Members of BoS:

1. HOD Computer Science, SB Women's College, Cuttack
2. Dr P K Behera, Asso Prof Dept of Computer Science & Applications, Utkal University
3. Dr Sateesh Pradhan, Prof Dept of Computer Science & Applications, Utkal University
4. Dr Bibudhendu Pati, HoD, Asso. Prof. Dept. of Computer Science, RDWU
5. Dr Debabala Swain, Asso Prof Dept of Computer Science, RDWU
6. Mrs Monalisa Jena, Asst Prof Dept of Computer Science, RDWU
7. Dr Chhabi Rani Panigrahi, Asst Prof Dept of Computer Science, RDWU
8. Dr Purna Chandra Sethi, Asst Prof. Dept. of Computer Science, RDWU

Discussions held and resolutions made unanimously by the Members of BoS in Computer Science as follows
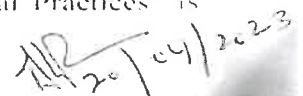
1. The existing syllabus of the UG, PG and Pre-Ph.D course work in Computer Science approved by the BoS of AY 2022-23 remains unchanged for the AY 2023-24

2. The Members of BoS in Computer Science have recommended the list of names for the following assignments

   a) Paper Setters for UG Computer Science (Hons/Pass/Elective) Examination (Appendix-1)
   b) Moderators for UG Examination (Appendix-B)
   c) Paper Setters for P G in Computer Science Examination (Appendix-C)
   d) Examiners for P G in Computer Science (Theory & Practical) Examination (Appendix-D)
   e) Moderators for P G in Computer Science Examination (Appendix-E)
   f) Paper Setters for Pre-Ph D Coursework (Computer Science) Examination (Appendix-F)
   g) Examiners for Pre-Ph D coursework (Computer Science) Theory & Practical Exam (Appendix-G)
   h) Moderators for Pre-Ph D course work Examination (Appendix-H)

3. P G in Computer Science, and Pre-Ph D in Computer Science coursework are recommended without any modification to continue as such for the session 2023-24

4. The Value Added Course (Syllabus) entitled "Web Development and Ethical Practices" is unanimously approved by the BoS (Appendix-I)

Dept. of Computer Science, RDWU, Bhubaneswar
Proceedings of Board of Studies Meeting held on 10/05/2022

The meeting of the members of Board of Studies, Dept. of Computer Science for the year 2022 was held on 10/05/2022 at 11am in the Examination Board room.

The members present in the meeting were:

1. Dr. Debabala Swain, HoD, Dept. of Computer Science, RDWU, Chairperson
2. Dr. Bibudhendu Pati, Asso.Prof., Dept, of Computer Science, R.D.W. University (ABSENT)
3. Mrs. Monalisa Jena, Asst.Prof., Dept, of Computer Science, R.D.W. University
4. Dr.Chhabi Rani Panigrahi,Asst.Prof., Dept, of Computer Science, R.D.W. University
5. Sri Purna Chandra Sethi, Asst.Prof., Dept, of Computer Science, R.D.W. University
6. Dr.P.K.Behera, Associate Prof., Dept. of Computer Science & Appl., Utkal University, External Member
7. Ms. Monalisa Swain, HOD, Dept. of Computer Science, Sailabala Women's (Auto) College, External Member

The minutes of the meeting were as follows:

1. The +3 BSc CBCS syllabus was passed through the BoS and no changes were suggested.
2. The .PhD course work syllabus was passed through the BoS and no changes were suggested.
3. The new PG syllabus structure and detailed syllabus was passed through the BoS.
4. The Advanced Diploma in Computer Application (ADCA) course which was introduced in the year 2019 was resolved to be splitted into two skill-based courses, namely 'Graphics Designing' and 'Programming in C' of 36 hours each (theory and practical) to be offered to PG students of the University. The above two courses will be offered by the E-Learning

Center of the Department. The respective syllabus of the above two courses were passed through the BoS.

5. The new syllabus of the skill-based course 'Fundamentals of Computer Applications' to be offered to all UG students by the E-Learning Center of the University was passed through the BoS.

6. The external members have authorized the Chairperson BoS and the internal members of BoS to prepare and submit the list of paper setters, moderators and examiners for the UG, PG and PhD examinations.

7. The PhD examiner list of Ms. Sasmita Parida with regd. no—PhD-CS- 02/2025 is approved.

The meeting was concluded with a vote of thanks by the chair.

Member
(Dr. C. Panigrahi)

Member
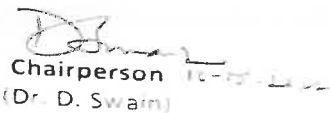(Ms. M Jena)

Member
(Mr. P C Sethi)

(ABSENT)

Member
(Dr. B. Pati)

Member
(Ms. M Swain)

Member
(Dr. P. K. Behera)

Chairperson
(Dr. D. Swain)

	COURSE OPTED	COURSE NAME	CREDITS
	Ability Enhancement Course-1	AEC-1 (Environmental Science)	2
	Core Course-1	Programming using C	4
	Core Course-1 Practical	Programming using C LAB	2
	Core Course-2	Digital Logic	4
	Core Course-2 Practical	Digital Logic Lab	2
	Generic Elective-1	GE-1	4
	Generic Elective-1 Practical	GE-1 Tutorial/ LAB	2
II	Ability Enhancement Course-2	AEC-2 (English Communication/MIL)	2
	Core Course-3	Programming using C++	4
	Core Course-3 Practical	Programming using C++ LAB	2
	Core Course-4	Data Structures	4
	Core Course-4 Practical	Data Structures LAB	2
	Generic Elective-2	GE-2	4
	Generic Elective-2 Practical	GE-2 Tutorial/ LAB	2
III	Core Course-5	JAVA Programming	4
	Core Course-5 Practical	JAVA Programming LAB	2
	Core Course-6	Database Systems	4
	Core Course-6 Practical	Database Systems LAB	2
	Core Course-7	Discrete Mathematical Structures	4
	Core Course-7 Practical	Discrete Mathematical Structures LAB	2
	Skill Enhancement Course-1	SEC-1	2
	Generic Elective-3	GE-3	4
	General Elective-3 Practical	GE-3 Tutorial/ LAB	2
IV	Core Course-8	Operating Systems	4
	Core Course-8 Practical	Operating Systems LAB	2
	Core Course-9	Computer Networks	4
	Core Course-9 Practical	Computer Networks LAB	2
	Core Course-10	Computer Graphics	4
	Core Course-10 Practical	Computer Graphics LAB	2
	Skill Enhancement Course-2	SEC-2	2
	Generic Elective-4	GE-4	4
	General Elective-4 Practical	GE-4 Tutorial/ LAB	2
V	Core Course-11	Web Technology	4
	Core Course-11 Practical	Web Technology LAB	2
	Core Course-12	Software Engineering	4
	Core Course-12 Practical	Software Engineering Lab	2
	Discipline Specific Elective-1	DSE-1	4
	Discipline Specific Elective-1 Practical	DSE-1 LAB/ Tutorial	2
	Discipline Specific Elective-2	DSE-2	4
	Discipline Specific Elective-2 Practical	DSE-2 LAB/ Tutorial	2
VI	Core Course-13	Artificial Intelligence	4
	Core Course-13 Practical	Artificial Intelligence LAB	2
	Core Course-14	Algorithm Design Techniques	4
	Core Course-14 Practical	Algorithm Design Techniques LAB	2
	Discipline Specific Elective-3	DSE-3	4
	Discipline Specific Elective-3 Practical	DSE-3 LAB/ Tutorial	2

5

	Discipline Specific Elective-4	DSE-4
	Discipline Specific Elective-4 Practical	DSE-4 LAB/ Tutorial

CORE Papers: (Credit: 06 each)

CORE – 1: Programming Using C

CORE – 2: Digital Logic

CORE – 3: Programming Using C++

CORE – 4: Data Structure

CORE – 5: Java Programming

CORE – 6: Database Systems

CORE – 7: Discrete Mathematical Structures

CORE – 8: Operating System

CORE – 9: Computer Network

CORE – 10: Computer Graphics

CORE – 11: Web Technologies

CORE – 12: Software Engineering

CORE – 13: Artificial Intelligence

CORE – 14: Algorithm Design Techniques

Discipline Specific Electives (DSE) Papers:

DSE–1: Numerical Techniques

DSE–2: Unix Shell Programming

DSE–3: Data Science

DSE–4: Project Work / Dissertation

OR

Data Mining

Skill Enhancement Courses (SEC):

SEC – 1: Python Programming.

SEC – 2: Android Programming.

Ability Enhancement Courses (AEC):

AEC – 1: Environmental Science.

AEC – 2: English Communication/MIL.

GE – 1: **Computer Fundamentals**

GE – 2: **C and Data Structures**

GE – 3: **Programming in Python**

GE – 4: **Web Technology**

However the students from **Computer Science/IT** discipline shall choose **four papers of any one discipline** as their GE papers from the following list.

GE-1:

a) Mathematics–1
b) Physics–1
c) Statistics–1
d) Electronics –1

GE-2:

a) Mathematics–2
b) Physics–2
c) Statistics–2
d) Electronics –2

GE-3:

a) Mathematics–3
b) Physics–3
c) Statistics–3
d) Electronics –3

GE-4:

a) Mathematics–4
b) Physics–4
c) Statistics–4
d) Electronics –4

Detailed Syllabus

CORE – 1: Programming Using C

OBJECTIVES:
- To learn basics of C programming language.
- To be able to develop logics to create programs/ applications in C.

Unit-1

7

SYLLABUS FOR Ph.D. COURSE-WORK

All the scholars of Ph.D. programme of this Department have to undergo a course work of one semester duration. On successful completion of the course work, the scholars may be eligible for registration for Ph.D. subject to final recommendation of Department Research Committee (DRC). The syllabus structure for course work is given below.

Papers	Course Title	Credits	Marks	Pass Mark	Remarks	Page No.
Paper I	Research Methodology and Computer Application (Theory & Practical)	4	100	55%	Subject Specific	
Paper II (Elective)	Elective *Subject Specific* (Theory)	4	100	55%	Subject Specific	
Paper III	Review of Related Literature (Practical)	4	100	55%	Common to all subjects	
Paper IV	Research and Publication Ethics (Theory & Practical)	4	100	55%	Common to all subjects	
	Total	16	400	55%		

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Dept. of Computer Science, RDWU, Bhubaneswar
Proceedings of Board of Studies Meeting held on 14/07/2021

The meeting of the members of Board of Studies, Dept. of Computer Science for the year 2021 was held on 14/07/2021 at 11am through online mode.

The members present in the meeting were:

1. Dr. Debabala Swain, HoD, Dept. of Computer Science, RDWU, Chairperson
2. Dr. Bibudhendu Pati, Asso. Prof., Dept, of Computer Science, R.D.W. University
3. Mrs. Monalisha Jena, Asst. Prof., Dept. of Computer Science, R.D.W. University
4. Dr. Chhabi Rani Panigrahi, Asst. Prof., Dept, of Computer Science, R.D.W. University
5. Sri Purna Chandra Sethi, Asst. Prof., Dept., of Computer Science, R.D.W. University
6. Prof. Satish Pradhan, Former Professor, P.G. Dept. of Computer Science & Application, Utkal University, External Member
7. Dr. P.K. Behera, Dept. of Computer Science & Appl., Utkal University, External Member
8. Dr. Jyoti Ranjan Mohanty, Dept. of Computer Science, OUAT,BBSR, External Member

The minutes of the meeting were as follows:

1. The points raised by various members in the BoS regarding the contents of the UG syllabus were discussed. Since the model syllabus for UG students has to be followed for minimum three years as a matter of principle, all the suggested changes in the syllabus are postponed to be accommodated from the session 2022-2023. The PG syllabus remains unchanged.

2. The students may opt at most two elective papers from Swayam/NPTEL courses during the UG/PG program.

3. The external members have authorized the Chairperson BoS and the internal members of BoS to prepare and submit the list of paper setters, moderators and examiners for the UG, PG and PhD examinations.

4. The SEC-II paper of 4th sem, UG prescribed by DHE, 'Quantitative and Logical Thinking' was approved and included in the syllabus. The new Pre PhD coursework syllabus was approved.
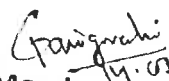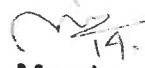
The meeting was concluded with a vote of thanks by the chair.

Member 14.07.21
(Dr. C. Panigrahi)

Member 4/07/2021
(Mr. P C Sethi)

Member 4/07/21
(Dr. J R Mohanty)

Member
(Dr. B. Pati)

Member
(Dr. P. K. Behera)

Chairperson 14-07-2021
(Dr. D.Swain)

Member 14.07.2021
(Mrs. M Jena)

Member
(Prof. Satish Pradhan)

MODEL SYLLABUS FOR UNDER GRADUATE
COURSE IN COMPUTER SCIENCE
(Bachelor of Science Examination)

UNDER
CHOICE BASED CREDIT SYSTEM

Approved from the Seurioy
2021-22.

MSc Computer Science Syllabus

(2021)

P. G. DEPARTMENT OF COMPUTER SCIENCE
RAMA DEVI WOMEN'S UNIVERSITY
VIDYA VIHAR, BHUBANESWAR-751022

Approved from the session 2021-22.

RAMA DEVI WOMEN'S UNIVERSITY, MASTER OF SCIENCE [M.Sc.] COMPUTER SCIENCE [CBCS]

SEMESTER-1

SL.NO	PAPER	COURSE TITLE	MARKS	CREDIT	GROUP
1	CS-1	DATA STRUCTURE & ALGORITHMS	100	6	HCC-1
2	CS-2	COMPUTER SYSTEM ARCHITECTURE	100	6	HCC-2
3	CS-3	DATABASE SYSTEMS & IMPLEMENTATION	100	6	HCC-3
4	CS-4	a) Data structure & Algorithm Lab b) Database Lab	100	6	HCC-4

SEMESTER-II

5	CS-5	OPERATING SYSTEM DESIGN	100	6	HCC-5
6	CS-6	DISCRETE MATHEMATICAL STRUCTURE	100	6	AEC-1
7	CS-7	APPLIED CRYPTOGRAPHY	100	6	AEC-2
8	CS-8	a) Operating System Lab b) Applied Cryptography Lab	100	6	HCC-6

SEMESTER-3

9	CS-9	COMPUTER NETWORKS	100	6	HCC-7
10	CS-10	ARTIFICIAL INTELLIGENCE	100	6	CEC-1
11	CS-11	a) Networking Lab b) AI Lab	100	6	CEC-2
12	CS-12	THEORY OF COMPUTATION	100	6	AEC-1
13	CS-13	INFORMATION TECHNOLOGY	50	3	OEC

SEMESTER-4

14	CS-14	COMPILER DESIGN	100	6	HCC-8
15	CS-15	PROJECT / DISSERTATION	100	6	HCC-9
16	CS-16	SOFTWARE ENGINEERING	100	6	CEC-3
17	CS-17	CLOUD COMPUTING	100	6	CEC-4
18	CS-18	E-COMMERCE	50	3	OEC-2

HCC- HARD CORE COURSE   CEC-CORE ELECTIVE COURSE
AEC-ALLIED ELECTIVE COURSE   OEC-OPEN ELECTIVE COURSE

RAMA DEVI WOMEN'S UNIVERSITY, VIDYA VIHAR
BHUBANESWAR-22

Proceeding of the meeting of the Board of Studies ..... Computer Science (UG)
on ...... 25/8/2020 ...... at .... 11:00 .... A.M / P.M. in the University Office,
Nai Nagar, Bhubaneswar-22.

Members Present :

1. Dibudhendu Pati
2. S. K. Pradhan
3. Jay Ram Murmu
4. Dr. Debabala Swain.
5. Purna Ch. Sethi
6. Monalisa Jena
7. Chhabi Rani Panigrahi
8. P. K. Behera

Prof./ Dr. ...... Dibudhendu Pati ...... is selected as Chairman of the
Board for the Academic year 20:20 - 21 ,

The recommendations of the Board in respect of the Regulations, Detailed Syllabus, Text Books and other items are appended the prescribed form. (Annexure I attached)

Signature of the Members :-

CHAIRMAN

1. Dibudhendu Pati
2. S. K. Pradhan Sateesh
3. Jay Ram Murmu
4. Swain -08-2020
5. PK 25/08/2020
6. Murmu
7. Panigrahi 25. 08 2020
8.

1. The Department of Computer Science introduced 25% of the syllabus as the Guided Student Self-Study (Blended Learning) approach at UG level vide Govt. of Odisha Higher Education Department letter no: 20119/ HE, dated 19.06.2020 (i.e. **Unit – 2 of each subject will be considered as Guided Student Self-Study mode for the academic session 2020-21**) in Board of Studies (BoS).

2. The BoS authorizes the Controller of Examination (CoE) to take alternative measures in case of any urgency.

3. The BoS approved the changes made to the UG CBCS syllabus and will be implemented from the session 2020-21 admission batch.

(Dr. Bibudhendu Pati)   25/8/2020
Chairman

The Department of Computer Science introduced 25% of the syllabus as the Guided Student Self-Study (Blended Learning) approach at both UG and PG levels vide Govt. of Odisha Higher Education Department letter no: 20119/ HE, dated 19.06.2020 (i.e. **Unit – 2 of each subject will be considered as Guided Student Self-Study mode for the academic session 2020-21**) in Board of Studies (BoS).

2. The BoS authorizes the Controller of Examination (CoE) to take alternative measures in case of any urgency.

3. The BoS discussed about the PG Syllabus (MSc. Computer Science) and approved the changes made. It was also decided that it will be implemented from the session 2019-20 2020-21 admission batch. The changes made for the PG Syllabus are as follows:

   a) 1st Semester Paper: CS-1 – **"Data Structure & Algorithm"** – 100 marks-6 Credits- HCC – 1: The contents of all units partially changed. The modified syllabus is attached.

   b) 2nd Semester Paper: CS-7 – **"Advanced JAVA"** -100 Marks-6 Credit – AEC-2 is changed to Subject: **"Applied Cryptography"** and the detailed syllabus for the same is attached. The Lab component HCC-6 is modified from **Advanced Java Lab** to **Applied Cryptography Lab.**

   c) 4th Semester Paper: CS-17 – **"Mobile Computing"** – 100 Marks – 6 Credit – CEC-4 is changed to Subject: **"Cloud Computing"** and the detailed syllabus for the same is attached.

4. The BoS approved the changes made to the UG CBCS syllabus and will be implemented from the session 2020-21 admission batch.

(Dr. Bibudhendu Pati)
Chairman

(Prof. Sateesh Ku. Pradhan)
External Member

(Dr. Prafulla Ku. Behera)
External Member

(Dr. Jyoti Ranjan Mohanty)
External Member

(Dr. Debabala Swain)
Member

(Mrs. Monalisa Jena)
Member

(Dr. Chhabi Rani Panigrahi)
Member

(Mr. Purna Ch. Sethi)
Member

RAMA DEVI WOMEN'S UNIVERSITY.
VIDYA VIHAR, BHUBANESWAR-22

Proceeding of the meeting of the Board of Studies ..... Computer .....

held on ..... 27.8.19 ..... at ..... 11.00 ..... A.M P.M. in the University Office.

Bhoi Nagar, Bhubaneswar-22.

Members Present :

1. The HOD, Dept of Comp Science, RDW University
2. Dr. Debabala Swain, Asso Prof, Dept of Comp Science, RDW University
3.
4. Dr. Monalisa Jena, Asst. Prof, Dept of Comp Science, RDW University
5. Dr. Chhabirani Panigrahi, Asst Prof, Dept of Comp Science, RDW University
6.
7. Dr. P.K. Behera, Reader, P.G Dept of Comp Science & App, UU
8. Dr. Purna Ch Sethi, Asst Prof, RDW University

Prof./ Dr. ..... Bibudhendra Patra ..... is selected as Chairman of the Board for the Academic year 20......

The recommendations of the Board in respect of the Regulations. Detailed Syllabus. Text Books and other items are appended the prescribed form.

Signature of the Members :-

CHAIRMAN

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PROCEEDINGS OF THE MEETING OF THE SPECIAL BOARD OF STUDIES IN COMPUTER SCIENCE HELD ON 16.04.2019 FOR B.A (PASS)

The meeting of the Special Board of Studies in computer science, for the adaptation of Common UG Syllabus was held on 16.04.2019 at 1.00 P.M. in the Department of Computer Science, Rama Devi Women's University, Bhubaneswar.

The following members were present in the meeting.

1. Dr. Bibudhendu Pati, Associate Professor.
2. Dr. Debabala Swain, Associate Professor, HoD and Chairperson
3. Dr. Chhabi Rani Panigrahi, Associate Professor, Secretary
4. Mr. Purna Chandra Sethi, Asst. Professor, Comp. Science
5. Ms. Monalisa Jena, Asst. Professor, Comp. Science
6. Dr. Satish Pradhan, Professor, Comp. Science
7. Dr. Prafulla Kumar Behera, Reader, PG Dept of Computer Sc. Utkal University.
8. Dr. B.N.B. Ray, Reader, PG Dept of Computer Sc. Utkal University.
9. Mr. Jyoti Ranjan Mohanty, Professor, OUAT, Bhubaneswar.

After a brief discussion, the following points were resolved.

- The common syllabi for +3 Degree course for computer science were adopted by the members.
- The recommendations of the Government in respect of Regulation for +3 Degree Course effective from 2019-20 was adopted by members.
- It was decided that the Dept. of Computer Science, RDWU will offer 2 no.s of GE papers, i.e. Computer Fundamental (GE-I) and C and Data Structure (GE-II).
- In other matters, the following suggestions were made by members.

    A. In Part-I of question pattern, fill in the blanks questions may be replaced by MCQ in either pattern as below.
        a. 20 questions of 1 mark each
            or
        b. 10 questions of 2 marks each
    B. In part-IV of question pattern, 2 numbers of 10 marks questions may be replaced by 4 no.s of 5 marks questions so that each module can be covered. In case of 10 marks questions, it should cover all units.
    C. The Lab component of Discrete Mathematics may be replaced by tutorial classes
    D. The members suggested to provide training (to Faculty members/Programmers/ Demonstrators) for the following Lab sessions.
        a. VHDL Programming (Digital Logic)
        b. Network Simulation
        c. Prolog Programming
        d. Numerical Techniques(DSE-I) using MATLAB
        e. Data science (DSE-III using R Programming)
        f. Data Mining (DSE-IV)
- No change in PG and MPhil syllabus for the session 2019-20

                                                        Bibudhendu Pati
                                                        CHAIRMAN 16/4/19

Signature of Members:

1. Dr. Bibudhendu Pati, Associate Professor, HoD and Chairperson   Bibudhendu Pati 16/4/19
2. Dr. Debabala Swain, Associate Professor, Secretary   Debabala Swain 16.04.19
3. Dr. Chhabi Rani Panigrahi, Asst. Professor, Comp. Science   Chhabi Rani Panigrahi 16.04.19
4. Mr. Purna Chandra Sethi, Asst. Professor, Comp. Science   Purna Chandra Sethi 16/04/19
5. Ms. Monalisa Jena, Asst. Professor, Comp. Science   Monalisa Jena 16/04/19
6. Dr. Satish Pradhan, Professor, PG Dept of Computer Sc. Utkal University   Satish
7. Dr. Prafulla Kumar Behera, Reader, PG Dept of Computer Sc. Utkal University
8. Dr. B.N.B. Ray, Reader, PG Dept of Computer Sc. Utkal University
9. Mr. Jyoti Ranjan Mohanty, Professor, OUAT, Bhubaneswar

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RAMA DEVI WOMEN'S UNIVERSITY, BHUBANESWAR

Proceeding of the meeting of the Board of Studies .in..Computer..Science

held on 16.04.2019 at 01.00 P.M. in the University Office, Bhoinagar, Bhubaneswar-22.

Members Present :

1. Bibudhendu Pati 16/4
2. Debabala Swain.
3. Mnnalisa Jena
4. Prerna Chandra Sethi
5. Chhabi Rani Panigrahi
6. Prafulla Kumar Behera
7. Sateesh Kumar Pradhan
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11.

    The recommendations of the Board in respect of the +3 Degree Regulations, Detailed Common Syllabus, Text Books and other items for +3 Degree Course are appended with the prescribed form effective from the year 2019-20.

Signature of the Members :-

Bibudhendu Pati
CHAIRMAN 16/4/19

1. Bibudhendu Pati 16/4
2. Debabala Swain.
3. Mnnalisa Jena
4. Prerna Chandra Sethi
5. Chhabi Rani Panigrahi
6. 16.04.19 (Prafulla Kumar Behera)
7. Sateesh 16/4/19 (Sateesh Kumar Pradhan)
8.
9.
10.

RAMA DEVI WOMEN'S UNIVERSITY
BHUBANESWAR
******

ATTEDANCE SHEET

MEETING OF THE SPECIAL BOARD OF STUDIES IN COMPUTER SCIENCE HELD ON 16.04.2019 AT 01.00P.M.

Sl. No.	Name of the Member	Signature	Contact No.
1	Dr. Bibhudendu Pati, Asso. Professor, Dept. of Comp. Science, R.D.W.University.	Bibhudendu Pati 14/4	8895033020
2	Dr. Debabala Swain, Asso. Professor, Dept. of Comp. Science, R.D.W.University.	Debabala Swain.	
3	Dr. Satish Pradhan, Professor, P.G.Dept. of Comp. Science & Application, U.U	Satish	9437001231
4	Dr. B.N.B. Ray, P.G.Dept. of Comp. Science & Application, U.U		
5	Dr. Monalisa Jena, Asst. Professor, Dept. of Comp. Science, R.D.W. University.	Monalisa Jena	
6	Dr. P.K.Behera, P.G.Dept. of Comp. Science & Application, U.U		9437013358
7	Dr. Chhabi Rani Panigrahi, Asst. Professor, Dept. of Comp. Science, R.D.W. University.	Chhabi Rani Panigrahi	
8	Dr. Jyoti Ranjan Mohanty, Professor, Dept. of Comp. Science, OUAT, BBSR.		
9	The HOD,Dept. of Comp. Science, S.B.Women's (Auto.) College, Cuttack.		
10	Dr. Purna Chandra Sethi, Asst. Professor, R.D.W. University.	Purna Chandra Sethi	

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 Development
- Computer Architecture and Security

PSO2. Apply problem-solving skills and the knowledge of computer science to solve real world problems.

PSO3. Develop technical project reports and present them orally among the users

COMMON SYLLABUS FOR BSc COMPUTER SCIENCE

B. Sc. (Honours) Computer Science (CBCS)

SEMESTER	COURSE OPTED	COURSE NAME	CREDITS
I	Ability Enhancement Course-1	AEC-1 (Environmental Science)	2
	Core Course-1	Programming using C	4
	Core Course-1 Practical	Programming using C LAB	2
	Core Course-2	Digital Logic	4
	Core Course-2 Practical	Digital Logic Lab	2
	Generic Elective-1	GE-1	4
	Generic Elective-1 Practical	GE-1 Tutorial/ LAB	2
II	Ability Enhancement Course-2	AEC-2 (English Communication/MIL)	2
	Core Course-3	Programming using C++	4
	Core Course-3 Practical	Programming using C++ LAB	2
	Core Course-4	Data Structures	4
	Core Course-4 Practical	Data Structures LAB	2
	Generic Elective-2	GE-2	4
	Generic Elective-2 Practical	GE-2 Tutorial/ LAB	2
III	Core Course-5	JAVA Programming	4
	Core Course-5 Practical	JAVA Programming LAB	2
	Core Course-6	Database Systems	4
	Core Course-6 Practical	Database Systems LAB	2
	Core Course-7	Discrete Mathematical Structures	4
	Core Course-7 Practical	Discrete Mathematical Structures LAB	2
	Skill Enhancement Course-1	SEC-1	2
	Generic Elective-3	GE-3	4
	General Elective-3 Practical	GE-3 Tutorial/ LAB	2

IV	Core Course-8	Operating Systems	4
	Core Course-8 Practical	Operating Systems LAB	2
	Core Course-9	Computer Networks	4
	Core Course-9 Practical	Computer Networks LAB	2
	Core Course-10	Computer Graphics	4
	Core Course-10 Practical	Computer Graphics LAB	2
	Skill Enhancement Course-2	SEC-2	2
	Generic Elective-4	GE-4	4
	General Elective-4 Practical	GE-4 Tutorial/ LAB	2
V	Core Course-11	Web Technology	4
	Core Course-11 Practical	Web Technology LAB	2
	Core Course-12	Software Engineering	4
	Core Course-12 Practical	Software Engineering Lab	2
	Discipline Specific Elective-1	DSE-1	4
	Discipline Specific Elective-1 Practical	DSE-1 LAB/ Tutorial	2
	Discipline Specific Elective-2	DSE-2	4
	Discipline Specific Elective-2 Practical	DSE-2 LAB/ Tutorial	2
VI	Core Course-13	Artificial Intelligence	4
	Core Course-13 Practical	Artificial Intelligence LAB	2
	Core Course-14	Algorithm Design Techniques	4
	Core Course-14 Practical	Algorithm Design Techniques LAB	2
	Discipline Specific Elective-3	DSE-3	4
	Discipline Specific Elective-3 Practical	DSE-3 LAB/ Tutorial	2
	Discipline Specific Elective-4	DSE-4	4
	Discipline Specific Elective-4 Practical	DSE-4 LAB/ Tutorial	2

CORE Papers:(Credit: 06 each)

CORE–1: Programming Using C
CORE – 2: Digital Logic
CORE – 3: Programming Using C++
CORE – 4: Data Structure
CORE – 5: Operating Systems
CORE – 6: Database Systems
CORE – 7: Discrete Mathematical Structures
CORE – 8: Java Programming
CORE – 9: Computer Network
CORE – 10: Computer Graphics
CORE – 11: Web Technologies
CORE – 12: Software Engineering
CORE – 13: Artificial Intelligence

Semester-I								
Sl. No.	Nature of Course	Course Code	Paper Title	Units	Credits	Marks		
						Mid-Sem.	End-Sem.	Total
1	Hard Core	HC-101	Discrete Mathematical Structure	5	5	30	70	100
2	Hard Core	HC-102	Computer System Architecture	5	5	30	70	100
3	Hard Core	HC-103	Database Systems Implementation	5	5	30	70	100
4	Hard Core	HC-104	a) Database Systems Practical b) Python Practical	--	5	30	70	100
5	Allied Core	AC-101	Computer Applications in Teaching Learning (Course to be offered by e-learning center)	3	3	Mid-Sem 10+ Practical 10= 20 marks	30	50
	Total				23	135	315	450

Semester-II								
Sl. No.	Nature of Course	Course Code	Paper Title	Units	Credits	Marks		
						Mid-Sem.	End-Sem.	Total
6	Hard Core	HC-201	Data structure & Algorithm	5	5	30	70	100
7	Hard Core	HC-202	Operating Systems	5	5	30	70	100
8	Hard Core	HC-203	Theory of Computation	5	5	30	70	100
9	Hard Core	HC-204	a) Data Structure & Algorithm Practical b) Operating System Practical	--	5	30	70	100
10	Core Elective	CE-201	Artificial Intelligence **OR** Data Science	5	5	30	70	100
11	Open Elective	OE-201	E-Commerce **OR** MOOCs (From SWAYAM/ NPTEL etc.)	--	4	--	50	50
	Total				29	150	400	550

Semester-III								
Sl. No.	Nature of Course	Course Code	Paper Title	Units	Credits	Marks		
						Mid-Sem.	End-Sem.	Total
12	Hard Core	HC-301	Computer Networks	5	5	30	70	100

Sl. No.	Nature of Course	Course Code	Paper Title	Units	Credits	Mid-Sem.	End-Sem.	Total
13	Hard Core	HC-302	Software Engineering	5	5	30	70	100
14	Hard Core	HC-303	a) Computer Networks Practical b) Software Engineering Practical	--	5	30	70	100
15	Core Elective	CE-301	Compiler Design **OR** Graph Theory	5	5	30	70	100
16	Core Elective	CE-302	Cloud Computing **OR** Soft Computing	5	5	30	70	100
17	Field Internship	FI-201	Field Internship	--	3	--	50	50
	Total				28	150	400	550

Semester-IV								
Sl. No.	Nature of Course	Course Code	Paper Title	Units	Credits	Marks		
						Mid-Sem.	End-Sem.	Total
18	Hard Core	HC-401	Applied Cryptography	5	5	30	70	100
19	Hard Core	HC-402	a) Java Practical b) Applied Cryptography Practical	--	5	30	70	100
20	Hard Core	HC-403	Dissertation	--	5	--	100	100
21	Core Elective	CE-401	Data Mining **OR** Internet of Things	5	5	30	70	100
22	Allied Core	AC-401	Women and Society (For All PG Subjects/ Programs)	3	3	15	35	50
	Total				23	105	345	450

Summary

HC-Hard Core	14 x100	1400
CE-Core Elective	4 x100	400
OE-Open Elective	1x50	50
AC-Allied Core	2x50	100
FI-Field Internship	1x50	50
Total Marks:		2000

Summary

Semester	Credits	Total Marks
Sem-I	23	450
Sem-II	29	550
Sem-III	28	550
Sem-IV	23	450
TOTAL	103	2000

SYLLABUS FOR Ph.D. COURSE-WORK

All the scholars of Ph.D. programme of this Department have to undergo a course work of one semester duration. On successful completion of the course work, the scholars may be eligible for registration for Ph.D. subject to final recommendation of Department Research Committee (DRC). The syllabus structure for coursework is given below.

Papers	Course Title	Credits	Marks	Pass Mark	Remarks	Page No.
Paper-I	Research Methodology and Computer Application (Theory & Practical)	4	100	55%	Subject Specific	
Paper-II (Elective)	**Elective**: *Subject Specific* (Theory)	4	100	55%	Subject Specific	
Paper-III	Review of Related Literature (Practical)	4	100	55%	Common to all subjects	
Paper-IV	Research and Publication Ethics (Theory & Practical)	4	100	55%	Common to all subjects	
--	**Total**	**16**	**300**	**55%**	--	---

M.Phil. Computer Science Syllabus

SEMESTER-I

Sl No	Paper Code	Paper	Paper Name	Mark	Credit
1	1.1	Paper-1	Research Methodology	100	6
2	1.2	Paper-2	Design and Analysis of Algorithms + Lab	100	6
3	1.3	Paper-3	Soft Computing	100	4
			Total	300	16

SEMESTER-II

Sl No	Paper Code	Paper	Mark	Credit
1	2.1	Literature review + Technical paper writing + Presentation	100	4
2	2.2	Synopsis preparation and presentation	100	4
3	2.3	Dissertation	100	6
		Total	300	14