ଆଲେନ ବିକିରଣ, କିରୀଟୀୟ ବସ୍ତୁତ୍ୱ ବହିଷ୍କରଣ, ଆପେକ୍ଷିକ ତତ୍ତ୍ୱ, ଗାମ ରଶ୍ମି, କ୍ୱାଣ୍ଟମ ତତ୍ତ୍ୱ, ବୋହମନୀୟ ଯାନ୍ତ୍ରିକ ତତ୍ତ୍ୱ, ତରଙ୍ଗ ସମୀକରଣ, ଫିତା ତତ୍ତ୍ୱ, କାଲାବି- ଯାଉ ବସ୍ତୁବିଧତା, ସିପି ଉଲ୍ଲଂଘନ ପ୍ରକ୍ରିୟା, ଷ୍ଟାର୍ଟ ମଡେଲ୍, ପ୍ରାକୃଲ, ବ୍ଲକ ହୋଲ୍ , ITER ପ୍ରକଳ୍ପ, ସୌର ଉଦ୍‌ଜାନ ପାଞ୍ଚାର ଆଦି ବୈଜ୍ଞାନିକ ତତ୍ତ୍ୱ ସମ୍ପର୍କରେ ବିଦ୍ୟାର୍ଥୀ ଜାଣିପାରିବେ ।

SEMESTER-VI

CORE-13

(ଓଡ଼ିଆ ଗଦ୍ୟ ସାହିତ୍ୟ)

COURSE OUTCOMES (Cos)

- CO1. ଆତ୍ମଜୀବନୀ, ଭ୍ରମଣ ସାହିତ୍ୟ ଓ ସମାଲୋଚନାର ପଠନ ତାଙ୍କ ସର୍ଜନଶୀଳ ଶକ୍ତିକୁ ବୃଦ୍ଧି କରାଇ ପାରିବ ।
- CO2. ଫତୁରାନନ୍ଦଙ୍କ ସମ୍ପର୍କରେ ଜାଣିହେବ ।
- CO3. ଭୁବନେଶ୍ୱର ବେହେରାଙ୍କ ସମ୍ପର୍କରେ ଜାଣିପାରିବେ ।
- CO4. ଗଦ୍ୟ ସାହିତ୍ୟର ଦିଗଦିଗନ୍ତ ପର୍ଯ୍ୟନ୍ତ ବିଦ୍ୟାର୍ଥୀ ସେମାନଙ୍କ ଜ୍ଞାନ ବଳୟକୁ ବ୍ୟାପ୍ତ କରିପାରିବେ ।

CORE-14

(ଓଡ଼ିଆ ଭାଷାର ବ୍ୟାବହାରିକ ପ୍ରୟୋଗ)

COURSE OUTCOMES (Cos)

- CO1. ଯୋଗାଯୋଗ ପ୍ରକ୍ରିୟାରେ ଭାଷଣ କଳା, ଦଳଗତ ଆଲୋଚନା ଓ ସାକ୍ଷାତକାରର ଅବଦାନ ଜାଣିହେବ ।
- CO2. ସ୍ତମ୍ଭ, ପିଚର ଓ ବିଜ୍ଞାପନର ଲିଖନ ଶୈଳୀକୁ ଜାଣିହେବ ।
- CO3. ନଥି, ଚିଠା, ବିଜ୍ଞପ୍ତି ତଥା ପତ୍ରଲିଖନର ବିଭିନ୍ନ ଶୈଳୀକୁ ଜାଣିହେବ ।
- CO4. ଓଡ଼ିଆ ଭାଷାରେ କମ୍ପ୍ୟୁଟରୀକରଣ ତଥା ଇଣ୍ଟର୍ନେଟର ବ୍ୟବହାରକୁ ଜାଣିପାରିବେ ।

DSE -III

(ଓଡ଼ିଆ ସାହିତ୍ୟ)

COURSE OUTCOMES (Cos)

- CO1. ପ୍ରାଚୀନ କବିତା ଓ ଆଧୁନିକ କବିତା ମଧ୍ୟରେ ତୁଳନାକୁ ଜାଣିପାରିବେ ।
- CO2. ଚାରୋଟି ଗଳ୍ପ ସମ୍ପର୍କରେ ଅବଗତ ହୋଇପାରିବେ ।
- CO3. ଚାରୋଟି ପ୍ରବନ୍ଧ ଓ ସମାଲୋଚନା ସମ୍ପର୍କରେ ଅବଗତ ହୋଇପାରିବେ ।
- CO4. ମାଟିର ମଣିଷ ଓ ତାହାର ଔପନ୍ୟାସିକଙ୍କ ସମ୍ପର୍କରେ ସମ୍ପୂର୍ଣ୍ଣ ତଥ୍ୟ ପାଇପାରିବେ ।

DSE -IV

(ପ୍ରବନ୍ଧ ପ୍ରସ୍ତୁତି ଓ ଉପସ୍ଥାପନା)

କିମ୍ବା

(ସମାଲୋଚନା, ଅନୁବାଦ, ସମ୍ପାଦନା ଓ ଗବେଷଣା)

COURSE OUTCOMES (Cos)

- CO1. ସମାଲୋଚନାର ସଂଜ୍ଞା, ସ୍ୱରୂପ ଓ ପ୍ରକାରଭେଦ ସମ୍ପର୍କରେ ଅବଗତ ହୋଇପାରିବେ ।
- CO2. ଅନୁବାଦର ସଂଜ୍ଞା ସ୍ୱରୂପ ଓ ପ୍ରକାରଭେଦ ବିଷୟରେ ଜାଣିପାରିବେ ।
- CO3. ସମ୍ପାଦନାର ସଂଜ୍ଞା ସ୍ୱରୂପ ଓ ପ୍ରକାରଭେଦ ବିଷୟରେ ଜାଣିପାରିବେ ।
- CO4. ଗବେଷଣା ପଦ୍ଧତିର ବ୍ୟବହାର ସମ୍ବନ୍ଧରେ ଜାଣିପାରିବେ ।

RAMA DEVI WOMEN'S UNIVERSITY

COURSE STRUCTURE OF ODIA DEPARTMENT (P.G.)



RAMA DEVI WOMEN'S UNIVERSITY
BHOI NAGAR, BHUBANESWAR, ODISHA, PIN-
751022

Course Structure for **P.G.** Department(2022-23)

Choice Based Credit System (CBCS)

Hard Core Courses, Core Elective Courses, Allied Elective Courses and Open Elective

Duration	:	2 Years
Semester	:	4
Each Semester Period	:	16 to 18 weeks
Total Papers	:	22
Teaching Hours per Paper	:	60 Hours
Total Credits	:	103
Per Paper	:	5 Credits (Excluding Allied Core, Open Elective and Field Internship)
Allied Core	:	3 Credits each Paper
Open Elective	:	4 Credits each Paper
Field Internship	:	3 Credits each Paper
One Credit	:	10 Teaching Hours

Instruction:

Each Paper : 100 Marks

- Internal Assessment : 30 Marks
(20 Marks Theory +10 Marks Viva-voice)
- Semester Examination : 70 Marks
- Total : 100 Marks
- Total Credit : 05

PAPER AND CREDIT DISTRIBUTION IN P.G. DEPARTMENT

Total No. of Papers : 22

Total Marks : 2000

(Each paper 100 marks +

2 Allied Elective papers 50

Marks + Open Elective 50

Marks + Field Internship 50

marks each)

Total Credits : 103

1. Hard Core Papers: 14 x 5 = 70

2. Core Electives : 4 x 5 = 20

3. Open Electives : 1 x 4 = 4

4. Allied Core : 2 x 3 = 6

5. Field Internship : 1 x 3 = 3

1) Hard Core Paper :

Main Discipline

2) Core Elective papers:

Subject specific/ special/advance/supportive to the discipline
(choice to be given 2 or more options)

3) Open Elective papers:

Open to students of all P.G. Departments.

4) Allied Elective Paper:

Our students have to opt. Allied Paper from other disciplines during
course work.

5) Field Internship:

Our Student will get practical experience before working on their
own.

ସ୍ନାତକୋତ୍ତର ଓଡ଼ିଆ ଭାଷା-ସାହିତ୍ୟ ବିଭାଗ

SEMESTER WISE COURSE STRUCTURES FOR P.G

DEPARTMENT

SEMESTER-1

Sl. No.	Paper	Hard Core	Core Elective	Allied Core	Open Elective	Field Internship
01	1	101	-	-	-	-
02	2	102	-	-	-	-
03	3	103	-	-	-	-
04	4	104	-	-	-	-
05	5	-	-	101*	-	-

Total Papers – 5

Total Marks – 450

Total Credits – 23

SEMESTER-2

Sl. No.	Paper	Hard Core	Core Elective	Allied Core	Open Elective	Field Internship
06	6	201	-	-	-	-
07	7	202	-	-	-	-
08	8	203	-	-	-	-
09	9	204	-	-	-	-
10	10	-	201	-	-	-
11	11	-	-	-	201	-

Total Papers – 6

Total Marks – 550

Total Credits – 29

SEMESTER-3

Sl. No.	Paper	Hard Core	Core Elective	Allied Core	Open Elective	Field Internship
12	12	301	-	-	-	-
13	13	302	-	-	-	-
14	14	303	-	-	-	-
15	15	-	301	-	-	-
16	16	-	302	-	-	-
17	17					201

Total Papers – 6

Total Marks – 550

Total Credits – 28

SEMESTER-4

Sl. No.	Paper	Hard Core	Core Elective	Allied Core	Open Elective	Field Internship
18	18	401	-	-	-	-
19	19	402	-	-	-	-
20	20	403	-	-	-	-
21	21	-	401	-	-	-
22	22	-	-	401	-	-

Total Papers – 5

Total Marks – 450

Total Credits – 23

TITLE OF THE PAPERS

Hard Core Papers

H.C. 101	– ପ୍ରାଚୀନ ଓ ମଧ୍ୟଯୁଗୀୟ କାବ୍ୟ କବିତା
H.C. 102	– ଆଧୁନିକ କାବ୍ୟ କବିତା
H.C. 103	– ଓଡ଼ିଆ ଗଦ୍ୟ ସାହିତ୍ୟର ଧାରା
H.C. 104	– ଗଳ୍ପ/ଉପନ୍ୟାସ
H.C. 201	– ନାଟକ ଓ ଏକାଙ୍କିକା
H.C. 202	– ଭାଷା ବିଜ୍ଞାନ
H.C. 203	– ଗବେଷଣା ପଦ୍ଧତି
H.C. 204	– ଲିଖନ କଳା
H.C. 301	– କାର୍ଯ୍ୟାଳୟ ନିୟମ ପ୍ରସ୍ତୁତି ଓ ସମ୍ପାଦନା କଳା
H.C. 302	– ଓଡ଼ିଆ ଗୀତିକବିତାର ସ୍ୱରୂପ
H.C. 303	– ମଧ୍ୟଯୁଗୀୟ କାବ୍ୟ ପରମ୍ପରା (୧୫୦୦ - ୧୮୫୦)
H.C. 401	– ପ୍ରାୟୋଗିକ ଓଡ଼ିଆ ବ୍ୟାକରଣ
H.C. 402	– ପ୍ରାଚ୍ୟ ପାଶ୍ଚାତ୍ୟ କାବ୍ୟତତ୍ତ୍ୱ
H.C. 403	– ପାଠକ୍ରମ ନିବନ୍ଧ ପ୍ରସ୍ତୁତି ଓ ମୌଖିକ ପରୀକ୍ଷା

Core Electives

C.E. 201	- ଆଧୁନିକ ଓଡ଼ିଆ କାବ୍ୟ-କବିତା <i>ଅଥବା</i> ଭାଷାତତ୍ତ୍ୱ (ଏଥିରୁ ଗୋଟିଏ ପଢ଼ିବେ)
C.E. 301	- ଆଧୁନିକ ଗଦ୍ୟ ସାହିତ୍ୟର ଧାରା <i>ଅଥବା</i> ଭାଷା-ବିଜ୍ଞାନ ଚର୍ଚ୍ଚା ଓ ଭାଷା ବିଜ୍ଞାନ (ଏଥିରୁ ଗୋଟିଏ ପଢ଼ିବେ)

- C.E. 302 - ଗୀତି ଯୁଗ *ଅଥବା* ଲୋକସାହିତ୍ୟର ବିଭିନ୍ନ ବିଭାଗ
(ଏଥିରୁ ଗୋଟିଏ ପଢ଼ିବେ)
- C.E. 401 - ଆଧୁନିକ ପ୍ରୟୋଗ ତତ୍ତ୍ୱ *ଅଥବା*
ଲୋକସାହିତ୍ୟ ଓ ସଂସ୍କୃତି (ଏଥିରୁ ଗୋଟିଏ ପଢ଼ିବେ)

Open Electives

- O.E. 201 - ଓଡ଼ିଶାର ବିଭିନ୍ନ ସଂସ୍କୃତି

Allied Core

- A.C. 101 - କମ୍ପ୍ୟୁଟର ଆପ୍ଲିକେସନ
- A.C. 401 - WOMEN & SOCIETY

PROGRAMME OUTCOME (POs), PROGRAM SPECIFIC OUT COMES(PSOs), COURSE OUTCOMES(Cos) FOR ALL PROGRAMME OFFERED BY THE P.G. DEPARTMENT OF ODIA

PROGRAMME OUTCOMES (POs)

PO1. ସ୍ନାତକୋତ୍ତର ଶିକ୍ଷା ମାନବ ପ୍ରବୃତ୍ତିକୁ ଲକ୍ଷ୍ୟ ପ୍ରଦାନ କରିଥାଏ। ଅର୍ଥାତ ଅଧ୍ୟାପନା ବୃତ୍ତି ସହିତ ପ୍ରବୃତ୍ତିଗତ ସାରସ୍ୱତ କର୍ମ ମଧ୍ୟ ତା' ଦ୍ୱାରା ସମ୍ଭବ ହୋଇଥାଏ ।

PO2. ଜୀବନ ଓ ଜଗତକୁ ବୃହତ୍ତର ମାନଦଣ୍ଡରେ ବିଚାର କରିବାକୁ ସାହିତ୍ୟ ସୁଯୋଗ ଦେଇଥାଏ ।

PO3. ଆର୍ଥିକ ମାନଦଣ୍ଡକୁ ସଜାଡ଼ିବାର ଏକମାତ୍ର ଶୈକ୍ଷିକ ମାଧ୍ୟମ ହେଉଛି ସ୍ନାତକୋତ୍ତର ଭାଷାସାହିତ୍ୟ ଶିକ୍ଷା ।

PO4. ସାହିତ୍ୟକୁ ନେଇ ସ୍ନାତକୋତ୍ତର ଶିକ୍ଷା ଲାଭ ଦ୍ୱାରା ଚେତନାର ବିକାଶ ହୋଇଥାଏ ।

PO5. ଉଚ୍ଚଶିକ୍ଷା ପ୍ରାପ୍ତିପରେ ଗବେଷଣାର ବିଭିନ୍ନ ଦିଗ ଉଦ୍ଘୋଷିତ ହେବ ।

PO6. ଆଇଏଏସ , ଓପିଏସସି ଭଳି ସରକାରୀ ମର୍ଯ୍ୟାଦାଜଣକ ବୃତ୍ତିଗତ ପଦବୀ ହାସଲ ହୋଇପାରିବ ।

PO7. ନେତ ବା ନ୍ୟାସନାଲ ଏଲିଜିବିଲିଟି ଟେଷ୍ଟ ପରୀକ୍ଷା ଦେବା ପାଇଁ ସ୍ନାତକୋତ୍ତର ଶିକ୍ଷାଲାଭ ଏକମାତ୍ର ମାଧ୍ୟମ ।

PO8. ସ୍ନାତକୋତ୍ତର ଶିକ୍ଷା ଚେତନାର ଏଭଳି ଏକ ବଳିଷ୍ଠ ସୋପାନ ଯାହା ଅନ୍ୟ ଭାରତୀୟ ଭାଷା ସାହିତ୍ୟକୁ ହୃଦବୋଧ କରିବା ପାଇଁ ଏକ ଆଦ୍ୟସୋପାନ ।

PO9. ସ୍ନାତକୋତ୍ତର ଶିକ୍ଷାଦ୍ୱାରା ମାତୃଭାଷାକୁ ନେଇ ବିବିଧ ପରୀକ୍ଷା ନିରୀକ୍ଷା ଓ ସମ୍ଭବ ହୋଇପାରିବ ।

PO10. ସ୍ନାତକୋତ୍ତର ଶିକ୍ଷା ଦ୍ୱାରା ଅଧ୍ୟାୟମାନଙ୍କ ଭିତରେ ଓଡ଼ିଆ ଭାଷା, ସାହିତ୍ୟ ଓ ସଂସ୍କୃତି ସମ୍ବନ୍ଧରେ ଧାରଣା ସୃଷ୍ଟିହେବା ସହ ଏ ସବୁର ସଂରକ୍ଷଣ, ପ୍ରଚାର ଓ ପ୍ରସାର ଦିଗରେ ଯତ୍ନବାନ ହୋଇପାରିବେ।

PROGRAM SPECIFIC OUT COMES(PSOs)

PSO1.ପ୍ରାକ ସାରଳା ଯୁଗ, ସାରଳା ଯୁଗ, ପଞ୍ଚସଖା ଯୁଗର ସାମାଜିକ, ସାଂସ୍କୃତିକ ଅବସ୍ଥା ସମ୍ପର୍କରେ ଜାଣିପାରିବେ ।

PSO2.୧୯୫୦ ମସିହା ପର୍ଯ୍ୟନ୍ତର ଓଡ଼ିଆ କବିତାର ସାମାଜିକ ପୃଷ୍ଠଭୂମି, କାବ୍ୟିକ ଆଭିମୁଖ୍ୟ ସମ୍ପର୍କରେ ଜାଣିହେବ ।

PSO3.ଓଡ଼ିଆ କଥା ସାହିତ୍ୟର ଜନକ ଫକୀରମୋହନ ସେନାପତି, ସୁରେନ୍ଦ୍ର ମହାନ୍ତି, ଅଶ୍ୱଳ ମୋହନ ପଟ୍ଟନାୟକ, ବନବରଣ ମିତ୍ର ଓ ମନୋଜ ଦାସଙ୍କ ଗନ୍ଧର ପ୍ରଭାବ ତଥା ଆଭିମୁଖ୍ୟକୁ ବିଦ୍ୟାର୍ଥୀ ଜାଣିବେ ।

PSO4.ଏକ ନିର୍ଦ୍ଦିଷ୍ଟ ସମୟ ଖଣ୍ଡରେ ରଚିତ ଓଡ଼ିଆ ନଟକାର ସୃଷ୍ଟି, ବିକାଶ ପ୍ରକ୍ରିୟା ଓ ଆଭିମୁଖ୍ୟ ବିଷୟରେ ସ୍ପଷ୍ଟ ସୂଚନା ପ୍ରାପ୍ତ ହେବେ ।

PSO5.ଭାରତର ବିଭିନ୍ନ ଭାଷାଗୋଷ୍ଠୀ ସମ୍ପର୍କରେ ଅବଧାରଣା ମିଳିପାରିବ ।

SEMESTER-1

HARD CORE

Paper - 101

ପ୍ରାଚୀନ ଓ ମଧ୍ୟଯୁଗୀୟ କାବ୍ୟ କବିତା

PROGRAMME OUTCOME (COs)

- CO1. ପ୍ରାକ ସାରଳା, ସାରଳା, ପଞ୍ଚସଖା ଓ ମଧ୍ୟଯୁଗ ସାହିତ୍ୟର ସାମାଜିକ, ସାଂସ୍କୃତିକ ପୃଷ୍ଠଭୂମି ସମ୍ପର୍କରେ ଜ୍ଞାନ ଆହରଣ କରିପାରିବେ ।
- CO2. ସରଳା ମହାଭାରତର ମୌଳିକତା କ୍ରମରେ 'ସ୍ଵର୍ଗାରୋହଣ ପର୍ବ'କୁ ଜାଣିହେବ ।
- CO3. ଜଗନ୍ନାଥ ଦାସଙ୍କ କବିତ୍ଵ ଓ ଶବ୍ଦ ସଂଯୋଜନାକୁ ଜାଣିହେବ ।
- CO4. ଅଭିମନ୍ୟୁ ସାମନ୍ତ ସିଂହାରଙ୍କ ଲିଖନ ଶୈଳୀକୁ ଜାଣିହେବ ।
- CO5. ପ୍ରାଚୀନ ଓ ମଧ୍ୟଯୁଗ କବିତାର ପରିଚୟ ପାଇପାରିବେ ।

HARD CORE

Paper - 102

ଆଧୁନିକ କାବ୍ୟ କବିତା

PROGRAMME OUTCOME (COs)

CO1. ଆଧୁନିକ ସାହିତ୍ୟର ପୃଷ୍ଠଭୂମି ସମ୍ପର୍କରେ ଜାଣିପାରିବେ ।

CO2. ଉନବିଂଶ ଶତକର ଅଷ୍ଟମ ଦଶକର କାବ୍ୟ ଜଗତ ତଥା ମହାକାବ୍ୟର ଅଙ୍ଗିକତାକୁ ଜାଣିହେବ ।

CO3. ଗୋପବନ୍ଧୁ ଦାସଙ୍କ ଜନ୍ମ, ଜୀବନୀ ଓ ସାହିତ୍ୟକୃତି ସମ୍ପର୍କରେ ଜାଣିହେବ ।

CO4. କବି ସଚ୍ଚିଦାନନ୍ଦ ରାଉତରାୟ, ଗୁରୁପ୍ରସାଦ ମହାନ୍ତି, ରମାକାନ୍ତ ରଥ ଓ ବେଣୁଧର ରାଉତଙ୍କ କାବ୍ୟିକ ଆଭିମୁଖ୍ୟ ତଥା ଶବ୍ଦ ଚାତୁର୍ଯ୍ୟକୁ ଜାଣିହେବ ।

CO5. ପ୍ରଗତିଶୀଳ ଚିନ୍ତନ ତଥା ପ୍ରୟୋଗଧର୍ମୀ କବିତା ସମ୍ପର୍କରେ ଜ୍ଞାନ ମିଳିବ ।

HARD CORE

Paper - 103

ଓଡ଼ିଆ ଗଦ୍ୟ ସାହିତ୍ୟର ଧାରା

PROGRAMME OUTCOME (COs)

- CO1. ଓଡ଼ିଆ ପ୍ରବନ୍ଧ ସାହିତ୍ୟ ସମ୍ପର୍କରେ ଉତ୍ତମ ସୂଚନା ଅର୍ଜନ କରିପାରିବେ ।
- CO2. ପ୍ରାଚୀନ ଗଦ୍ୟ ସାହିତ୍ୟର ଧାରାକୁ ଜାଣିପାରିବେ ।
- CO3. ପ୍ରବନ୍ଧ ରଚନାକୁ ଏକ କଳା ଭାବରେ ଚିହ୍ନିତ କରିପାରିବେ ।
- CO4. ଭ୍ରମଣକାହାଣୀ ପଠନର ଉପଦେୟତାକୁ ଜାଣିପାରିବେ ।
- CO5. ସାହିତ୍ୟଧର୍ମୀ ଭ୍ରମଣକାହାଣୀର ସୂଚନା ପାଇପାରିବେ ।

HARD CORE

Paper - 104

ଗଣ୍ଠ / ଉପନ୍ୟାସ

PROGRAMME OUTCOME (COs)

- CO1. କ୍ଷୁଦ୍ରଗଣ୍ଠରେ ରାଜନୀତିକ, ସାମାଜିକ, ସାଂସ୍କୃତିକ ଅବସ୍ଥା ଓ ତାହାର ପ୍ରତିଫଳନକୁ ଜାଣିହେବ ।
- CO2. ଓଡ଼ିଆ ଗଣ୍ଠ ସମ୍ପର୍କରେ ଜ୍ଞାନ ଆହରଣ କରିପାରିବେ ।
- CO3. ଉପନ୍ୟାସରେ ରାଜନୀତିକ, ସାମାଜିକ, ସାଂସ୍କୃତିକ ଅବସ୍ଥା ଓ ତାହାର ପ୍ରତିଫଳନକୁ ଜାଣିହେବ ।
- CO4. ବସନ୍ତ କୁମାରୀ ପଟ୍ଟନାୟକଙ୍କ ଲିଖନ ଶୈଳୀକୁ ଜାଣିହେବ ।
- CO5. ବିଭିନ୍ନ ଔପନ୍ୟାସିକଙ୍କ ଜୀବନୀ ଶୈଳୀ ଓ ରଚନା ଶୈଳୀକୁ ଜାଣିପାରିବେ ।

ALLIED CORE (କମ୍ପ୍ୟୁଟର)

Paper - AC - 101

Computer Application Course by e-learning Centre

SEMESTER – II

HARD CORE

Paper - 201

PROGRAMME OUTCOME (COs)

- CO1. ଆଦି ପର୍ଯ୍ୟାୟର ରଚିତ ଓଡ଼ିଆ ନାଟକର ପୃଷ୍ଠଭୂମି, ବୈଶିଷ୍ଟ୍ୟକୁ ଜାଣିହେବ
- CO2. ଓଡ଼ିଆ ନାଟକ ଅବଲମ୍ବନରେ ତତ୍କାଳୀନ ସମାଜର ଚିତ୍ରକୁ ଜାଣିହେବ ।
- CO3. ନବନାଟ୍ୟ ଆନ୍ଦୋଳନ ଓ ନାଟ୍ୟକାର ମନୋରଞ୍ଜନ ଦାସଙ୍କ ଲିଖନ ଶୈଳୀକୁ ଜାଣିହେବ ।
- CO4. ପ୍ରମୁଖ ନାଟ୍ୟକାରଙ୍କ କୃତୀ ସମ୍ପର୍କରେ ଜାଣିହେବ ।
- CO5. ଓଡ଼ିଆ ରଙ୍ଗମଞ୍ଚ ସମ୍ପର୍କିତ ବିସ୍ତୃତ ଧାରଣା ମିଳିପାରିବ ।

HARD CORE

Paper - 202

ଭାଷା ବିଜ୍ଞାନ

PROGRAMME OUTCOME (COs)

CO1. ପୃଥିବୀର ଭାଷା ପରିବାର ସମ୍ପର୍କରେ ଜ୍ଞାନ ଆହରଣ କରିବେ ।

CO2. ମୌଳିକ ପର୍ଯ୍ୟାୟରୁ ତତ୍ତ୍ୱ, ତତ୍ତ୍ୱ, ଦେଶଜ ପର୍ଯ୍ୟାୟରୁ ଶବ୍ଦଗୁଡ଼ିକର ସ୍ୱରୂପଗତ ପରିଚୟଗୁଡ଼ିକୁ ଜାଣିହେବ ।

CO3. ଓଡ଼ିଆ ଭାଷାର ବିକାଶ କ୍ରମକୁ ଜାଣିହେବ ।

CO4. ଭାଷା ପରିବର୍ତ୍ତନର କାରଣଗୁଡ଼ିକୁ ବିଦ୍ୟାର୍ଥୀ ଜାଣିପାରିବେ ।

CO5. ଓଡ଼ିଆ ଭାଷା ସହିତ ଅନ୍ୟାନ୍ୟ ଭାଷାଭାଷୀଙ୍କ ସମ୍ପର୍କକୁ ଜାଣିହେବ ।

HARD CORE

Paper - 203

ଗବେଷଣା ପଦ୍ଧତି

PROGRAMME OUTCOME (COs)

- CO1. ଗବେଷଣାର ଉଦ୍ଦେଶ୍ୟ ଓ ଆଭିମୁଖ୍ୟକୁ ଜାଣିହେବ ।
- CO2. ଗବେଷଣାର ଉପକରଣ ସମ୍ପର୍କରେ ବିଦ୍ୟାର୍ଥୀ ଜ୍ଞାତ ହେବେ ।
- CO3. ଗବେଷଣାର ବିଭିନ୍ନ ସୋପାନକୁ ବିଦ୍ୟାର୍ଥୀ ଜାଣିପାରିବେ ।
- CO4. ପ୍ରାଚୀନ ସଂସ୍କୃତି, ପରମ୍ପରା ଓ ଐତିହ୍ୟ ସମ୍ପର୍କରେ ଜାଣିବା ନିମିତ୍ତ ଆଗ୍ରହ ସୃଷ୍ଟି ହୋଇପାରିବ ।
- CO5. ସାହିତ୍ୟିକ ସନ୍ଦର୍ଭର ପାଠ ଓ ବିଭିନ୍ନ ଉପସ୍ଥାପନା ଶୈଳୀ ସମ୍ପର୍କରେ ଜାଣିହେବ ।

HARD CORE

Paper - 204

ଲିଖନକଳା ଓ ନଥି ପ୍ରସ୍ତୁତି

PROGRAMME OUTCOME (COs)

- CO1. ପ୍ରବନ୍ଧ ଲିଖନର ଅବଶ୍ୟକତାକୁ ବୁଝିହେବ ।
- CO2. ପତ୍ର ଲିଖନର ଅବଶ୍ୟକତାକୁ ଜାଣିହେବ ।
- CO3. ନୋଟିଂ ଓ ଡ୍ରାଫଟିଙ୍ଗ ସମ୍ପର୍କିତ ଧାରଣା ମିଳିବ । .
- CO4. ବିବରଣୀ ସମ୍ପର୍କିତ ଜ୍ଞାନ ମିଳିପାରିବ ।
- CO5. ଲିଖନ ପଦ୍ଧତିରେ ବ୍ୟବହୃତ ବିଭିନ୍ନ ଚିହ୍ନର ଅବଶ୍ୟକତାକୁ ଜାଣିହେବ ।

CORE ELECTIVE

Paper - 201

ଆଧୁନିକ କାବ୍ୟ କବିତା

PROGRAMME OUTCOME (COs)

- CO1. ଓଡ଼ିଆ କବିତାରେ ନବଚେତନର ପ୍ରତିଫଳନକୁ ବିଦ୍ୟାର୍ଥୀ ଜାଣିପାରିବେ ।
- CO2. ଓଡ଼ିଆ କବିତାର ବିଶେଷ ଅଧ୍ୟୟନ ଦ୍ୱାରା ତତ୍କାଳୀନ ସାମାଜିକ ପୃଷ୍ଠଭୂମି, କାବ୍ୟିକ ଆଭିମୁଖ୍ୟ ସମ୍ପର୍କରେ ଜାଣିହେବ ।
- CO3. ସ୍ୱଧୀନତା ପରବର୍ତ୍ତୀ ଓଡ଼ିଆ କବିତାର ସ୍ୱରୂପ ସମ୍ପର୍କିତ ଜ୍ଞାନ ପ୍ରାପ୍ତି ହେବ
- CO4. ଆଧୁନିକ କବି ଓ କବିତାର ସ୍ୱରୂପ, ଥିମ ଓ ଭାଷାକୁ ଜାଣିହେବ ।
- CO5. ପ୍ରୟୋଗବାଦୀ ଚେତନା, ମୃତ୍ୟୁ ଚେତନା

OPEN ELECTIVE

Paper - (201)

ଓଡ଼ିଶାର ବିଭିନ୍ନ ସଂସ୍କୃତି

PROGRAMME OUTCOME (COs)

- CO1. ଜନଜାତିଙ୍କ ଧର୍ମଧାରା, ପର୍ବପର୍ବାଣୀ, ଗୀତ, ନୃତ୍ୟ, ବାଦ୍ୟଯନ୍ତ୍ର ଓ କଳାଜଗତ ସମ୍ପର୍କରେ ଧାରଣା ମିଳିପାରିବ ।
- CO2. ଶ୍ରୀ ଜଗନ୍ନାଥ ସଂସ୍କୃତି ସମ୍ପର୍କରେ ଜାଣିହେବ ।
- CO3. ବୌଦ୍ଧ ସଂସ୍କୃତିର ସମ୍ପର୍କରେ ଜ୍ଞାନ ମିଳିପାରିବ ।
- CO4. ବୈଷ୍ଣବ ଧର୍ମ ପରମ୍ପରା ସମ୍ପର୍କରେ ଜ୍ଞାନ ମିଳିବ ।

SEMESTER – III

HARD CORE

Paper - 301

ସମ୍ପାଦନା କଳା

PROGRAMME OUTCOME (COs)

CO1. ପୋଥି ସମ୍ପାଦନାର କୌଶଳକୁ ଜାଣିହେବ ।

CO2. ସୃଜନଶୀଳ ରଚନା ଓ ଅନୁବାଦ ରଚନାର ସମ୍ପାଦନା ସମ୍ପର୍କରେ ସମ୍ୟକ ଧାରଣା ଅର୍ଜନ କରିହେବ ।

CO3. ସମ୍ପାଦନାର ପରିସର ଓ ବ୍ୟାପାକତା ସମ୍ପର୍କରେ ଧାରଣା ଅର୍ଜନ କରିହେବ

CO4. ଅନୁବାଦ ସମ୍ପାଦନାର ତାତ୍ପର୍ଯ୍ୟକୁ ବୁଝିହେବ ।

CO5. ସମ୍ପାଦନା କ୍ଷେତ୍ରରେ ଦକ୍ଷତା ହାସଲ କରିପାରିବେ ।

HARD CORE

Paper - (302)

ଓଡ଼ିଆ ଗୀତିକବିତାର ସ୍ଵରୂପ

PROGRAMME OUTCOME (COs)

- CO1. ଚଉତିଶା, ଚଉପଦୀ, ଚମ୍ପୂ, ଦୁତିକାବ୍ୟ, ସମ୍ବୋଧନ ଗୀତିକା ସମ୍ପର୍କରେ ବିଦ୍ୟାର୍ଥୀ ଧାରଣା ପ୍ରାପ୍ତ ହେବେ ।
- CO2. ଚଉତିଶା ଓ ଚମ୍ପୂ ସାହିତ୍ୟ ବିଷୟରେ ଜ୍ଞାନ ଆହରଣ କରିବେ ।
- CO3. ଗୀତିକବିତାର ଧାରାରେ ଅନୁପ୍ରାଣିତ ହୋଇ ବିଦ୍ୟାର୍ଥୀ କବି, ଅଧ୍ୟାପିକା ହୋଇପାରିବେ ।
- CO4. 'ସନେଚ' ଧର୍ମୀ କବିତାର ଶୈଳୀକୁ ଜାଣିହେବ ।

HARD CORE

Paper - (303)

ମଧ୍ୟଯୁଗୀୟ କାବ୍ୟ ପରୀକ୍ଷା (୧୫୦୦-୧୮୫୦)

PROGRAMME OUTCOME (COs)

- CO1. ମଧ୍ୟଯୁଗୀୟ ସମାଜ ସହ ସାହିତ୍ୟର ସମ୍ପର୍କକୁ ଜାଣିହେବ ।
- CO2. ଓଡ଼ିଆ ଜନଜୀବନରେ ଭାଗବତର ଭୂମିକା ଆଲୋଚନା କର ।
- CO3. ମାଳିକା, ଭଜନ, କୋଇଲି, ଗୀତା, ଓଗାଳ, ପୋଇ ସମ୍ପର୍କିତ ଜ୍ଞାନ ମିଳିବ ।
- CO4. ରୀତିଯୁଗର କାବ୍ୟାଦର୍ଶକୁ ଜାଣିହେବ ।
- CO5. କବି ଦେବଦୁର୍ଲଭ ଦାସଙ୍କ ଜୀବନୀ ଓ ଭକ୍ତି ଭାବନା ସମ୍ପର୍କରେ ଜ୍ଞାନ ଆହରଣ କରିପାରିବେ

CORE ELECTIVE

Paper - (301)

ଆଧୁନିକ ଗଦ୍ୟସାହିତ୍ୟର ଧାରା

PROGRAMME OUTCOME (COs)

- CO1. ଆଧୁନିକ ଉପନ୍ୟାସ, ଗଳ୍ପ, ପ୍ରବନ୍ଧ, ସମାଲୋଚନା ସାହିତ୍ୟର ଧାରାକୁ ଜାଣିହେବ ।
- CO2. ସ୍ଵରେନ୍ଦ୍ର ମହାନ୍ତିଙ୍କ ଲେଖା ଶୈଳୀକୁ ଜାଣିହେବ ।
- CO3. ବିଶିଷ୍ଟ ଗାନ୍ଧିକମାନଙ୍କର ସୃଷ୍ଟି ସମ୍ଭାରକୁ ଜାଣିହେବ ।
- CO4. ବିଶିଷ୍ଟ ପ୍ରାବନ୍ଧିକ ତଥା ସମାଲୋଚକଙ୍କ ସୃଷ୍ଟିସମ୍ଭାରକୁ ଜାଣିହେବ ।
- CO5. ଓଡ଼ିଆ ପ୍ରବନ୍ଧ ସାହିତ୍ୟ ସମ୍ପର୍କରେ ଉତ୍ତମ ସୂଚନା ଅର୍ଜନ କରିପାରିବେ ।

CORE ELECTIVE

Paper - (302)

ଗୀତିଯୁଗ

PROGRAMME OUTCOME (COs)

- CO1. ମଧ୍ୟଯୁଗୀୟ ଓଡ଼ିଆ ସାହିତ୍ୟରେ ଖୁଦ୍ର ରଚନାବଳୀର ପ୍ରସଙ୍ଗିକତାକୁ ବୁଝିପାରିବେ ।
- CO2. ମଧ୍ୟଯୁଗୀୟ ଗୀତିକବିତାର ବିକାଶକ୍ରମକୁ ଜାଣିହେବ ।
- CO3. ଓଡ଼ିଆ ଗୀତିକବିତା ସମ୍ପର୍କରେ ଜ୍ଞାନ ଆହରଣ କରିପାରିବେ ।
- CO4. ଓଡ଼ିଆ ସାହିତ୍ୟର ବିକାଶକ୍ରମରେ ଭୀମଭୋଇଙ୍କ ଭୂମିକାକୁ ଜାଣିପାରିବେ
- CO5. ଓଡ଼ିଆ ଭକ୍ତିମୂଳକ କବିତାର ପରିଚୟ ପାଇପାରିବେ ।

କ୍ଷେତ୍ର ଅଧ୍ୟୟନ (FIELD INTERNSHIP)

Paper Code - F I - 201

PROGRAMME OUTCOME (COs)

- CO1. ସାମାଜିକ ବିଜ୍ଞାନ କ୍ଷେତ୍ରରେ ତଥ୍ୟ ସଂଗ୍ରହ ପାଇଁ ବ୍ୟବହୃତ ଦର୍ଶନ ଓ ଭୂମିକା ଏକ ସାଧାରଣ ଉପକରଣ । ଏହାର ଉପକରଣକୁ ବିଦ୍ୟାର୍ଥୀ ଜାଣିପାରିବେ ।
- CO2. ମୌଖିକ ପରୀକ୍ଷା ଦ୍ଵାରା ଜାତିଲରୁ ଅତି ଗୁରୁ ଅର୍ଥ ବାହାର କରିବାର ସାମର୍ଥ୍ୟତା ସମ୍ଭବ ହୋଇଥାଏ ।

SEMESTER – IV

HARD CORE

Paper - 401

ପ୍ରାୟୋଗିକ ଓଡ଼ିଆ ବ୍ୟାକରଣ

PROGRAMME OUTCOME (COs)

- CO1. ଓଡ଼ିଆ ଭାଷାର କାରକ ଓ ବିଭକ୍ତି ଅନ୍ତର୍ଗତ ବିଭିନ୍ନ ବ୍ୟାକରଣିକ ଶୃଙ୍ଖଳାଗୁଡ଼ିକ ସମ୍ପର୍କରେ ସ୍ପଷ୍ଟ ଅବଧାରଣା ପାଇପାରିବେ ।
- CO2. ଓଡ଼ିଆ ଭାଷାରେ ପଦ ଓ ବାକ୍ୟ ବିନ୍ୟାସ ସମ୍ପର୍କରେ ସ୍ପଷ୍ଟ ଅବଧାରଣା ପାଇପାରିବେ ।
- CO3. ଉଚ୍ଚାରଣର ସୌନ୍ଦର୍ଯ୍ୟ ନିମନ୍ତେ ସନ୍ଧିର ଆବଶ୍ୟକତା ତଥା ସମାସ ଆଦିର ଗୁରୁତ୍ୱକୁ ଜାଣିହେବ ।
- CO4. ଓଡ଼ିଆ ବ୍ୟାକରଣର ବୈଶିଷ୍ଟ୍ୟକୁ ଜାଣିହେବ ।
- CO5. ଅଳଙ୍କାରିକ କାବ୍ୟର ଗତି ପ୍ରବୃତ୍ତିକୁ ଜାଣିପାରିବେ ।

HARD CORE

Paper - 402

ପ୍ରାଚ୍ୟ-ପାଶ୍ଚାତ୍ୟ-କାବ୍ୟତତ୍ତ୍ୱ

PROGRAMME OUTCOME (COs)

- CO1. କାବ୍ୟର ବିଭିନ୍ନ ଅଙ୍ଗ, ସ୍ୱରୂପ, ପ୍ରକରଣ ଜାଣିବା କ୍ଷେତ୍ରରେ ରସ ରୀତି ଭଳି କବ୍ୟତତ୍ତ୍ୱର ଭୂମିକା ଅତ୍ୟନ୍ତ ମହତ୍ତ୍ୱପୂର୍ଣ୍ଣ ।
- CO2. ଓଡ଼ିଆ କାବ୍ୟରେ ଧ୍ୱନି ତଥା ବକ୍ତୃତ୍ୱର ପ୍ରୟୋଗ ରୀତିକୁ ଜାଣିପାରିବେ ।
- CO3. ବ୍ୟାକରଣ ସମ୍ପର୍କରେ ଜ୍ଞାନ ପ୍ରାପ୍ତି ହେବ ।
- CO4. କ୍ଲସିକ ଓ ରୋମାଣ୍ଟିକ୍ ବାଦର ବୈଶିଷ୍ଟ୍ୟକୁ ଜାଣିପାରିବେ ।
- CO5. ଚିତ୍ରକଳ୍ପ ଓ ପ୍ରତୀକବାଦ ସାହିତ୍ୟର ସ୍ୱରୂପ, ବୈଶିଷ୍ଟ୍ୟ ସମ୍ପର୍କରେ ଜାଣିପାରିବେ ।

HARD CORE

Paper - 403

ପାଠକ୍ରମ ନିବନ୍ଧ ପ୍ରସ୍ତୁତି ଓ ମୌଖିକ ପରୀକ୍ଷା

PROGRAMME OUTCOME (COs)

- CO1. ପୂର୍ବ ସ୍ୱୀକୃତ ବିଚାରଧାରାର ପୁନଃବିଚାର କରିବାର ପାଇଁ ଦିଗ ପ୍ରସ୍ତୁତ ହୋଇପାରିବ ।
- CO2. ମୌଖିକ ପରୀକ୍ଷା ଦ୍ୱାରା ଜଟିଳରୁ ଅତି ଗୁରୁ ଅର୍ଥ ବାହାର କରିବାର ସାମର୍ଥ୍ୟତା ସମ୍ଭବ ହେବ ।

CORE ELECTIVE

Paper – 401

ଆଧୁନିକ ପ୍ରୟୋଗ ତତ୍ତ୍ୱ

PROGRAMME OUTCOME (COs)

- CO1. ମୂଳପାଠ (S.T) ଏବଂ ଉଦ୍ଦିଷ୍ଟ ପାଠ(T.T.) ମଧ୍ୟରେ ସାମ୍ୟ ଓ ବୈଷମ୍ୟ କେଉଁ କାରଣରୁ ପ୍ରତିବିମ୍ବିତ ହେଉଥାଏ ସେ ସମ୍ପର୍କରେ ଜାଣିବା ।
- CO2. ବିଶିଷ୍ଟ ବ୍ୟକ୍ତି ମାନଙ୍କର ଅନୁବାଦ ସମ୍ପର୍କିତ ମତବ୍ୟ ସମ୍ପର୍କରେ ଅବଗତ ହୋଇପାରିବ ।
- CO3. ଅନୁବାଦ ପ୍ରକ୍ରିୟାରେ କାର୍ଯ୍ୟ କରୁଥିବା ବିଭିନ୍ନ ପ୍ରାକ୍ତୀୟ ସାହିତ୍ୟକୁ ତଥା ସାହିତ୍ୟିକଙ୍କୁ ଜାଣିହେବ ।
- CO4. ଅନୁବାଦର ଲକ୍ଷ୍ୟ ଓ ଉଦ୍ଦେଶ୍ୟକୁ ବୁଝିବା ।
- CO5. ବିଶିଷ୍ଟ ଅନୁବାଦକ ଓ ତାଙ୍କର ଅନୁବାଦ କର୍ମକୁ ଜାଣିହେବ ।

RAMA DEVI WOMEN'S UNIVERSITY

COURSE STRUCTURE OF ODIA DEPARTMENT (PhD)



RAMA DEVI WOMEN'S UNIVERSITY
BHOI NAGAR, BHUBANESWAR, ODISHA, PIN- 751022

ସ୍ନାତକୋତ୍ତର ଓଡ଼ିଆ ଭାଷା-ସାହିତ୍ୟ ବିଭାଗ

ରମାଦେବୀ ମହିଳା ବିଶ୍ୱବିଦ୍ୟାଳୟ

ଭୁବନେଶ୍ୱର



ପାଠ୍ୟକ୍ରମ

Ph.D. ଓଡ଼ିଆ (କୋର୍ସ୍ ଥ୍ରାଉଟ୍)

୨୦୨୦-୨୧

Ph.D. Odia, Course Work Syllabus

ପି.ଏଚ୍.ଡି. (କୋର୍ସ ୱାର୍କ) ପାଠ୍ୟକ୍ରମ

Paper code	Title of the Paper	Full works	Credit
୧	ଗବେଷଣା ଅନୁବିଧି ଏବଂ କମ୍ପ୍ୟୁଟର ଅନୁପ୍ରୟୋଗ Research Methodology & Computer Application	100	04
୨	ଆତ୍ମବିଦ୍ୟାଭିତ୍ତିକ ଅଧ୍ୟୟନ ଏବଂ ତୁଳନାତ୍ମକ ସାହିତ୍ୟ Interdisciplinary studies in Comparative lit.	100	04
୩	ସମ୍ବନ୍ଧିତ ସାହିତ୍ୟର ପୁନରାବଲୋକନ ଏବଂ PPT ପ୍ରସ୍ତୁତି Review of Literature writing – Hardcopy & PPT	50	02
୪	ଗବେଷଣା ଏବଂ ପ୍ରକାଶନର ନୈତିକ ବିଚାର (Research & Publication Ethics)	50	02
	Total	300	12

PROGRAMME OUTCOMES (POs)

PO1. ଗବେଷଣା ଜିଜ୍ଞାସୁମାନଙ୍କ ଚେତନାର ଆଶ୍ରୟସ୍ଥଳୀ ହେବ ।

PO2. ଅନ୍ତର୍ନିହିତ ଜ୍ଞାନଶକ୍ତିର ଭୂଲୋଚିକାଶ ସହିତ ମାନବ ଜୀବନର ପ୍ରକୃତ ସତ୍ୟ-ସତ୍ୟାନ୍ୱେଷଣ କେବଳ ଗବେଷଣା ଦ୍ୱାରା ସମ୍ଭବ ।

PO3. ଆତ୍ମବିଦ୍ୟା ଅଧ୍ୟୟନ ଗବେଷଣାକୁ ବୌଦ୍ଧିକ ଭାବରେ ପରିବ୍ୟାପ୍ତ କରେ ।

PO4. ନୂତନ ତତ୍ତ୍ୱ , ତଥ୍ୟ ଓ ସତ୍ୟର ଉପଲବ୍ଧି ଓ ପ୍ରତିଷ୍ଠା ଗବେଷଣାର ଉଦ୍ଦେଶ୍ୟ

PO5. ସାହିତ୍ୟାନୁସନ୍ଧାନ ଦ୍ୱାରା ନୂତନ ଦିଗନ୍ତର ଆବିଷ୍କାର ପାଇଁ ପ୍ରଚେଷ୍ଟା ।

PO6. କମ୍ପ୍ୟୁଟରୀକରଣ ମାଧ୍ୟମରେ ଉନ୍ନତ ଗବେଷଣାତ୍ମକ ଜ୍ଞାନ ପ୍ରଦାନ ।

PO7. ତୁଳନାତ୍ମକ ଗବେଷଣା ଦ୍ୱାରା ବ୍ୟାପକ ଦୃଷ୍ଟିକୋଣକୁ ଆୟତ୍ତାଧୀନ କରାଇବାର ଶୃଙ୍ଖଳା ଏହାର ମୁଖ୍ୟଲକ୍ଷ୍ୟ ।

PO8. ପାଞ୍ଚର ପଏଣ୍ଟ୍ ମାଧ୍ୟମରେ ପ୍ରବନ୍ଧ ଉପସ୍ଥାପନାର କୌଶଳ ଶିକ୍ଷା ।

PO9. ଦାର୍ଶନିକ ଦୃଷ୍ଟିକୋଣ ତଥା ପ୍ରକାଶନର ନୈତିକତା ପ୍ରତି ଗୁରୁତ୍ୱାରୋପ ।

PO10. ଉନ୍ନତ ଗବେଷଣା କ୍ଷେତ୍ରରେ ସାମୁହିକ ଦିଗଗୁଡ଼ିକ ପ୍ରତି ସଚେତନ ଦୃଷ୍ଟିପାତ ।

PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1.ଗବେଷଣା ଲକ୍ଷ୍ୟପ୍ରାପ୍ତି ନିମନ୍ତେ ଏକ ଶୃଙ୍ଖଳିତ ପଥ ନିର୍ଦ୍ଦାଶ କରିବାରେ ସାହାଯ୍ୟ କରିବ ।

PSO2.ପ୍ରାଚ୍ୟ- ପାଶ୍ଚାତ୍ୟ ସାହିତ୍ୟ ତତ୍ତ୍ୱର ବିବର୍ତ୍ତନ ସମ୍ପର୍କରେ ଧାରଣା ମିଳିପାରିବ ।

PSO3.ପାଞ୍ଚାର ପଏଣ୍ଟ୍ ପ୍ରସ୍ତୁତି ଫଳରେ ଆମ ଜ୍ଞାନର ବିଧିବଦ୍ଧ ରୂପ ଜିଜ୍ଞାସୁ ବିଦ୍ୟାର୍ଥୀମାନଙ୍କ
ନିକଟରେ ପହଞ୍ଚିପାରିବ ।

PSO4.ପୁସ୍ତକ ଗୁଡ଼ିକର ପ୍ରକାଶନ କ୍ଷେତ୍ରରେ ସଚ୍ଚୋଟତା ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ । ତା' ଦ୍ୱାରା ଲେଖକର ସୃଷ୍ଟି
ସ୍ୱତନ୍ତ୍ର ଓ ମୌଳିକ ହୋଇପାରିବ ।

PAPER- I

(ଗବେଷଣା ଅନୁବିଧି ଏବଂ କମ୍ପ୍ୟୁଟର ଅନୁପ୍ରୟୋଗ)

COURSE OUTCOMES (COs)

- CO1. ସାହିତ୍ୟର ବିବିଧ ପ୍ରାରୂପ ଉପରେ ଗବେଷଣା ଦ୍ୱାରା ନୂତନ ଅନାଲୋଚିତ ତଥ୍ୟ ଉଦ୍ଧାରିତ ହୁଏ
- CO2. ଗବେଷଣାତ୍ମକ ଗୁଣବତ୍ତାକୁ ସୁରକ୍ଷିତ କରିବା ଉଦ୍ଦେଶ୍ୟରେ ତଥ୍ୟ ସଂଗ୍ରହକାଳୀନ ବୌଦ୍ଧିକତା ବୃଦ୍ଧିପାଏ ।
- CO3. ଗବେଷଣାର ବିବିଧ ପଦ୍ଧତି ଜିଜ୍ଞାସୁ ଗବେଷକଙ୍କ ଭିତରେ ଇତିହାସ, ବିଜ୍ଞାନ, କଳା, ସଂସ୍କୃତି ତଥା ସମୟର ପ୍ରକୃତ ମୂଲ୍ୟକୁ ପ୍ରତିଷ୍ଠା କରାଏ ।
- CO4. ଆଧୁନିକ ଯୁଗରେ କମ୍ପ୍ୟୁଟରୀକରଣର ଆବଶ୍ୟକତା ହେତୁ କମ୍ପ୍ୟୁଟରର ଉପଯୋଗିତା ଶିକ୍ଷଣୀୟ

PAPER- II

(ଆନ୍ତର୍ବିଦ୍ୟାଭିତ୍ତିକ ଅଧ୍ୟୟନ ଏବଂ ତୁଳନାତ୍ମକ ସାହିତ୍ୟ)

COURSE OUTCOMES (COs)

- CO1. ତୁଳନାତ୍ମକ ସାହିତ୍ୟ ପ୍ରେକ୍ଷାପଟରେ ପ୍ରକଟିତ ହେଉଥିବା ସୌନ୍ଦର୍ଯ୍ୟବୋଧ ସମ୍ପର୍କରେ ଜାଣିହେବ ।
- CO2. ସାହିତ୍ୟ ତତ୍ତ୍ୱର ଅନୁଶୀଳନ ଦ୍ୱାରା ପାଠକ ଓ ବିଦ୍ୟାର୍ଥୀ ସାହିତ୍ୟିକ ବିଭବ ଗୁଡ଼ିକ ମାଧ୍ୟମରେ ଜଣେ ସାରସ୍ୱତ ସାଧକରେ ପରିଣତ ହୁଏ ।
- CO3. ସାହିତ୍ୟ ଆଲୋଚନାର ନୂତନ ଦୃଷ୍ଟିଭଙ୍ଗୀକୁ ଜାଣିହେବ ।
- CO4. ଲୋକସାହିତ୍ୟ ମାଧ୍ୟମରେ ଜାତିର ଅସ୍ଥିତାକୁ ଜାଣିହେବ ।

PAPER- III

(ସମ୍ବନ୍ଧିତ ସାହିତ୍ୟର ପୁନରାବଲୋକନ, ପାଠାର ପଏଣ୍ଟ ପ୍ରସ୍ତୁତିକରଣ)

COURSE OUTCOMES (COs)

CO1. ଗବେଷଣା ନିମିତ୍ତ ଗ୍ରନ୍ଥାଗାରର ଉପଦେୟତାକୁ ଜାଣିହେବ ।

CO2. ଗବେଷଣା ନିମିତ୍ତ ଇଣ୍ଟରନେଟ୍ ର ଭୂମିକାକୁ ଜାଣିହେବ ।

PAPER- IV

(ଗବେଷଣା ଏବଂ ପ୍ରକାଶନର ନୈତିକ ବିଚାର)

COURSE OUTCOMES (COs)

- CO1.ଦର୍ଶନ ତଥା ନୈତିକତା ଗବେଷଣା ନିମିତ୍ତ କିପରି ମାର୍ଗଦର୍ଶନ କରାଇଥାନ୍ତି-ସେଥିପ୍ରତି ଧାରଣା ମିଳିପାରିବ ।
- CO2.ବିଜ୍ଞାନସମ୍ମତ ବିଚାର ତଥା ଶୈଳୀ ସମ୍ପର୍କରେ ଧାରଣା ମିଳିପାରିବ ।
- CO3.ଗବେଷଣାର ତଥ୍ୟ, ଫଳାଫଳ, ପଦ୍ଧତି, ପ୍ରଣାଳୀ ଏବଂ ପ୍ରକାଶନ ସ୍ଥିତିକୁ ସଜୋଡ଼ା ଭାବରେ ସମ୍ପନ୍ନ କରାଇପାରିବାର ଶୈଳୀ ସମ୍ପର୍କରେ ଧାରଣା ମିଳିପାରିବ ।
- CO4.ସାହିତ୍ୟକୁ ସମସ୍ତଙ୍କ ପାଇଁ ମୁକ୍ତ ଭାବରେ ଉପଲବ୍ଧ ଏବଂ ପୁନଃବ୍ୟବହାର ଯୋଗ୍ୟ କରିପାରିବା ସହିତ ଏହାର ସ୍ୱଚ୍ଛତାକୁ ବଜାୟ ରଖିପାରିବା ।
- CO5.ଲେଖାର ମିଥ୍ୟାକରଣ, ଚୋରୀ(PLAGIARISM),ଅନୁପଯୁକ୍ତ ଲେଖନ, ନକଲ ଦାଖଲ/ ଏକାଧିକ ଉପସ୍ଥାପନା, ଓଭରଲିଫ୍ ପ୍ରକାଶନ ଇତ୍ୟାଦି ସମ୍ପର୍କରେ ଜାଣିହେବ ।
- CO6.ଅନୁସନ୍ଧାନ ମେଟ୍ରିକ୍ ଗୁଡ଼ିକ ପ୍ରକାଶିତ ଅନୁସନ୍ଧାନର ଗୁରୁତ୍ୱକୁ ପ୍ରମାଣ ଓ ତଦାରଖ କରିଥାଏ ।