# INSTITUTIONAL DEVELOPMENT PLAN (2023-2028)





RAMA DEVI WOMEN'S UNIVERSITY VIDYA VIHAR, BHUBANESWAR-751022, ODISHA

Director IDAC
Director IDAC
Rama Devi Women's University
Bhubaneswar

Registrar RD Women's University Bhubaneswar

# **CONTENTS**

	Parameters	Page No.
	Executive Summary	01
01	Context	01
02	Vision and Mission, Core values, SWOC	04
03	Institutional Basic Information	07
3.1	Establishment details	07
3.2	Accreditation details	08
3.3	Academic Information	08
3.4	Faculty status	12
3.5	Examination details	12
3.6	Student's profile	13
3.7	Infrastructure facilities	15
3.8	Games & Sports	15
3.9	NCC	16
3.10	YRC	16
3.11	NSS	16
3.12	Research and Development	17
3.13	Institutional Identity	19
04	Methodology	20
05	Metrics and Targets	22
06	Core Strategies of the Plan	25
6.1	Curricular and Pedagogical Excellence	26
6.2	Research and Innovation	32
6.3	Examination Reforms	33
6.4	Outreach, diversity and Inclusivity	36
6.5	Perception and Brand Building	38
6.6	Infrastructure Development and Maintenance	41
6.7	Effective Governance	43
6.8	Internationalization	45
6.9	Employment and Career Opportunities	46
07	Budget for Institutional Project	47
08	Separation of Budget under Capital and Recurring Heads	51
09	Budget Summary	53
10	Conclusion	53
	Annexure-I: List of equipment under Central Instrumental facility	
	Annexure-II: List of Game Facilities under Sports Council	
	Annexure-III: List of Publication of Research papers and Books/Book Chapters	
	Annexure-IV: List of Patents	
	Annexure-V: List of functional MoUs	

## **EXECUTIVE SUMMARY**

Rama Devi Women's University, the first and only women's University in Odisha came into existence in the year 2015. It is an affiliating University with 48 women's Colleges in its jurisdiction. Prior to the University status, this institution was Govt. women's college since the year 1964 and renamed as Rama Devi Women's College in the year 1969. The College was given autonomous status in the year 1999. The junior wing of Rama Devi Women's Autonomous College was separated from the Autonomous College in the year 2001. The College was upgraded to the University Status under RUSA scheme in May, 2015, and has been conferred the UGC 12 B status on February, 2021.

The University campus is situated in the State Capital, Bhubaneswar and is spread over 23.6 acres of land. The University aims at a holistic development of the girl students by providing them an inclusive teaching & learning ecosystem so as to excel in academics, research and extension. Through its NCC, NSS, YRC and Sports wings, the University inculcates the core humanitarian values among the students. It fosters inclusive education for visually-impaired students by providing them a conducive environment to explore their full potential in curricular and extra-curricular activities. The University has established a legacy in higher education for women in the state. At present, the University is offering 54 programmes at undergraduate, postgraduate and Ph.D. level. Apart from the regular Programmes, the University is also offering 61 Value Added and Certificate courses for capacity building and skill enhancement of the students.

To meet the demand of the dynamic educational system, the Institutional Development Plan of the University has been prepared keeping in view the focus areas of National Education Policy (NEP) - 2020, National Institutional Ranking Framework (NIRF), National Assessment and Accreditation Council (NAAC) and Sustainable Development Goals (SDG) - 2030. This is a strategic plan chalked out for 5 years, from the year 2023-2028. While planning, the bench mark status were analysed and recorded in the specific areas like curricular and pedagogical excellence, research and innovation, examination reforms, outreach programmes, diversity and inclusivity, perception and brand building, infrastructure development and maintenance, effective governance, internationalization, employment and career opportunities.

The need assessment was done by survey and interactions with the stakeholders and focus-group discussions. The strategic developmental needs were assessed and prioritized. A realistic and measureable activity plan for coming five years was prepared. The detailed project proposal of Institutional Development Plan (IDP) of RDWU was outlined meticulously and budgeting was made accordingly. The IDP of the University will act as a guiding force for implementation of various developmental activities in the University for coming five years. The tentative cost of the programmes proposed in RDWU IDP@2023-28 amounts to Rs. 544.87 Cr.

# 1. CONTEXT

Women's education is vital for the transformation of society. It can only be possible through sustainable development that aims at the holistic growth of people in India. With newer challenges and priorities, women's education system in India has to cater to the aspirations of the stakeholders. With this as the major goal, Rama Devi Women's University (RDWU) has prepared an Institutional Developmental Plan that would create a conducive educational ecosystem. The IDP of RDWU seeks to link education with employment, entrepreneurship and leadership by redesigning the curriculum, fostering linkages between institutions across the globe and linking education with industry. The focus is on building competence and skill enhancement to create a market ready workforce. Overall, the objective of IDP of RDWU is to make its students successful citizens by improving the academic ambiance. The IDP will help the university update the checklist in a proper system over a targeted course of time to achieve the stated goals. It will provide a road map and inputs for successful implementation of National Education Plan (NEP) 2020, National Institutional Ranking Framework (NIRF), National Assessment and Accreditation Council (NAAC) and Sustainable Developmental Goal (SDG)-2030.

# 1.1 National Education Policy 2020

The IDP of RDWU emphasizes the following points/areas as per the guidelines of NEP-2020:

- To meet the 21st century requirements, higher education must aim at holistic development of individuals by incorporating an identified set of skills and values in both personal and professional lives improving both-academic ambiance and research infrastructure of the university.
- A multidisciplinary approach to be implemented from undergraduate level. Strategies
  are to be devised for teaching in local languages so as to cater to the students of socioeconomically disadvantaged classes. More emphasis is to be given on faculty and
  institutional Autonomy.
- Keeping in pace with the institutional plans, RDWU aims at having 7500 students on its campus including approximately 1500 students in Open Distance Learning (ODL) mode.
- RDWU being a semi-multidisciplinary institution, other professional courses need to be introduced and the existing courses are to be linked to them.
- Need for a Dynamic and Comprehensive Examination Approach at all levels that will
  include seminar presentation, community linkage project work, term paper writing,
  digital literacy, research work etc. to assess the students taking into account their
  innovative ideas, critical and analytical skills, problem-solving abilities, teamwork,
  communication skills, and in-depth knowledge in their concerned fields.
- An Industry-based approach to be adopted to ensure employability.

- Encourage the recruitment and retention of competent faculty by committing greater rewards, recognition and appreciation for excellence in teaching and research.
- Provision for financial assistance and scholarships to socio-economically disadvantaged students at UG and PG levels.
- Introduction of bridge courses for students who come from disadvantaged educational background (Age specific entry courses)
- Vocational and short-term certificate courses to be introduced.

# 1.2 National Institutional Ranking Framework (NIRF)

The National Institutional Ranking Framework (NIRF) was approved by the MHRD, Government of India to rank institutions across the country. The methodology adopted draws from the overall recommendations and broad understanding of various parameters like "Teaching, Learning and Resources," "Research and Professional Practices," "Graduation Outcomes," "Outreach and Inclusivity," and "Perception" for ranking various universities and institutions. RDWU is participating in the process since 2019 and hopes to get a rank in the top 50 in next five years.

# 1.3 National Assessment and Accreditation Council (NAAC)

The National Assessment and Accreditation Council (NAAC) conducts assessment and accreditation of Higher Educational Institutions (HEI) such as colleges, universities or other recognised institutions to derive an understanding of the 'Quality Status' of the institution. NAAC accreditation identifies the quality of the institute in terms of its curriculum, research output, faculty profile, infrastructure development, etc. NAAC certification is a measure to evaluate and then guarantee a standard of education provided in higher institutions across the nation.

Unlike the traditional educational system, NAAC aims to improve the overall development of students by helping them inculcate skills and knowledge through education. Institutions with NAAC accreditation fall under the category of institutions that offer "Quality Education" to students. RDWU, while it was a college was graded 'A' twice in 2004 and 2015. As a university, it plans to go for NAAC accreditation in 2023-

# 1.4 Sustainable Development Goals-2030

The UN Sustainable Development Goal (SDG), 2030 is a visionary plan to create a better and more sustainable future for all, established by the United Nations. They represent key benchmarks to address poverty, inequality, and issues related to climate change for establishing peace and justice. Among the 17 SDGs the goals like No Poverty, Zero Hunger, Good Health and well-being, Quality Education, Gender Equality, Clean Water and Sanitation are directly related to community and can be achieved by the University, in convergence with other developmental departments.

# 2. <u>VISION AND MISSION OF THE UNIVERSITY</u>

# Vision:

- Holistic development of women through the promotion of quality teaching and research
- Enhancing global visibility in terms of quality, employability, inclusiveness, and empowerment of women
- Equipping and enabling girls to lead a meaningful life

### Mission:

- To strive for excellence by continuously enriching the curriculum and the work culture of the University through innovative teaching, research and extension activities
- To ensure a stress-free and inclusive-learning environment by providing easy access and facilities to diverse categories of students
- To develop entrepreneurial skills and self-reliance among students through well-structured, skill based, future-ready and value-added courses
- To build the capacity of students through hands-on experience in collaboration with institutions of national and international repute
- To maximize participation of women in nation building initiatives

# 2.2. Core Values and Graduate Attributes of the University as the Guiding Force for the Strategic Plan:

Rama Devi Women's University established in the name of Maa Rama Devi, who was a the brave freedom fighter and ardent follower of Mahatma Gandhi and is guided by the principles of Gandhian Philosophy, which it adheres to in order to achieve its Vision and Mission. The core values of the University are:

- Inclusiveness
- Excellence
- Social Responsibility
- Mutual respect
- Integrity and honesty
- Dignity of labour

The Graduate Attributes of the University are a set of competencies, skills and abilities that the students acquire through the educational programmes of the University. The University is constantly seeking for holistic development of its students and inculcating in them the required skills and attributes are as below:

Intellectual Development: RDWU aims at intellectual development of its students through an in-depth knowledge the core of discipline of study, inculcation of critical thinking and

problem-solving traits, continuous upskilling through independent assignments and digital competency.

**Personal and Professional Development**: Personality development is given utmost priority for both personal and professional development. This is being envisaged through inculcation of leadership skills, self-confidence, communication skills, ethical, moral and social responsibilities, demonstration of integrity and honesty and compassion towards the humankind by students' participation in organised forums like NSS, NCC, YRC, Sports and Community Connect Cell and participation in Faculty Development Programmes on effective governance.

**Social Development**: Social development among the students and faculties is being achieved through cross-cultural awareness programmes on inclusivity, diversity, environmental concern, bio-diversity conservation and building a peaceful co-habitation.

# 2.3. Strengths, Weaknesses, Opportunities and Challenges of the University

# **Strength:**

- Established in 2015, the University basks in a rich legacy of women achievers of Odisha, since its inception as a college in 1964.
- A multidisciplinary educational hub catering to more than two crore population of the coastal region of Odisha.
- Strategic location in the heart of the State Capital city Bhubaneswar
- Well-designed curriculum and future ready programmes
- Outcome based education with excellent placement record
- Two Centres of Excellence and one Chair Professor
- Only University of the State providing NCC as a credit-based course and Gender Studies programme at Post Graduate level
- Proximity to many research and academic institutes of national and international repute
- Wider community outreach activities on social issues
- Effective governance and administrative commitment
- Strong alumni base (Smt. Draupadi Murmu, The President of India and few other Padmashree Awardee are from RDWU)
- Comprehensive education with facilities and provisions for the visuallychallenged girls
- Nurturing excellence through digital competency
- Use of ERP and automation in Governance and Library to bring objectivity, transparency, and quick delivery.

- Effective Coordination and monitoring of all its 48 affiliated Women's Colleges.
- Hostel facilities for around 2000 students

### Weaknesses:

- Existing campus is inadequate to the increasing needs of the University
- Vacancy in teaching and non-teaching positions
- Limited number of funded projects by the faculties across disciplines
- Insufficient collaborative and consultancy activities
- Lack of residential facilities for teaching and non-teaching staff

# **Opportunities:**

- Scope for second campus with sufficient land and physical infrastructure
- Filling up vacant posts and sanction of additional teaching position
- Promotion of research through incentivization and improved laboratory facilities
- Having incubation and entrepreneurship cells.
- Strengthening national and international collaborations.
- Potential for strong University- Industry interface because of the location
- More extramural research funding and consultancy grants can be obtained based on thrust areas of research.
- Introducing more need-based and industry integrated certificate programmes
- Scope for more Centres of Excellence
- Evolving as an institute of eminence for women's education, research, training and social outreach activities in the State

### **Challenges:**

- Emerging as Multidisciplinary Education and Research University (MERU).
- Acquiring global competency.
- Implementation of digitization, automation and Enterprise Resource Planning (ERP) among the supporting staff.
- Ensuring equity and equality among the stakeholders in the campus
- Insufficient number of faculty members and students from outside the State
- Attracting international students to the campus

# 3. BASIC INFORMATION OF THE INSTITUTION:

### 3.1 Establishment Details

Rama Devi Women's University, Bhubaneswar, Odisha has been established Act No.5 of 1989 of State Legislature of Odisha as a State University vide Notification No.-HE-FE-I-B-MISC-9/2015 dated 30.05.2015 and is empowered to award degrees as specified by the UGC under Section 22 of the UGC Act 1956 through its own departments, its constituent Colleges and/or through its affiliated Colleges in regular mode with the approval of concerned statutory bodies/councils, wherever required.

- Government Women's College, Bhubaneswar was established in the year 1964 in a small building of the Labour Department of Govt of Odisha and was affiliated to Utkal University. The College was shifted to the Old School Building of Unit-1 in 1966 and finally to the campus of 23.6 acres near Rupali Square, Bhubaneswar (present University campus) on 1st January 1969.
- In the year 1969, Vide G.O. No. 3131/dated 08.02.69 from the Govt of Odisha, the (Education Department) the Director of Public Instruction (D.P.I, H.E.), the name of the College was changed to Rama Devi Women's College, Bhubaneswar.
- The Syndicate of Utkal University, Odisha as per Resolution in its meeting held on 07.03.69 has recorded the decision of the Government of Odisha in regard to the change of name of Government Women's College, Bhubaneswar to Rama Devi Women's College, Bhubaneswar. This was communicated to the Secretary to Govt of Odisha, Dept of Education and Youth Services Bhubaneswar by the Assistant Registrar, Administration, Utkal University vide letter No.-69878 dated 20th March 1969.
- The College celebrated Silver Jubilee in the year 1990.
- The College was given a Lead College Status by the Govt of Odisha in 1994.
- The College was conferred Autonomous status vide U.U. Notification No. Dev-1/145/38257/99 dated 19.06.99 and by the Govt. of Odisha letter No.50351/I-HE/AC-1/98/HE dated 12.10.99.
- The Junior wing (classes of Higher Secondary) Rama Devi Women's Autonomous College was separated from the Autonomous College from the Year 2001-vide Govt Notification 29412/HE dated 15.05.2001.
- Under the RUSA scheme the College was up-graded to the Status of the University on 30.05.2015 vide Higher Education Department, Govt. of Odisha Notification No. HE-FE-I-MISC-9/2015/11605/HE dated 30.05.2015.

### 3.2. Accreditation Details

- The University was conferred the UGC 12 B status in Feb 2021.
- The Rama Devi College was accredited by 'A' grade NAAC on 16 September 2004. In Feb 2015 ,reaccredited with an 'A' grade by NAAC. At present the University is getting ready for NAAC in 2023/2024.

### 3.3. Academic Information

RDWU is one of the premier women's universities with adequate facilities for study and research. The University offers 24 undergraduate (UG), and 17 postgraduate (PG) programmes with the intention of promoting basic research foundations from the UG level onwards. A mandatory one-semester project is offered for PG and UG students with the objective of focusing more on research and innovation. The University has started Ph. D. programmes in 11 disciplines since 2020 in order to tap the creative and entrepreneurial flair as well as the innovative aptitude of the students, presently offering Ph. D. programmes in 13 disciplines. Total 97 students have been registered (53 in 2020; 41 in 2022 and 03 in 2023) and are involved in cutting edge research in their respective fields. Three scholars have successfully submitted their theses in 2022.

Electives like music and NCC are being offered, and that stands out as a unique feature of the university. Besides classroom teaching, the university provides several academic and non-academic facilities and services to students, including NSS, Rangers, and YRC. Skill enhancement courses are also offered in collaboration with other institutes. The library, which has 52,077 books and more than 50 journals, recently got a facelift as it moved to the newly-constructed library building. Moreover, curricular provisions for MOOCs, SWAYAM, etc. are being provided across all disciplines.

The programmes run in different Departments are presented below:

S1.	Department	Programme	Sanctioned strength
No.			
1	Economics	UG	48
		PG	48
		Ph.D.	
2	Education	UG	48
		PG	
		Ph.D.	
3	English	UG	48
		PG	32
		Ph.D.	
4	Hindi	UG	32
		PG	48
		PhD	
5	History	UG	48
6	Mathematics	UG	64
7	Odia	UG	48
		PG	32

		Ph.D.	
8	Philosophy	UG	32
		PG	32
		PhD	
9	Political Science	UG	64
		PG	32
		PhD	
10	Psychology	UG	32
		PG	16
11	Sanskrit	UG	48
12	Sociology	UG	32
13	Statistics	UG	32
14	Commerce	UG	192
		PG	48
		PhD	
15	Physics	UG	32
16	Chemistry	UG	32
17	Botany	UG	32
18	Zoology	UG	32
19	Biotechnology	UG	32
		PG	32
		PhD	
20	Home Science	UG	32
		PG	32
		PhD	
21	Computer Science	UG	32
		PG	32
		PhD	
22	Gender studies	PG	32
		PhD	
23	Life Science	PG (Life Science)	32
		PG (Industrial Microbiology)	24
		PhD	
24	Journalism and Mass	PG	32
	Communication	PhD	
25	MBA	PG	48
26	Teacher Education	B.Ed.	50

# **Short Term Courses Offered:**

- ❖ Diploma in Computer Applications to all the UG students enrolled
- ❖ Computer Applications for Teaching and Learning (03 credits) at Post Graduate level from 2022
- Certificate course on Disability study from 2023
- ❖ Value added and Skill based Certificate Courses at Undergraduate and Postgraduate level.

# **Value Added Courses**

Sl.No.	Name of the Department	No. of VAC	Title of the value added course
1.	B.ED.	1	Stress management
2.	BIOTECHNOLOGY	3	2. Protein engineering
			3. Molecular technology for integrative research
			4. Food processing and preservation
3.	BOTANY	2	5. Bio fertilizers
			6. Medicinal botany
4.	COMMERCE	3	7. E-commerce and digital marketing
			8. Introduction to financial technology
			9. Women entrepreneurship
5.	COMPUTER SC.	3	10. Web development and web ethics
			11. Latex for documentation
			12. Web development and ethical practices
6.	CHEMISTRY	2	13. Lab techniques and sop of lab equipment
			14. Green chemistry for safer environment
7.	ECONOMICS	3	15. Financial literacy and banking-i
			16. Financial literacy and banking-ii
			17. Economics of rural development
8.	EDUCATION	4	18. Extension education and development
			19. Gandhiyan philosophy
			20. Planning and management of higher education
			21. Yoga in student life
9.	ENGLISH	3	22. Effective writing and reading skill
			23. Film studies
			24. Creative writing
10.	GENDER STUDIES	2	25. Community engagement

Odisha
gement
for
g from
ophy
У
lls
g

23.	SOCIOLOGY	2	55. Applied research methodology
			56. Social medicine and community health
24.	STATISTICS	2	57. Survey sampling methods
			58. Statistical computing - python
25.	ZOOLOGY	2	59. Aquarium keeping
			60. Vermicomposting
26.	EDUCATION, HOME	1	61. Certificate course for disability studies
	SCIENCE AND		
	PSYCHOLOGY		
TOTAL		61	1

# 3.4. Faculty Status (Regular/Temporary Faculty as of now)

At present the university holds the total number of 74 regular faculty members (including Professor, Associate Professor and Assistant Professor) and 63 guest faculty members (on-contract). Besides, the University has appointed seven visiting faculty on contract for one year.

Sl. No.	Items	No.
1	Total sanctioned posts	137
2	University faculty	74
4	Guest faculty	63
5	Visiting faculty	07
6	B.Ed. faculty	08

# 3.5. Examination Details

Examination affairs of the University are managed by the Examination Section constituted of Controller of Examinations, Deputy Controller of Examinations and the dealing assistants. While the PG and UG programmes run in a semester-based system and follow Choice based Credit system (CBCS) curriculum with specific courses based on Ethics and Women's Studies, the B.Ed. programme is based on NCTE curriculum. Moreover, a mandatory one semester project work is included in the curriculum for all the PG programmes. Likewise, for the UG students, those securing more than 60% marks in the previous semester are entitled to do a project in their 6<sup>th</sup> semester. The University provides 100% digital literacy by imparting computer application course to all its students inducted each year to the University.

# 3.6. Students' Profile

For the admission into different programmes, the University follows the policy and guidelines of Department of HE, Govt. of Odisha as regards to the reservations of SC, ST and PWD categories.

SC category: 16.25%ST Category: 22.5 %

• PWD Category: 5%

# **UG Admission Details, 2022**

Sl. No.	Programme	Total admitted strength	General	OBC	SC	ST	PWD
1	BIOTECHNOLOGY	31	13	10	4	4	0
2	BOTANY	31	16	2	5	7	1
3	CHEMISTRY	32	17	3	4	7	1
4	COMMERCE	189	89	25	32	42	1
5	COMPUTER SCIENCE	32	18	4	3	7	0
6	ECONOMICS	48	17	9	12	10	0
7	EDUCATION	46	17	8	7	12	2
8	ENGLISH	46	21	6	9	10	0
9	HINDI	32	17	4	5	6	0
10	HISTORY	44	20	4	8	10	3
11	HOME SCIENCE	28	17	8	2	1	0
12	MATHEMATICS	61	30	12	10	9	0
13	ODIA	48	11	6	2	13	18
14	PHILOSOPHY	31	16	4	5	6	0
15	PHYSICS	31	13	7	4	7	0
16	POLITICAL SCIENCE	61	27	11	10	12	1
17	PSYCHOLOGY	31	18	2	5	6	0
18	SANSKRIT	47	21	5	10	11	0
19	SOCIOLOGY	29	13	4	5	7	0
20	STATISTICS	29	14	7	6	2	0
21	ZOOLOGY	28	13	4	5	6	0
	Total	955	438	145	153	195	27

# PG Admission Details, 2022

Sl. No.	Programme	Total admitted strength	General	ОВС	SC	ST	PWD
1	BIOTECHNOLOGY	23	12	4	3	4	0
2	COMMERCE	48	28	4	6	10	0
3	COMPUTER SCIENCE	18	11	6	0	1	0
4	ECONOMICS	40	15	8	7	10	0
5	EDUCATION	40	19	5	6	10	0
6	ENGLISH	30	16	4	4	6	0
7	GENDER STUDIES	31	27	1	2	1	0
8	HINDI	44	25	10	6	3	0
9	HOME SCIENCE	32	16	2	6	8	0
10	INDUSTRIAL MICRO BIOLOGY	17	11	1	2	3	0
11	JOURNALISM & MASS COMMUNICATION	24	17	5	2	0	0
12	LIFE SCIENCE	31	17	1	5	8	0
13	MBA	32	21	5	4	2	0
14	ODIA	28	8	6	7	5	2
15	PHILOSOPHY	29	19	4	4	2	0
16	POLITICAL SCIENCE	32	12	6	8	5	1
17	PSYCHOLOGY	15	6	2	3	4	0
	Total	514	280	74	75	82	3

# **B.Ed.** Admission Details, 2022

Sl. No.	Total students admitted	General	SC	ST	PWD
1	50	28	8	11	3

# Ph.D. Admission Details, 2022

Sl. No.	Programme	Total admitted strength	General	SC	ST	PWD
1	PhD	82	61	12	07	02

### 3.7. Infrastructure Facilities

Rama Devi Women's University is the stepping stone for fulfilling the dreams of millions of girls in the state of Odisha. The University accommodates the day-to-day teaching, learning, research and administrative activities. In 2022, several new buildings become functional and that showcase newer, state-of-the-art architecture. The new infrastructure will transform student experience, providing laboratories for undergraduates, postgraduates and researchers, as well as smart class galleries. The new buildings will also aim to facilitate the University's outreach through opportunities for art, exhibitions, lectures and conferences leading to greater public engagement.

The	University	is e	equipped	with	follow	ing	facilities:
1110	CIII I CI DIC	10 \	Jaippea	* * 1 (11	10110 11		i aciii aco.

Sl.No.	Name of the facility	Remarks
1	Central Instrumentation Facility	Developed in 2022 with funding from DST-CURIE, Govt. of India.
2	Centre of Excellence for Translation and Life Writing	Developed in 2019 through Institutional Development Plan funded by World Bank for enrichment of Indian and foreign languages.
3	Sarala Devi Centre for Gender Research	Developed in 2019 as a collaborative platform for advance interdisciplinary gender research
4	Kuntala Kumari Library	Fully digitalized and automated facility with 52000 books and 50 journals, including facility for visually challenged students
5	Academic and Research Laboratories	In various departments including Physics, Chemistry, Botany, Zoology, Computer Sciences, Statistics, Home Science, Life Sciences, Psychology, Education and Biotechnology
6	Hostels	Six hostels for accommodation of 1172 students, including dedicated facilities for visually challenged students (60 nos), students from reserved categories (400 Nos.) and research scholars (70 Nos.).

<sup>\*</sup> The list of equipment under Central Instrumentation Facility is annexed (Annexure-I)

# 3.8. Games and Sports

Rama Devi Women's University aims at instilling confidence and determination in the young students so as to enable them achieve their goals. The university not only emphasises on academics, but also on extra-curricular activities, skill development programmes and extensive activities give for all-round development of their personalities. The University is proud to be the home to two female Olympians and International Sprinters, about hundred an Inter-University National Champions and a thousand of best

female athletes of the state of Odisha representing University at National and International platform.

The University Sports Council coordinate the sporting activities of 48 affiliated women's colleges under its jurisdiction throughout the year and also organises various intercollege and Inter-University sports/games/athletics events, to motivate students and inculcate the participative and competitive spirit among them. In 2021, RDWU team won the inter-university championship in Kabaddi and Table Tennis and participated in weightlifting and Judo in the Khelo India programme. To spread the spirit of Hockey World Cup 2023, the Sports Council RDWU organized the Inter-college and Inter-university Women's Hockey sponsored by the Department of Higher Education, Government of Odisha.

\* The list of facilities under Sports Council is annexed (Annexure-II)

# 3.9. National Cadet Corp (NCC)

NCC unit at RDWU is a vibrant part of the University where cadets learn important values and skills that prepare them to be responsible citizens of the country. The cadets of the University have participated in republic day parade in the national capital.

# 3.10. Youth Red Cross (YRC)

Youth Red Cross is the vibrant wing of RDWU with an objective to train the enthusiastic Youth with the fundamental principles of Red Cross so that they develop the spirit of selfless service and volunteerism and serve the most vulnerable people, globally and locally. The YRC regularly conducts first -aid training programmes, plantation activities, blood donation camps, disaster management programmes throughout the year.

# 3.11. National Service Scheme (NSS)

The NSS Bureau of RDWU was established in the year 2016. The motto or watchword of National Service Scheme is: 'NOT ME BUT YOU'. This reflects the essence of democratic society and upholds the need for selfless service and appreciation of other person's point of view and also to show consideration for fellow human beings.

Sl no	Extension activity	Yearly enrolment
1	NCC	50 + 50
2	NSS	200
3	YRC	50

# 3.12. Research and Development

Research activities have gained special attention at Rama Devi Women's University (RDWU). All Faculties and Centres in RDWU have made significant efforts in order to boost the research output of the University and promote research culture. Research and innovation has been an integral part of the University's activities and it is committed towards building an inclusive, as well as diverse and collaborative research environment, prioritizing quality research and innovation that have social relevance.

In order to facilitate research activities, the University has developed a well drafted Research Policy to guide, encourage, fund, support and monitor core, interdisciplinary as well as multidisciplinary research in emerging areas.

### Research Publications:

- More than 200 research papers have been published during the last 5 years. The University currently has an H index of 10.
- \* The list of publications and patents is annexed (Annexure-III and IV)

# Sponsored Research Projects:

In order to strengthen of research in various subjects across streams, the University has received various research grants from different funding agencies. At present seventeen research projects are ongoing with mobilization of Rs. 7, 58, 34,000/- from various funding agencies such as the Department of Biotechnology, Govt. of India, Science and Engineering Research Board, Govt. of India, National Commission for Women, New Delhi, Science and Technology Department, Govt. of Odisha, Odisha State Higher Education Council and Odisha State Open University.

Sl. No.	Individual/ Individual Centric	Project title/Department	Funding agency	Amount mobilized (in Lakhs)
1	Institutional	Consolidation of University Research for Innovation and Excellence in Women Universities (CURIE)	DST, Govt. of India	231.76
2	Institutional	DBT supported PG teaching programme	DBT, Govt. of India	180.00
3	Institutional	Centre of Excellence in Translation and Life Writing	Dept. of HE, Odisha	150.00
4	Individual	Rapid development of NGS based SNP markers and marker-assisted selection towards purple blotch resistance in Onion (Allium cepa L.)	SERB, Govt. of India	53.52
5	Individual	Gedunin-ZnO nanoparticle-incorporated Poly-L-Lactic acid electrospun nanofibrous scaffold for controlled drug	SERB, Govt. of India	30.00

		delivery using a three-dimensional hepatosphere model		
6	Individual	A novel approach towards staphylococcal biofilm using synergism of lysostaphin conjugated silver nanoparticles from Annona Muricata L. for biomedical applications	OSHEC, Govt. of Odisha	4.72
7	Individual	IOT for social causes	OSHEC, Govt. of Odisha	4.32
8	Individual	Menstrual health and school absenteeism among adolescent tribal girls in Khandamal district of Odisha	OSHEC, Govt. of Odisha	4.06
9	Individual	Bioprospecting of <i>lxora coccinea</i> plant extracts used by the tribal communities of Odisha for treatment of leucorrohea"	OSHEC, Govt. of Odisha	5.22
10	Individual	Bioprospecting of major phytochemical profile of Coffea arabica cultivated by the tribal communities of Koraput district of Odisha and its potential therapeutic effect	S&T Dept., Govt. of Odisha	9.96
11	Individual	Development of Rapid Diagnostic Kit for Early Detection of Rhizome Rot in Turmeric and Ginger	S&T Dept., Govt. of Odisha	48.00
12	Individual	Evaluation of Antimicrobial and Antidiabetic activities of selected parasitic plants of Odisha	S&T Dept., Govt. of Odisha	6.76
13	Individual	Design of Cost-Efficient Allocation Model for Resource Management in Cloud Environment	S&T Dept., Govt. of Odisha	8.50
14	Individual	An IOT enabled smart healthcare model to monitor critical patients using deep learning algorithms	S&T Dept., Govt. of Odisha	9.22
15	Individual	Farmers participation in the futures market: Problems and possibilities in Odisha	ICSSR	3.50
16	Individual	Work place gender discrimination in Odisha: mechanism to arrest it	National Women's Commission	8.80

# IPR Cell:

• The University has housed an Intellectual Property Right (IPR) cell on the campus in Collaboration with Science and Technology Department, Govt. of Odisha.

• The University has filed 13 research patents, 8 of which have been already published.

### Research and Innovation Cell:

- The University has established a Research and Innovation cell to tap the entrepreneurial and management skills of its teachers and students.
- The University has conducted boot camps to promote student level innovation projects in association with startup Odisha.

# Research Collaborations:

The University has collaborations for research and academic exchanges with many institutions of national and international repute such as

- 1. Miranda House, Delhi University
- 2. SNDT Women's University, Mumbai
- 3. Kalinga Foundation
- 4. Kalinga Institute of Social Sciences (KISS)
- 5. Institute of Life Sciences, Bhubaneswar
- 6. Central Institute of Freshwater Aquaculture, Bhubaneswar
- 7. CIWA Central Institute for Women in Agriculture
- 8. IIT, Bhubaneswar

### 3.13. Institutional Identity

Rama Devi Women's University, formerly known as Rama Devi Women's Autonomous College, is a state university for women located in Bhubaneswar, Odisha. The campus covers an area of 25.9 acres (https://goo.gl/maps/AZQj8k56o7f6zUqWA). The university is named after freedom fighter and social reformer Rama Devi Choudhury. Since its establishment, it has maintained quality education, socially relevant research, and a commitment to serve the state and society. This University aspires to be a vital community of academics, researchers, staff, students, and alumni working together towards the greater common goal. For its peaceful ambience, the variety of courses offered, and its locational advantage, the university has become a preferred campus for many girls, both within and outside the state. At present, the University is the only women's university in the state, with 48 affiliated colleges across 9 districts of the state.

\* The list of affiliated colleges with NAAC accreditation status, autonomy status, rural urban distribution is annexed (Annexure-6)

<sup>\*</sup> The list of all the MoUs stating the nature and outcome of collaborations is annexed (Annexure-V)

# 4. METHODOLOGY:

Institutional Developmental Planning was prepared with much brain storming and worked out with sincere intent.

The major steps in the procedure of institutional planning followed are as follows:

- 1. Analysis
- 2. Survey
- 3. Need assessment
- 4. Prioritisation and enlisting

# 4.1. Analysis

For effective organisation of University planning, a Special Committee was formed by the Vice chancellor to analyse the present situation with regards to the needs of the university. A number of meetings and brain storming sessions were carried out with the different stake holders of the institution like the syndicate members, alumni, parents, faculties, staff and students with the board in order to ascertain that pre-requisite conditions are fulfilled. The major need of the sessions was to analyse the gap between where we are at present i.e., the existing status and where we ought to be i.e. the status after five years.

These pre requisite conditions are whether the following resources are adequate

- (i) The Physical, Research and Social infrastructure of the University
- (iii) laboratory and library facilities
- (iv) Present staff position
- (v) Additional components like hostel, staff quarters, play-grounds etc.
- (vi) Examination reform

Again, there was another meeting of the Committee in order to identify the areas of improvement and discuss the modus oprendi to translate it into results.

# **4.2. Survey**

The committee members of IDP executed a survey of the existing resources and the resources that can be easily made available. Statistical facts and figures regarding enrolment, staff, equipment, books, examination results etc. were placed before the Board for ready reference.

Two categories of resources were taken into consideration such as:

- 1. Resources in the University e.g., the building infrastructure, library, laboratory, etc.
- 2. Resources available in the community, e.g., industries, technical institutions and concerned state departments

The committee prepared the plan for the best use of the resources for the benefit of the students. It was kept in the mind that the institutional planning would aim at the maximum use of the available human and material resources.

### 4.3. Need Assessment

After careful consideration, a list of improvement programmes were outlined prepared with detailed attention about each programme. Each improvement programme need was defined in terms of its utility for the University and financial implications if any.

Apropos to the attainment of its Vision and Mission, the university thus plans for enhancement in its scholastic and extra-and co-curricular environment through the following:

- Establishment of new departments including commencement of PG programmes in the existing departments. The opening of new UG and PG programmes like Social Work, Performing Arts, Geology, Geography and Anthropology has been already approved in the syndicate. Similarly, the PG programmes in the core subjects such as Physics, Botany, Zoology, Mathematics, History, Sociology etc. are to be opened in coming years. Apart from that, the University plans to open the **Professional courses** like BBA, Physical Education, LLB, Nursing, and Pharmacy in addition to the opening of new value added- and skill enhancement courses to meet the objective of NEP 2020. Further **bridge courses** would be introduced for students that come from disadvantaged educational backgrounds.
- Keeping pace with the institutional plans, RDWU aims at having **7500 students** or its campus and that would include approximately 1500 in Open Distance Learning (ODL) mode.
- To maintain the pupil teacher ratio at 20:1, the University needs a total of **300** faculty and the gap between existing strength and required ones would be filled by the engagement of temporary faculty, adjunct faculty, visiting faculty and professors of practice. To ensure quality education, steps would be taken for faculty retention through committing greater rewards, recognition for excellence in teaching and research and there would be incentivization by facilitating exposure visits, participation in seminars and conferences. Besides, these, staff residential infrastructure would be created to enable the faculty to commit themselves to research and publication with ease.
- Student support activities including placement/counselling/boot camps/ entrepreneurship programmes and enhanced interaction with industry (Industry linkages through permission for internship, training and capacity building programmes) would be planned in next five years.
- More focus on research would be made by augmenting research infrastructure (modernisation of laboratories, procurement of high end equipments and computational facility etc.) and establishment of new Centre of excellences

including CoE in Genomics and Nanotechnology, CoE in Business & Entrepreneurial studies, CoE in Food Science & Technology and CoE in Disability studies.

- To encourage the entrepreneurial ability of the stakeholders, an Innovation and Incubation centre would be established.
- With an objective of enhancing the extracurricular skills of the students, an
  indoor sports arena and cultural and recreational Facilities including music
  studio, cinema theatre etc would be established.
- With present capacity of 1000 students in hostels, RDWU plans for construction of new hostel facilities for another 3000 students. Besides an International Hostel for around 60 students will be constructed to house international students as part of international collaboration.
- A **furnished Guest House** to accommodate the guests coming to the University for various purposes
- Creation of **HRD Centre for ODL mode and a multilingual Learning**Management System including provision for workshops/training
- As a part of brand building, RDWU plans to create an Institutional Advisory Committee constituting eminent personalities from across India and abroad.

# 4.4. Prioritisation and Enlisting

The prioritisation was done after the need assessment and accordingly the most needed programmes were included in the IDP. Then the programmes and activities were enlisted. The year wise execution details were framed along with the budget requirement for making it a comprehensive strategic plan.

# 5. METRICS AND TARGETS:

Indicator (s)	Present Rating	Target Rating (After 5 years)
GOVERNANCE QUALITY INDEX		
Faculty strength	70	300
Faculty student ratio	1:64	1:20
% of non-teaching staff to teaching staff	100%	100% to be maintained while increasing the number of teaching staff
Total no of under graduation programs	21	21
Total no of post graduate programs	17	35
Total no of doctoral programs	13	35

Faculty appointment - turn around/ cycle time in months	as per HE, GoO	-	
Delay in payment of monthly salary payment of faculty	on time	on time	
ACADEMIC EXCELLENCE INDE	X		
Student strength	4500	7500 (6000+1500 in ODL mode)	
National diversity (% of students enrolled from outside state through participation in national/other state admission programme)	2% of total	5% of total student strength	
Internationalization (% of foreign students in the campus through international collaboration)	Nil	2% of the total student strength	
Plagiarism Check	OURIGINAL software in use	Updated version in place	
Accreditation	12 (B); 1 <sup>st</sup> cycle of NAAC in 2023	NAAC accredited (A+)	
NIRF Ranking	Participating	In the top 50	
Visiting professors/Adjunct faculty/Professor of Practice	07 visiting professors/No Adjunct faculty or Professor of Practice	One per department/ One Adjunct faculty or Professor of Practice	
Opening of new professional courses (LLB, Nursing, Pharmacy, BBA)	MBA (1 no.)	05 nos.	
Number of students receiving awards at National and International level	15 students  Awarded for national level sports, NCC, YRC and academic activities	75 student awards	
On time Graduate (%)	83 % (Average)	>95 %	
Delay in exam conduction and declaration of results	On time	-	
Dropout rate	< 2%	< 1%	
No. of foreign collaborations	One	5	

Subscription to INFLIBNET	Existing	-	
Digitalization of the university	In process	Fully digitalized	
Wi-Fi bandwidth	100Mbps	2 Gbps	
<b>EQUITY INITIATIVE INDEX</b>			
SC Student%	15.9%	As per the Government rule	
ST Student%	18.85%	-do-	
Gender Parity	NA	NA	
Existence of CASH (Committee Against Sexual Harassment)	Yes	-	
Existence of Social Protection Cell	Grievance Cell exists	-	
Language assistance programs and proctor guided self-learning for slow learners	No	Will be taken up from 1 <sup>st</sup> year	
RESEARCH AND INNOVATION I	NDEX		
Per-faculty publications/year	01	02	
Cumulative Impact Factor of publication/faculty	02	03-05	
Annual citation index	02	08	
H Index of the University	10	15	
No. of staff involved as principal researcher	15	40	
Number of research projects fully or more than 50% funded by external agencies	16	30	
Total no of patents granted/ products obtained	02	10	
No. of faculty receiving national/ international awards	10	20	
Income through research	07 crores	10 crores	
Doctoral degrees awarded per academic Staff	one	20	
Digitization of master's and Doctoral thesis	PhD thesis in process  Masters will be taken	Fully digitised	

Income generated from non- grant Sources	up 57 Lakhs through Mo College Aviyan and Endowments	One crore
No of new professional development Programs (Entrepreneurship development programmes, boot camp, Hackathon etc.)	02	10
Existence of Placement Cells and Placement Plan	Yes	-
Placement Goal/Median salary	Rs. 2.8 Lakhs/annum; 20% placement	Rs. 5 Lakhs/annuum; 60-70% placement
No. of Students staying in hostel	1200	4000
Student Experience Surveys	Available	-
Income generated from training courses	Nil	Rs. 10,000,00/-

# 6. CORE STRATEGIES OF THE PLAN:

Rama Devi Women's University has resolved to remain at the forefront of teaching-learning to educate the girls of the state of Odisha. An agenda for excellence aimed at equity and innovation with inclusion define the core character of its perspective plan. The University aims at achieving the following in the next five years.

### Goals:

- To be ranked in top 50 of NIRF ranking and A+ in NAAC accreditation
- To have a national diversity of 10% of the student strength
- To have internationalization to the tune of 02% of the total student strength
- Pupil teacher ratio of 20:1

# Strategic objectives 2023-2028:

- 1. Excel in academic scholarship, multidisciplinary approach to and research its social impact.
- 2. Build character and inculcate a value system in the students through incorporation of sports, cultural exposure to diversity fieldwork and patriotism
- 3. Create a conducive academic infrastructure
- 4. To build a brand perception

The Strategic Plan of the University in the technology-enabled world, needs to be dynamic in nature. The Strategic Plan of Rama Devi Women's University seeks to galvanize academic life and build self-assured women leaders in every sphere of life, capable of taking the state of Odisha to a greater height. It intends to offer students the necessary space, world-class opportunities and provide research scholars with a conducive environment and ample resources to emerge as major contributors to global knowledge and interdisciplinary research. The University is inclined to achieve eminence in terms of the following dimensions:

- **A.** *Creation of Knowledge*: The University aims to work towards becoming a place for generator of knowledge, and innovations for the betterment of the society in general and women in particular.
- **B.** Research with Societal Relevance: The University is committed to harnesses academic potential of the studentsto enhance societal wellbeing through pursuing research that is relevant to contemporary society, especially during Covid and in post-Covid pandemic situation.
- C. High Quality Students Base: The University aims to attract and retain the best women talent to attain the best national rankings in the eastern part of India.

Thus, in the coming five years (2023-2028), Rama Devi Women's University envisages the following major Strategic Plans in terms of

# 6.1 Curricular and Pedagogical Excellence

Rama Devi Women's University is a premier higher learning institution engaged in fulfilling educational requirement of the girl students from diverse sections of the society in the core and applied academic disciplines. It aims at achieving academic excellence through multidisciplinary course curriculum, blended teaching methods and technology enabled learning environment. In addition to acquiring subject knowledge and required skills, the girls will be groomed to think, perform, and communicate in a critical, creative and effective manner to face the challenges of the future.

### **Objectives:**

- 1. To provide quality education at undergraduate, post Graduate and PhD levels.
- 2. To initiate multidisciplinary courses for emerging needs of stakeholders including industries, research institutions, government organizations, and society at large.
- 3. To design and implement an open source LMS.
- 4. To chalk out scholastic and co-scholastic activities to make the University educational environment more lively, vibrant, congenial and conducive for the students.
- 5. To maintain diversity with inclusiveness

Sl.	Strategies	Current	Year-1	Year-2	Year-3	Year-4	Year-5
No		status					
•							
1	To provide quality	education at	Undergradu	ate, Post Gra	duate and P	hD levels.	
1a	Enrichment of	PG			Revisio		
	course	Syllabus			n of the		
	curriculum in	revised			syllabus		
	the light of	and					
	national	enriched					
	standards,	in 2022.					
	theoretical						
	advancements						
	and industry						
	requirements.						

\*The syllabus structure of 17 PG programmes is changed and value-added certificate courses are imparted from the current session. By the end of the 5<sup>th</sup> year, we envisage to run value added courses in all the UG and PG departments with necessary revisions in the course curriculum amounting to 05% to 15% per year.

1b	Value and ethics course in education and research	Introduced at UG and PhD level	To be continued	V	To be introduced at the PG level*	V	V
1c	Conducting elective courses on art, culture, heritage, welfare and contemporary issues	Music being offered as an elective subject	To be introduced as an Elective at UG level.  Courses-Classical Dance Forms, Western Music, Musical Instrument and Theatre	√	$\sqrt{}$	√ 	V
1d	Introducing P.G. and Ph.D. programmes	P. G. – 17 Dept Ph. D. – 13 Dept	P. G. – Two Ph.D. – Two	P. G. – Two Ph.D. – Two	P. G. – Two Ph.D. – Two	P. G.  Thre e Ph.D.  Two	Ph.D. – Three

1e 2			as well student register ABC sy	well as the adents will be gistered in the BC system			√ ling ind	√ ustries,
2a	research institution Introduction of	ns, government o	rganızatı Four	ons and soc	Eight	ge.		12
	Skill based and value-added certificate programmes in core and applied disciplines.	(One from each P.G. programme)	1 3 32	<i>2</i>	2.5			
2b	Introduction of embedded internship in all the U.G. and P.G. programmes	No embedded internship at UG level Internship introduced at PG level	V		V	V		V
2c	Designing and launching job oriented professional and vocational programmes of short-term duration offered as diploma and certificate courses	Certificate Course in Disability Studies introduced	Two /Year	Four /Year	Six /Year	Eight /Year		10 Year
2d	Exposure visits	Once in a	P.G	P.G	P.G	P.G	P.C	GOnce
	of students to Industries, research institutions and Govt. work areas like Panchayati Raj projects, Drinking Water	year for P.G programmes	Once U.G- Once	Once U.G- Once	Once U.G- Once	Once U.G- Once	U.G	G-Once

	Projects etc.							
2e	Exposure visits of teachers to Industries, research institutions and Govt. work areas like Panchayati Raj projects, Drinking Water Projects etc.	Nil		V	V	V		One/departme nt
2f	Organizing expert lectures on contemporary issues	Six lectures university level (3x28depts) 84 –Dept. level		Six- Unive rsity level 100 - Dept. level	Six - Universit y level 110 – Dept. level	Eight - Universi ty level 110 – Dept. level	Eight - Universi ty level 120 – Dept. level	Eight - University level 120 –Dept. level
3	To design and imp	olement an ope	en s	ource Ll	MS			
3a	Development of full-fledged smart classrooms with audio-visual aids.	One – AB1 Six – AB2 3 nos – AB3 AB- Academic Block	p in S	Action lan to nitiate one Smart lassroo in each partme nt	Completi on of the work Smart Classroo m	V	$\sqrt{}$	√ 
3b	Usage of blended teaching methodology involving traditional, interactive, and ICT enabled pedagogical techniques in all the UG and PG programmes	(Nine Dept./25 Dept) x 100= 36%		50%	70%	90%	100%	

3c	Developing quality study material available as econtent on website as well as hard copy in the University library.	Not available	20%*	40%	60%	80%	100%			
	ery department will ective course curric		develop stu	dy materials	as e -conte	nt for at lea	ast 20% of their			
3d	Establishment of on-campus media lab	Not available	Action plan to be initiated-	On- campus video lab to become functional	V	V	V			
4	To chalk out scholastic and co-scholastic activities to make the University educational environment more lively, vibrant, congenial and conducive for the girl students.									
4b	Making NCC spread over 4 semesters as GE in UG programme	To be introduced in 4 semesters With 24 credits	$\checkmark$	√	V	V	√			
4c	Provision for recruitment of Professor of Practice/Adjunct Professor/Profes sor of Practice from industrial and societal backgrounds.	No provision	Four Nos.	Four Nos.	Eight Nos.	15 Nos.	One/Departm ent			
4d	Ensuring retention of faculty members through conduct of in time CAS.	Not initiated	As and when due	V	V	V	V			
4e	Facilitate faculty members for national and international	Not initiated	30% of the total number	40% of the total number	60% of the total number	80% of the total number	of the total number of faculty			

4f	exposure and commendation for awards and recognition for teaching and research excellence.  Maintenance of pupil teacher ratio of 20:1 in all department	57:1 (4000 student/70 teachers)	of faculty members  20:1	of faculty members	of faculty members	of faculty members	members
4g	Engagement of additional guest faculty members	At present - 55	75*	V	V	V	V
5	*To achieve 20		er ratio				
	·			,	,		,
5a	Reservation for SC/ST/PWD/Outside state quota	35% Outside state quota- not available	35% Outside state quota- not available	V	V	V	V
5b	Development of EWS database and provision for 50% tuition fee exemption	Not available	100%	V	V	V	V
6	Establishment of ICT labs in the PG departments (35 nos.) @ 15 nos. desk tops and 2 multipurpose printers to each department 525 desk tops and 70 printers Lab set up	Not available	<b>\</b>	V	V	V	

### 6.2. Research and Innovation

The University is committed to high quality research and innovation having societal relevance. In order to facilitate research activities, the University has developed a well drafted Research Policy to guide, encourage, fund, support and monitor core and interdisciplinary as well as multidisciplinary research. The research scholars are encouraged to achieve and sustain in their respective areas of research excellence. The multidisciplinary research areas like Indian Knowledge System, Bio-informatics, Data science and Analytics, Community study and Public health, Occupational Health, Drudgery and Efficiency, Business Management, Marketing and Family Income etc have been identified and students are being encouraged to take up those for their field /project work as well as doctoral theses.

# **Objectives:**

- To promote multidisciplinary research in new, emerging and thrust areas of social relevancy.
- To create environment and facilities for interdisciplinary research.

Sl. No	Strategies	Present status	Year-1	Year-2	Year-3	Year-4	Year-5
1	Popularization and implementation of university research policy	Research policy developed	Full implementati on of Research policy		Amendmen t in Research policy as required	Implementati on of amended research policy	√
2	Creation of an ecosystem for continuous publication in journals (UGC care listed/WoS/Scopus)/bo oks, design and development of patents	Every faculty to publish Two articles /year	Two articles /Year	Two articles /Year	Three articles /Year	Three articles /Year	Three articles /Year
3	Maintenance of standard ethics in research through procurement of plagiarism Softwares as well as for big data analysis.	Anti- Plagiarism software procured		V	V		V
4	Undertaking with industry collaboration focussing on practical problems and applications in real life situations	One collaboration /Year. Focus area of research collaboration and thrust areas conceptualiz ed.	Two collaboration /Year	Two collaboratio ns /Year	Two collaboratio ns /Year	Five collaboration s /Year	Five collaboratio ns /Year
5	Creation of a broad funded research footprint through mobilization of	50 Lakhs /Year	One Crore /Year	One Crore /Year	1.5 Crores /Year	Two Crores /Year	2.5 Crores /Year

6	extramural funds that would cater to 60% of funded research in the University  Strengthening of existing research infrastructure including buildings, equipment, databases, books, journals and other facilities as required for pursuing	Three PG science dept with well-equipped infrastructur e	Additional five departments will be strengthened	Additional five department s will be strengthene d	Additional seven department s will be strengthene d	Additional seven departments will be strengthened	Additional ten department s will be strengthene d
7	Establishment of Centre for Innovation and incubation in the University	Centre for Innovation and incubation conceptualiz ed	Development of infrastructure for CII	Establishm ent of women centric bio incubator	Funding to small businesses	Full implementati on of women centric innovation and incubation	V
8	Establishment of Graduate and post- graduate innovation clubs	Socio- cultural innovation clubs conceptualiz ed	Development of infrastructure for Socio- cultural innovation clubs for climate changes and gender equality	Developme nt of digital innovation schemes	Strengtheni ng of socio- cultural and digital innovation club	V	V
9	Establishment of Graduate and post- graduate Researcher Groups	Graduate and post- graduate Researcher Groups conceptualiz ed	Development of infrastructure for graduate and post- graduate Researcher Groups	Creation of fund resources for Researcher groups	Strengtheni ng of Graduate and post- graduate Researcher Groups	Strengthenin g of Graduate and post- graduate Researcher Groups	Strengtheni ng of Graduate and post- graduate Researcher Groups
10	Formulation and implementation of Institutional Integrity policy	Institutional Integrity policy developed	Implementati on of the Institutional Integrity policy	V	V	V	V
11	Establishment of HPC	Conceptualiz ed	DPR developed	Installed	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$

# **6.3. Examination Reforms**

Examination Reforms are the changes in the examination process in order to improve the efficiency of the cController of Examinations section.

# **Objectives:**

The objective of the Examination Reform is being the process of teaching-learning.

1. Encouraging analytical and logical thinking and evaluation at par with the best universities of the world.

- 2. Continuous and Comprehensive Evaluation
- 3. Effective use of the Evaluation Process
- 4. Use of Grading system
- 5. Creation of Question Banks
- 6. Preparation of detailed Guidelines for UG, PG and PhD programs.

Sl. No	Strategies	Current status	Year-1	Year-2	Year-3	Year-4	Year-5				
1	Well-designed examination system with transparency in conduct and evaluation processes										
1a	CC-TV cameras in the examination halls	One Exam Hall with seating capacity of 400 Students	Seven classrooms	12 classrooms	15 classrooms	25 classrooms	40* classroom s				
*To	*To strengthen the security measures in conduct of exam										
1b	Faculty in- house orientation for ethical evaluation	One/year	One /year	Two/year	Two/year	Two/year	Two/year				
	inars with member		colleges are to	be conducted	for ethical eval	uation					
2	Streamlining of	1	T	1	1	1	1				
2a	Continuous Updating and Revision of Curriculum	Once per year	Once in three years (PG)	Course revision with 20 % change	Course revision with 20 % change	Course revision with 20 % change	Course revision with 20 % change				
The	syllabus needs to	be upgraded to	suit NEP 202	0							
2b	Results to be declared in a Time Bound manner	Within 45 days for Final Sem Within 60 for intermediat e sem	Within 60 Days	V	V	V	V				
3	Curriculum Flexibility including the provision for Credit Bank (Choice based)	All UG depts	Three depts	10 depts	All depts	All depts	All depts				
	Multiple sets of question papers and provision for question bank to have back	20%	40%	100%	100%	100%	100%				

	up in case of						
	emergency						
	situation						
4	Use of ICT in Exam	vination Manageme	ent				
4	Online Mode of	Only used	As and	-/	-/	./	./
7	Examination and	during COIVD	when	V	V	V	V
	evaluation and	19	required				
4a	Online Students	100%	100%	100%	100%	100%	100%
4a	Enrollments	100%	100%	100%	100%	100%	100%
4b	Online Mode of	A Impoder in	A Imagedy, in	<i>I</i>	<i>I</i>	ſ	ſ
40		Already in	Already in	$\sqrt{}$	√	V	V
	Teaching on Digital Platform	practice	practice				
	in Pandemic						
	situations like						
	COVID-19						
5		A Impoder in	A Imagedy, in	<i>I</i>	<i>I</i>	ſ	ſ
)	Introducing Grading system	Already in practice	Already in practice	√	√	$\sqrt{}$	٧
	Grading system - Cumulative Grade	practice	practice				
	Point Score- to						
	make the						
	evaluation system						
	at par with the						
	best practices in						
	the recognized						
	institutions						
5	Orientation	Once a Year		. /	. /	. [	. /
)	Programme for	Once a rear	V	√	V	٧	٧
	Teachers (for						
	successful						
	Implementation of						
	grading system						
	and exam						
	reforms)						
6	Orientation of	Prior to each	Once a		1/	<b>1</b> /	<b>1</b> /
	students on		Year	l v	, v	V	V
	examination	ZAMILIII MITOII	1001				
	pattern and						
	system for						
	handling stress						
7	Overcome the	10%	30%	50%	70%	80%	100%
-	Quality Issues in	improvement	Improvem	Improveme	Improveme	Improve	_00/0
	Examination	each time	ent	nt	nt	ment	
	(Enhancing						
	question paper						
	quality, Team						
	work assessment,						
	holding fair						
	practical exam,						
	management of						
	malpractices,						
	increasing quality						
	of answer script						
	evaluation, in time						
	paper correction,						
		<u> </u>	1	1	1		

	Assigning more qualified examiners)						
8	Feedback mechanism (Feedback from Students as well as Parents)	Nil Feedback only sought from Faculties	100%	$\sqrt{}$	$\sqrt{}$	V	$\sqrt{}$
9	Preparing Guidelines The university will prepare Broad Guidelines for grading to be followed by individual colleges under its Jurisdiction	Already in practice	100%	<b>\</b>		V	$\checkmark$
10.	Upgradation and maintenance of Hardware in form of new Server, Computer, printer etc.	Obsolate hardware in place	20% upgradatio n	V	$\sqrt{}$	V	V
11.	Implementation of a new PMU in the COE section (To be self-reliant in terms of own in-house programmer, hardware and software development)	No PMU in place	One time Setup	-	-	-	-

# **6.4.** Outreach, Diversity and Inclusivity

The University has a prime motive of developing people for humanity and social welfare. It is responsive and proactive to the social, regional and local requirements, problems and other issues of relevance. Service to society holds forms the basis of in the University's act on both curricular and co-curricular programmes.. The University has reaffirmed its commitment to the society by being an affiliating University, thus catering to educational needs of urban as well as rural areas. It further aims at connecting with society through various outreach programmes and extension activities. RDWU aims at maintaining diversity and inclusivity by enhancing the diversity score in enrolling the

students from all corners of the state and country and enhancing inclusion of students from all socio-economic strata.

- To develop a sense of social responsibility among faculty staff and students
- To galvanize the activities for sensitization, awareness and active participation of various stakeholders
- To locate and identify the local/regional talent, issues and priorities for development
- To ensure involvement and training of local community to develop national and global perspective.

Sl. No.	Strategies	Current Status	Year-1	Year-2	Year-3	Year-4	Year-5
1	Organizing extension activities in the areas of education, health, hygiene, child and women welfare, local governance, and national social service.	Awareness programmes (06 Nos.) conducted	10 Nos.	V	√	V	V
2	Strengthening NSS and NCC wing of the University for ensuring greater contribution to society and nation	Two Nos. of activities	Five activities	10 activities	15 activities	20 activities	20 activities
3	Contributing to cultural development of society by promoting and celebrating important days, occasions, festivals and events, and contributions of local and regional personalities	Being organized	V	V	V	V	V
4	Developing entrepreneurial skills of the community for managing small and medium enterprises of the region	One awareness programme for WSHG members organized	Two	Two	Four	Four	
5	Enhancing the diversity by enrolling students from all corners of the state/country	Enrollment from nine districts of the state and five states of the country	Efforts to cover maximum districts and states	V	V	V	V
6	Inclusion of differently abled students in curricular and co-curricular activities	70 differently abled students are enrolled And 50% of them	50%	100%	V	V	V

		participate in different activities					
7	Establishing support system for students from Economically and Socially Weaker Sections	Not in place	Initiated	Strengthened	Alı	ready envisa	ged
8	Making athletics, indoor and outdoor sports, and cultural activities as a regular feature for students of the University						
8a	Inter College Participation	10 events	10 events	12	14	16	20
8b	Inter University Participation	Six events	Six events	Eight	10	12	14
8c	State level athletic meet		Three events	Four	Five	Six	Seven
8d	Participation in Olympics and Para-Olympics		1 event /Year	2/Year	$\sqrt{}$	$\sqrt{}$	

### 6.5. Perception and Brand Building

It has been six years since the University is disseminating knowledge to the national corpus of research and scholarship knowledge. In order to create international visibility, academic brand value, and forge a gainful industry and society, there is a need to undertake various well planned brand building efforts. This can be achieved by using all communication tools in an integrated manner.

- To establish a widespread visibility of the University in academics, industry and society.
- To intensify interactivity of the University in and outside the state...
- To ensure consistency and clarity in all respects of communication

Sl.	Strategies	Current	Year-1	Year-2	Year-3	Year-4	Year-
No.		Status					5
1	Popularizing	Not	Installation	Installation	Installation	Installation	
	University	initiated	of boards/	of neon	of digital	of digital	
	values, vision		banners	boards in	display in	boards in	
	and mission			all	university	popular	
	statements by			buildings		area of the	
	highlighting					city	
	them on boards						
	in all the						
	departments,						
	offices,						
	brochures and						
	other places of						
	strategic						
	importance						
	through						
	boards/visual						

	displays/banners						
	etc.						
2	Prominently placing University logo at important places such as buildings, boundary walls, gates, stationery, souvenirs, and vehicles. Placing University flag at important locations and	Not initiated	To be completed	√	√	√	√
	important events	. 1 1	1 41 1 1	1 6	1111 1	1	
3	Publishing University  Printing of leaflets highlighting the facilities and achievements of the University	IIn practice	Printing of University leaflets	Printing of discipline specific leaflets		website √	V
4	Setting up University map in the campus and direction marks for departments, offices and other facilities to guide visitors.	V	V	V	V	V	$\sqrt{}$
5	Becoming member of important institutions and associations of academic interest.	In place					
6	Developing souvenirs with the University name and logo for guests, visitors, alumni and stakeholders of the University	To be initiated	Printing of University souvenir	Printing of discipline specific souvenir	Printing of School/Dept specific souvenir		$\checkmark$
7	Publishing University newsletter with contributions from the University stakeholders	In place	Annually	Annually / Dept/Year	V	V	

		ı	I	ı	1	ı	1
	along with developments and contributions of the University for internal and external						
	circulation						
8	Setting up the University information centre in the campus to help and facilitate students and	Not inititated	Initiation of Information Centre	Fully Functional Information centre	$\sqrt{}$	V	V
9	visitors  Effective designing, updating and maintenance of the University website for complete information, smooth navigation and operations.	In practice	Development of a dynamic website	Envisaged	V	V	V
10	Effective use of social media such as face book, twitter and blogs for increased interaction.	In place	60% of faculty effectively using the social media	100%	V	V	V
11	Uniformity in design of identity card, stationery and other communication material used by the University such as letterheads, envelopes, visiting cards, brochures etc in order to communicate a clear and consistent image. Making available Monogram for the coat, scarf, caps which can be worn on formal functions,	Partially in practice	30% Uniformity in identity cards, stationery and other communication material used by the University such as letterheads, envelopes, visiting cards, brochures	70%	80%	90%	100%

	ceremonies and official visits to other places					
12	Maintaining records on perception of students, alumni and eminent visitors	In practice	100%	V	 $\sqrt{}$	V
13	Programmes for alumni build up and strengthening alumni network	In practice		$\sqrt{}$	 	V

### 6.6 Infrastructure Development and Maintenance

The University strives to become and to sustain the status of 'Centre of Excellence' for higher learning. It shall require instructional and research facilities to accomplish this and at the same time to comply with its Research and Green policy with global standards.. It shall address the needs of infrastructural development and regular maintenance of new and existing facilities with a robust system of monitoring and accountability. The global trends and philosophies on infrastructure development and maintenance shall be complied with as and when applicable.

- To create state of the art learning centres with eco-friendly design and modern amenities.
- To develop aesthetically appealing clean and green campus.
- To adopt regular and preventive maintenance practices for civil, electrical and mechanical utilities.

Sl.	Strategies	Curren	Year-1	Year-2	Year-3	Year-4	Year-5
No		t					
		Status					
1		Providing	g state of art c	enters of learn	ing by provid	ing	
1a	ICT enabled	In place	Seven	12	15	25	40
	classrooms		classrooms	classrooms	classrooms	classrooms	classrooms
1b	State of art	Three	Four	Six	Eight	10	12
	laboratories	number	department	department	department	department	department
		S	s with the	S	S	s	s
			Labs				
1c	Automated	Yes	100%				
	library						
1d	Campus Wi- Fi	Yes	100%				$\sqrt{}$
2	Providing	NO	-	80 %			

	residential quarters for all faculty and staff						
3	Providing hostel facility to the students	Hostel for 1200 student s at present	Increase Hostel seats for for 400 students	Increase Hostel seats for for 400 students	Increase Hostel seats for for 400 students	Increase Hostel seats for for 400 students	Increase Hostel seats for for 400 students
4	Adopting preventive maintenance for electrical, mechanical and civil utilities including fire safety measures	Partiall y initiate d	30%	40%	60%	80%	100%
5	Back up for existing eight nos. of lifts	No	Eight nos. back up	-	-	-	-
6	Maintaining and renovating old University infrastructure.	Ongoin g	60%	80%	√	√	
7	Construction of guest houses for better utilization.	Not initiate d	Initiation of proposal for Guest house work	Constructio n of Guest work	Completio n of Guest house		
8	Construction of new buildings for housing various amenities like e-resource centre, university staff college, central innovation and incubation facility, central	Initiated for G+25 building	DPR Approval	Initiation of work	V	V	Completion of the G+25 building

	instrumentatio n facility, university skill development centre, office of the Dean's chair, new departments etc.						
9	Landscaping and Beautification of campus in general for better utility to stake holders as well as society.	Initiate d (30%)	80% (Maintaine d by OFDC for three years)	100%	√ 	$\checkmark$	$\sqrt{}$
10	Practicing cleanliness at facilities and amenities across the campus.	Initiate d	100%	V	V		

#### **6.7 Effective Governance**

The University envisions the seamless integration of all processes with a systems perspective. It is achieved by the improvement in the existing systems and laying-down of advanced systems as per requirements of time. It shall result in optimal sharing of resources and speedy accomplishments of the administrative and academic processes. The philosophy of 'Systems Approach' shall be the central to the work culture of the University.

- To ensure academic, financial and administrative autonomy in the University
- To ensure participatory, transparent and good governance at all level of the University

Sl. No.	Strategies	Current status	Year-1	Year-2	Year-3	Year-	Year-
1	Integration of academic and administrative departments	Initiated	30%	40%	50%	60%	100%
2	Integration of students' evaluation and assessment centrally for quick disposal of results	Initiated	100%	100%	100%	100%	100%
3	Adherence to establish statutes, ordinances, regulations, policies and procedures of the University	In place	100%	V	V	V	V
4	Improvement and reforms in procedures, process and policies for increasing efficiency and effectiveness through periodic amendment	In place	100%	V	V	V	V
5	Development of integrated facilities for sharing intellectual and physical resources.	Initiated	30%	40%	50%	60%	100%
6	Developing file movement and document tracing system.	In Place	Establishment of e-office		Development of online financial system		
7	Maintaining a central electronic database of faculty, staff and students.	Not Initiated		Development of student ERP system	V	V	V
8.	Planning Faculty Development Programmes on effective governance and leadership development	Not initiated	one	one	one	one	Four

#### 6.8. Internationalization

The University shall promote collaborations in research, teaching and employment at National as well as international level. The partnerships with different organizations will contribute towards achieving the following objectives of the University:

- To identify opportunities and create facilities for attracting foreign students, researcher and teachers to the University
- To identify opportunities for the students and teachers of the University to get exposure to national and international standards of research and publications.

Sl.	Strategies	Current	Year-1	Year-2	Year-3	Year-4	Year-5
No.		Status					
1	Collaborative arrangements with reputed academic institutions, research institutions and industry forums for creating opportunities for students and faculty						
1a	Signing MoUs with R and D institutions and industries for resource exchange and employment generation	In place	10 with National organization	15 national/ One International	20 national/ Three Internationa	25 national/ Four International	30 national/ Five Internation al
2	Attracting foreign students for university programs.	Not initiated	Five/Year	10/Year	15/Year	15/Year	15/Year 2% of total student strength
3	Creating Infrastructure for hosting foreign researchers, teachers and students.	Not initiated	ICT enabled labs and classrooms-Eight in numbers; International hostel (Rented)	ICT enabled labs and classrooms- Ten in numbers; International hostel (Rented)	ICT enabled labs and classrooms-15 in numbers; Internationa l hostel (Rented)	ICT enabled labs and classrooms for 20 departments; International hostel (Rented)	ICT enabled labs and classrooms for every department, University Guest house
4	Creating opportunities for exchange programs of students and teachers with foreign universities.	Not initiated	One/Year	Two/Year	Three/Year	Four/Year	Five/Year

5	Developing Tie-ups with apex and regulatory bodies for grants/funds, policy guidelines, developmental programs and other resources.	Not initiated	One	Two	Two	Two	Four
6.	Medium term fellowship to the students and visitors exchange	Not initiated	One Student One visitor	One Student One visitor	One Student One visitor	One Student One visitor	One students One Visitors

### **6.9. Employment and Career Opportunities**

The digital revolution has expanded the scope of professional choices among the students. There are more than 250 sectors in India that lack professionals. In spite of this, a major chunk of the Indian youth remains unemployed. In these circumstances, the University need to bridge the gap between talent nurturing and job opportunities.

- Comprehensive guidance and counselling to facilitate wider horizon and bigger pool of opportunities to explore the scope of employability.
- Conduct of on-campus job interviews in wider subject areas

Sl.	Strategies	Current	Year-1	Year-2	Year-3	Year-4	Year-5
No.		Status					
1	Conduct of workshops opportunities	on career	counselling	to enlighten	the students	on the broa	der pool of
1a	Elementary Years	Initiated	10/Year	15/Year	20/Year	20/Year	20/Year
1b	Final Years	Initiated	Four/Year	Five/Year	Six/Year	Seven/Year	Eight/Year
2	Conduct of scholarship, internship and counselling fairs to gain clarity on opportunities, application requirements and nuances of skill sets	Initiated	Five /Year	Five /Year	Five /Year	Five /Year	Five /Year
3	Conduct of on-campus job interview and selection	Initiated	10/Year	15/Year	20/Year	20/Year	20/Year
4	Conduct of on-campus job interview in life science, social science and humanities	Initiated	One/Year	Two/Year	Three/Year	Four/Year	Five/Year

	domains						
5.	Engagement of	Not	Engaged	Engaged	Engaged	Engaged	Engaged
	Placement Officer and	initiated					
	set up for placement						
	office						

# 7. BUDGET FOR INSTITUTIONAL PROJECT:

Sl.	Activities	Year 1	Year 2	Year	Year	Year 5
No.	T. C			3	4	
A	Infrastructure (421.7 Cr.)	250.0		T 6		
1	Construction of a multi- storey multi-purpose G+25 building (to host indoor sport complex, all existing and proposed Centre of Excellences, Wellness & Counselling Centre, Career Placement Cell, Cultural and recreational Facilities, HRD Centre, need based exiting and newly proposed	250 Cr	5 Cr	5 Cr	5 Cr	5 Cr
_	academic programmes					
2	Modernization and strengthening of laboratories including contractual technicians' recruitment	01 Cr	01 Cr	01 Cr	0.5 Cr	0.5 Cr
3	Establishment of new laboratories for existing UG and PG programs and new PG programs including contractual technicians' recruitment	2 Cr	0.5 Cr	0.5 Cr	0.5 Cr	0.5 Cr
4	Establishment of new Central	5 Cr	0.5 Cr	0.5 Cr	0.5 Cr	0.5 Cr
	Instrumentation Facilities					
5	Modernization of classrooms	2 Cr	0.5 Cr	0.5 Cr	0.5 Cr	0.5 Cr
6	Updating of Learning and Training Resources (Video lab)	1 Cr	1 Cr	1 Cr	0.5 Cr	0.5 Cr
7	Establishment of multilingual Learning Management System including workshops/training	0.3 Cr				
8	Procurement of furniture	2 Cr	0.5 Cr	0.5 Cr	0.5 Cr	0.5 Cr
9	Establishment/ Upgradation of Central Computer Centres	2 Cr	0.5 Cr	0.5 Cr	0.5 Cr	0.5 Cr

	including contractual					
10	technicians' recruitment	1 Cr	1.0	1.0	0.5.0	0.5 Cr
10	Modernization/improvements of supporting departments	1 Cr	1 Cr	1 Cr	0.5 Cr	0.5 Cr
11	Modernization and	2 Cr	01 Cr	01 Cr	01 Cr	01 Cr
	strengthening of libraries and	2 01	01 01	01 61	01 01	01 01
	increasing access to					
	knowledge resources					
12	Refurbishment (Minor Civil Works)	2 Cr	0.5 Cr	0.5 Cr	0.5 Cr	0.5 Cr
13a	Staff residential	20 Cr	1 Cr	1 Cr	1 Cr	1 Cr
	infrastructure (30 Apartments					
	each of 1500 sq ft area)					
13b	Additional hostel for 3000	20 Cr	1 Cr	1 Cr	1 Cr	1 Cr
	students					
14a	Enhancing Sports skills	03 Cr	0.5 Cr	0.5 Cr	0.5 Cr	0.5 Cr
	through development of					
14b	indoor sports arena Cultural and Recreational	03 Cr	0.5 Cr	0.5 Cr	0.5 Cr	0.5 Cr
140	Facilities including Music	05 C1	0.5 CI	0.5 C1	0.5 C1	0.5 C1
	studio, cinema theatre etc.					
15	Creation of Public Realm and	0.5 Cr	0.5 Cr	0.5 Cr	0.5 Cr	0.5 Cr
	enhancing Quality of Life on					
	Campus					
16	Construction of furnished	-	05 Cr	05 Cr	0.1 Cr	0.1 Cr
	Guest house					
	(3 storied building, plinth					
17	area-2000 sq.ft) Investment in preparation of	0.5 Cr	0.5 Cr	0.5 Cr	0.5 Cr	0.5 Cr
1 /	comprehensive masterplan to	0.5 C1	0.5 CI	0.5 C1	0.5 CI	0.5 CI
	guide future growth of					
	campus					
18	Creation of HRD Centre for	5 Cr	1 Cr	1 Cr	1 Cr	1 Cr
	ODL/ Vocational/Certificate					
10	Course			1 ~	1.0	
19	Creation of Innovation/	5 Cr	1 Cr	1 Cr	1 Cr	1 Cr
	incubation centre (Engagement of one CEO,					
	office assistant with set up					
	including civil work)					
20	Creation of International	10 Cr	1 Cr	1 Cr	1 Cr	1 Cr
	hostel for 60 students					
	(4 storied building, plinth					
	area-2500 sq. ft)	2111	4 4 4 -	4		4.1.1
21	Back up for eight nos. of lifts	3 lakh	1 lakh	1 lakh	1 lakh	1 lakh
<b>B</b>	Research and Development s			2 C=	2.0	2.0-
1	Providing Teaching and Research Assistantships to	2 Cr	2 Cr	2 Cr	2 Cr	2 Cr
	Ph.D. programs					
L	I II.D. Programs		1			

Cr Cr
Cr
Cr
2 Cr
2 Cr
2 Cr
z Ci
5.6
J.o √annu
m
lary)
2 000
0,000
lakh
iakii
Cr
Cr
Cr
Cr

	Advisory Committee					
	(including engagement of					
	eminent persons' lodging,					
	boarding, travel expenses					
	etc.)					
Е	Academic Support (28.44 Cr	.)				
1	Creation of new	1 Cr	1.2 Cr	1.4 Cr	1.6 Cr	1.8 Cr
	departments/courses (BBA,					
	Physical Education, LLB,					
	Nursing, Pharmacy)					
2	Enhanced Interaction with	0.5 Cr	0.5 Cr	0.5 Cr	0.5 Cr	0.5 Cr
	Industry (Industry linkages					
	through permission for					
	internship, training and					
	capacity building					
	programmes)	0.2.5	0.2.0	0.2.6	0.2.0	0.2.0
3	Temporary faculty	0.3 Cr	0.2 Cr	0.2 Cr	0.2 Cr	0.2 Cr
4	engagement	1.5 Cr	1.5 Cr	1.5 Cr	1.5 Cr	1.5 Cr
4	Student support activities including placement/	1.5 Cf	1.5 Cf	1.5 Cr	1.5 Cf	1.5 Cr
	counselling/boot camps/					
	entrepreneurship					
	programmes					
5	Engagement of Adjunct	0.48 Cr	0.48 Cr	0.96	0.96	0.96 Cr
	faculty/Prof. of Practice			Cr	Cr	
6	Exposure visits by faculty	0.5 Cr	1 Cr	1 Cr	1 Cr	1.5 Cr
	and students					
7	Establishment of bridge	0.3 Cr	0.3 Cr	0.3 Cr	0.3 Cr	0.3 Cr
	course programmes including					
	funds for counselling and					
	advisory					
8	Establishment of ICT labs in	525 x 80.000	1 lakh	1	1 lakh	1 lakh
	the PG departments (35 nos.)	= 420 lakh		lakh		
	@ 15 nos. desk tops and 2					
	multipurpose printers to each	70 x 1 lakh				
	department	= 70 lakh				
	525 desk tops and 70 printers					
	I ab set up	105 lakh				
	Lab set up	103 lakli				
		Total= 595				
		lakh				
	•	· '		Gran	d Total	544.87 Cr

# 8. <u>SEPARATION OF BUDGET UNDER CAPITAL AND RECURRING HEADS:</u>

Sl. No.	Activities	Non- Recurring	Recurring
A	Infrastructure (421.7 Cr.)	I I	
1	Construction of a multi-storey multi-purpose G+25 building (to host indoor sport complex, all existing and proposed Centre of Excellences, Wellness & Counselling Centre, Career Placement Cell, Cultural and recreational Facilities, HRD Centre, need based exiting and newly proposed academic programmes	250 Cr	20 Cr
2	Modernization and strengthening of laboratories including contractual technicians' recruitment	-	04 Cr
2	Establishment of new laboratories for existing UG and PG programs and new PG programs including contractual technicians' recruitment	2 Cr	2 Cr
3	Establishment of new Central Instrumental Facilities	5 Cr	2 Cr
4	Modernization of classrooms	2 Cr	2 Cr
5	Updating of Learning and Training Resources (Video lab)	-	4 Cr
6	Establishment of multilingual Learning Management System including workshops/training	-	1.5 Cr
7	Procurement of furniture	2 Cr	2 Cr
8	Establishment/ Upgradation of Central and Departmental Computer Centres including contractual technicians' recruitment	2 Cr	2 Cr
9	Modernization/improvements of supporting departments	-	4 Cr
10	Modernization and strengthening of libraries and increasing access to knowledge resources	2 Cr	4 Cr
11	Refurbishment (Minor Civil Works)	2 Cr	2 Cr
12a	Staff residential infrastructure (30 Apartments each of 1500 sq ft area)	20 Cr	4 Cr
12b	Additional hostel for 3000 students	20 Cr	4 Cr
13a	Enhancing Sports skills through development of indoor sports arena	03 Cr	2 Cr
13b	Cultural and Recreational Facilities including Music studio, cinema theatre etc.	03 Cr	2 Cr
14	Creation of Public Realm and enhancing Quality of Life on Campus	-	2.5 Cr
15	Construction of furnished Guest house (3 storied building, plinth area-2000 sq.ft)	10 Cr	0.2 Cr
16	Investment in preparation of comprehensive		2.5 Cr

	masterplan to guide future growth of campus		
17	Creation of HRD Centre for ODL/	5 Cr	4 Cr
	Vocational/Certificate Course		
18	Creation of Innovation/ incubation centre	5 Cr	4 Cr
19	Creation of International hostel for 60	10 Cr	4 Cr
	students (4 storied building, plinth area-2500		
	sq. ft)		
В	Research and Development support (68 Cr.)		
1	Providing Teaching and Research Assistance	-	10 Cr
	to existing and new Ph.D. programs		
2	Provision of resources for research support	-	10 Cr
3	Enhancement of R and D infrastructure,	-	25 Cr
	computational facilities, high performance		
	computer station and institutional consultancy		
	activities		
4	Funds for execution of collaboration including	-	5 Cr
	travel for research and academic gains		
5	Establishment of new Centre of excellences	15 Cr	3 Cr
	including CoE in Genomics &		
	nanotechnology, CoE in Business &		
	Entrepreneurial studies, CoE in Food Science		
	& Technology and CoE in Disability studies		
6	Engagement of Placement Officer (50,000/	5 lakh	82 lakh
	month, Office Executive (20,000/ month),		
	Office attendant (10,000/ month) and two		
	resource persons (50,000/ month) for training		
	classes with set up		
7	Medium term fellowship to the students and	-	30 lakh
	visitors exchange		
C	Faculty Development Support (7 Cr.)		
1	Faculty and Staff Development (including	-	7 Cr
	pedagogical training, and		
	organising/participation of faculty in research		
	writing workshops, seminars, and		
	conferences) to improve competency in		
	academic and research gains		
D	Institutional reforms (12.5 Cr.)		
1	Procurement of software for technical	2 Cr	4 Cr
	assistance in academic and examination		
_	activities		
2	Institutional management capacity	-	5 Cr
	enhancement		
3	Creation of Institutional Advisory Committee	-	1.5 Cr
	(including engagement of eminent persons'		
	lodging, boarding, travel expenses etc.)		
4	Back up for lifts	3 lakh	4 lakh
Е	Academic Support (28.44 Cr.)		
1	Creation of new departments/courses (BBA,	5 Cr	2 Cr
	Physical Education, LLB, Nursing, Pharmacy)		
_			

		Grand Total	544.87 Cr
	TOTAL	371.03 Cr	173.84 Cr
	Lab set up		
	525 desk tops and 70 printers		
	department		
	and 2 multipurpose printers to each		
	departments (35 nos.) @ 15 nos. desk tops		
8	Establishment of ICT labs in the PG	5.95 Cr	0.04 Cr
	including funds for counselling and advisory		1.0 01
7	Establishment of bridge course programmes	-	1.5 Cr
6	Exposure visits by faculty and students	_	5 Cr
	Practice		2.2.
5	Engagement of Adjunct faculty/Prof. of	-	3.84
	programmes		
	counselling/boot camps/ entrepreneurship		
'	placement/		7.5 C1
4	Student support activities including	_	7.5 Cr
3	Temporary faculty engagement	_	1.1 Cr
	training and capacity building programmes)		
	linkages through permission for internship,	-	2.3 CI
2	Enhanced Interaction with Industry (Industry	-	2.5 Cr

# 9. **BUDGET SUMMARY:**

Sl. No.	Category	Non- Recurring (in crores)	Recurring (in crores)	Total Amount (in crores)
A	Infrastructure	343.03	78.74	421.77
В	Research and development support	15.05	54.12	69.17
С	Faculty Development Support	-	7	07.0
D	Institutional reforms	2	10.5	12.5
Е	Academic support	10.95	23.48	28.44
	TOTAL	371.03 Cr	173.84 Cr	544.87 Cr

### 10. CONCLUSION:

In a world where technology, teaching pedagogy, and above all social fabrics keeps on changing rapidly, the strategic plan of the University needs to be a dynamic one. Therefore, updating this document shall be done every three years for its effective implementation and benefits.

\*\*\*

# List of equipment operating under Central Instrumental facility

Sl	Name of the Equipment	Qnty	Make	Year of Purchase
no.				
1	ELISA microplate photometer & washer system	01	ThermoFisher	2021
2	Immunoblotting system	01	BioRad	2021
3	Inverted microscope	01	Olympus	2021
4	Plant growth chamber	02	Labtech/Labtop	2021/2022
5	Spectrophotometer	01	iGene	2021
6	CO <sub>2</sub> incubator	01	ThermoFisher	2021
7	Biosafety cabinets	02	SVI/Supertech	2021/2022
8	Refrigerated centrifuges	02	MDT/Neuation	2020/2022
9	Water purification system	01	Millipore	2020
10	Shaker incubator	01	SVI/iGene	2020/2022
11	Gel electrophoresis system (horizontal/vertical)	01	BioRad	2020/21
12	Thermal cycler	01	HiMedia	2020
13	-80 deep freezer	01	ThermoFisher	2021
14	-20 freezer	01	Elanpro	2019
15	Wireless sensory network platform	01	iCONSet	2020

# **Game Facilities under Sports Council**

# **Indoor Game Facilities**

- 1. Table Tennis
- 2. Carom
- 3. Chess
- 4. Ludo
- 5. Chinese Checker

# **Outdoor Game Facilities**

- 1. Kabaddi
- 2. Kho Kho
- 3. Basket Ball
- 4. Volley Ball
- 5. Badminton

# **Other Facilities**

1. Gymnasium

# ANNEXURE III

### Research papers published in the Journals as notified on UGC CARE list including Scopus and WoS during the last five years

Sl. No	Authors	Title	Year	Source title	ISSN	Source
1	Dr. Jyotirmayee Udgata	A comparative study of prevalence of obesity among adolescent boys and girls in the capital city of Odisha, India	2023	Biological Forum – An International Journal	0975-1130	UGC CARE
2	Mishra S., Ghosh S., van Hullebusch E.D., Singh S., Das A.P.	A Critical Review on the Recovery of Base and Critical Elements from Electronic Waste-Contaminated Streams Using Microbial Biotechnology	2023	Applied Biochemistry and Biotechnology	2732289	Scopus
3	Paikaray B.K., Swain D., Chakravarty S.	An improved region-based embedding technique for data hiding and image recovery using multiple ROI and RONI	2023	International Journal of Electronic Security and Digital Forensics	1751911X	Scopus
4	Behera A., Panigrahi C.R., Behera S., Pati B.	Anomaly Detection of Unstructured Logs Generated from Complex Micro- service Based Architecture Using One- Class SVM	2023	Lecture Notes in Networks and Systems	23673370	Scopus
5	Mishra S., Dash D., Das A.P.	Aquatic Microbial Diversity on Plastisphere: Colonization and Potential Role in Microplastic Biodegradation	2023	Geomicrobiology Journal	1490451	Scopus
6	Mohapatra P., Ray A., Jena S., Padhiari B.M., Kuanar A., Nayak S., Mohanty S.	Artificial neural network based prediction and optimization of centelloside content in Centella asiatica: A comparison between multilayer perceptron (MLP) and radial basis function (RBF) algorithms for soil and climatic parameter	2023	South African Journal of Botany	2546299	Scopus
7	Pradhan G., Tripathy B., Ram D.K., Digal A.K., Das A.P.	Bauxite Mining Waste Pollution and Its Sustainable Management through Bioremediation	2023	Geomicrobiology Journal	1490451	Scopus
8	Das A.P., Mohanty A.K., van Hullebusch E.D., Figueiredo G.	Bioremediation as an emerging technology for the removal of synthetic microplastic pollutants from marine ecosystem	2023	Marine Pollution Bulletin	0025326X	Scopus
9	Nath N., Kumar A., Chakroborty S., Soren S., Barik A., Pal K., de Souza F.G., Jr.	Carbon Nanostructure Embedded Novel Sensor Implementation for Detection of Aromatic Volatile Organic Compounds: An Organized Review	2023	ACS Omega	24701343	Scopus
10	Sahoo Monalisha1, Jena Padan Kumar2, Mahapatra Sujata3 and Bhotra Tilothama4	Comparative Analysis of Nutritional and Antimicrobial Activity of Curcuma angustifolia (Roxb.) and Maranta arundinacea (L.),	2023	International Journal of Human Resource Management and Research	2249-3239	UGC CARE

	T					
11	Dora A.K., Senapati S.K., Patra R.C., Rath P.K., Sahoo R., Biswal S., Jena G.R.	Comparative therapeutic efficacy of oral administration of gluconeogenic precursors with nicotinamide and intravenous hypertonic dextrose solution for management of subclinical ketosis in Chilika buffaloes	2023	Tropical Animal Health and Production	494747	Scopus
12	Mahanty B., Mishra R., Joshi R.K.	Cross-kingdom small RNA communication between plants and fungal phytopathogens-recent updates and prospects for future agriculture	2023	RNA Biology	15476286	Scopus
13	Sahoo J., Mahanty B., Mishra R., Joshi R.K.	Development of SNP markers linked to purple blotch resistance for marker- assisted selection in onion (Allium cepa L.) breeding	2023	3 Biotech	2190572X	Scopus
14	Mohanty, Subhadarsini; Benya, Ankuri; Hota, Sujata; Kumar, M. Santhosh; Singh, Shikha	Ecotoxicity of hexavalent chromium and its adverse impact on environment and human health in Sukinda Valley of India: A review on pollution and prevention strategies	2023	ENVIRONMENTAL CHEMISTRY AND ECOTOXICOLOGY	2590-1828	PubMed
15	Das, Alok Prasad; Mallavarapu, Megharaj; Ghosh, Shreya	Ecotoxicity of mining pollutants on the environment and their remediation	2023	ENVIRONMENTAL CHEMISTRY AND ECOTOXICOLOGY	2590-1828	PubMed
16	Dey, Sudeshna; Tripathy, Banismita; Kumar, M. Santosh; Das, Alok Prasad	Ecotoxicological consequences of manganese mining pollutants and their biological remediation	2023	ENVIRONMENTAL CHEMISTRY AND ECOTOXICOLOGY	2590-1826	PubMed
17	Dr . Sanghamitra Bhanja	Ekamra nidhi Kedarnath	2023	Sahitya Godhuli		UGC CARE
18	Nanda S., Panigrahi C.R., Pati B.	Emergency management systems using mobile cloud computing: A survey	2023	International Journal of Communication Systems	10745351	Scopus
19	Parida S., Pati B., Nayak S.C., Panigrahi C.R.	eMRA: an efficient multi-optimization based resource allocation technique for infrastructure cloud	2023	Journal of Ambient Intelligence and Humanized Computing	18685137	Scopus
20	Benya A., Mohanty S., Hota S., Das A.P., Rath C.C., Achary K.G., Singh S.	Endangered Curcuma caesia Roxb.: Qualitative and quantitative analysis for identification of industrially important elite genotypes	2023	Industrial Crops and Products	9266690	Scopus
21	Tripathy D., Chakroborty S., Gadtya A.S., Mahaling R.N., Moharana S., Barik A., Pal K.	Enhanced dielectric and electrical performance of phosphonic acid-modified tantalum (Ta)-doped potassium sodium niobate (KNaNbO3)-P(VDF-HFP) composites	2023	European Physical Journal E	12928941	Scopus
22	Tripathy, Anchal; Dash, Debasis; Rath, Chandi Charan	Evaluation of antimicrobial efficacy of mycoendophytic isolates from rice (Oryza sativa L.) crop	2023	ANNALS OF PHYTOMEDICINE- AN INTERNATIONAL JOURNAL	2278-9839	PubMed
23	Panda B., Panigrahi C.R., Pati B.	Exploratory and Sentiment Analysis of Classified Drug Groups	2023	Lecture Notes in Networks and Systems	23673370	Scopus
24	Shilpa K., Kumari A., Das M.M., Sharma T., Biswal S.K.	Exploring Trauma Literacy Quotient Among Indian Journalists and a Way Forward in Post-Pandemic Era: A Case Study of India	2023	Journalism and Mass Communication Educator	10776958	Scopus

25	Sarkar J.L., Cowlessur S.K., Ramasamy V., Pati B., Mahesh Selvi T., Panigrahi C.R., Majumder B., Verma R.K., Fasech Qureshi N.M.	FogCom:SDN-enabled fog node selection for early detection of communicable diseases	2023	Journal of King Saud University - Computer and Information Sciences	13191578	Scopus
26	Mahanty B., Mishra R., Joshi R.K.	Fusarium oxysporum f. sp. cepae small RNAs (Foc-sRNAs) promote disease susceptibility in onion (Allium cepa L.) through cross kingdom RNA interference	2023	Physiological and Molecular Plant Pathology	8855765	Scopus
27	Paul A., Dey S., Ram D.K., Das A.P.	Hexavalent Chromium Pollution and its Sustainable Management through Bioremediation	2023	Geomicrobiology Journal	1490451	Scopus
28	Sruti T.S., Mohanty S., Joshi R.K.	Identification and characterization of microRNAs responsive to fluoride toxicity in rice (Oryza sativa L.)	2023	Plant Gene	23524073	Scopus
29	Hota S., Achary K.G., Singh S.	Identification and Molecular Characterization of Rhizopus delemar from Eastern Ghats of State of India and its Biotechnological Applications	2023	Geomicrobiology Journal	1490451	Scopus
30	Pati A., Parhi M., Pattanayak B.K., Pati B.	IFCnCov: An IoT-based smart diagnostic architecture for COVID-19	2023	Software - Practice and Experience	380644	Scopus
31	Chakraborty U., Biswal S.K.	Impact of social media participation on female entrepreneurs towards their digital entrepreneurship intention and psychological empowerment	2023	Journal of Research in Marketing and Entrepreneurship	14715201	Scopus
32	Champati B.B., Padhiari B.M., Ray A., Jena S., Sahoo A., Mohanty S., Patnaik J., Naik P.K., Panda P.C., Nayak S.	Implementation of multilayer perceptron (MLP) and radial basis function (RBF) neural networks for predicting Shatavarin IV content in Asparagus racemosus accessions.	2023	Industrial Crops and Products	9266690	Scopus
33	Santosh Kumar Biswal	Inclusive Communication through Community Journalism: Emerging Community Media Practices in India	2023	Journal of Media and Communication	2581-513X	UGC CARE
34	Chakraborty U., Biswal S.K.	Is Digital Social Communication Effective for Social Relationship? A Study of Online Brand Communities	2023	Journal of Relationship Marketing	15332667	Scopus
35	Raj, Kshyanaprava; Das, Alok Prasad	Lead pollution: Impact on environment and human health and approach for a sustainable solution	2023	ENVIRONMENTAL CHEMISTRY AND ECOTOXICOLOGY	2590-1827	PubMed
36	Dr Sarita Mishra	Life Orientations of Performing Artists: A Systematic Review of Literature	2023	International Journal of Food and Nutritional Sciences	2319 –1775	UGC CARE
37	Kumar M., Pandit S., Patel V., Khanna N., Nag M., Lahiri D., Ray R.R., Das A., Das D.	Maximization of Energy Recovery from Starch Processing Wastewater by Thermophilic Dark Fermentation Coupled with Microbial fuel Cell Technology	2023	Geomicrobiology Journal	1490451	Scopus
38	Mrs. Heleena Jati	Mental Health Challenges : A study on college going adolesce at Bhubaneswar , Odisha	2023	Biological Forum- An International Journal	0975-1130	UGC CARE

39	Das A.P., Dutta K., Khatun R., Behera I.D., Singh S., Mishra S.	Microfiber pollution and its microbial mitigation: A review on current trends and future prospects	2023	Journal of the Taiwan Institute of Chemical Engineers	18761070	Scopus
40	Mrs. Heleena Jati	Millet: The Food for Millenium	2023	The Indian Journal of Nutrition and Dietetics	0022-3174	UGC CARE
41	Dr. Jyotirmayee Udgata	Occupational Stress and Satisfaction of Professionals in Dual-Earner Families: A Review	2023	Biological Forum – An International Journal	0975-1130	UGC CARE
42	Mahuri M., Mohanty M., Thatoi H.	Optimization and purification of laccase activity from Mammaliicoccus sciuri isolated from the soils of Similipal, Odisha, India: a kinetics study of crystal violet dye decolorization	2023	Preparative Biochemistry and Biotechnology	10826068	Scopus
43	Panda B., Panigrahi C.R., Pati B.	Patient reviews analysis using machine learning	2023	International Journal of Computational Science and Engineering	17427185	Scopus
44	Anushriya Sahoo	Perception of risk factors associated with pesticide use and adoption of biological control:A study on rice farmers of Odisha, India.	2023	Purakala	0971-2143	UGC CARE
45	Mohanty M., Pattnaik M.M., Mishra A.K., Patra H.K.	Phytoefficacy of Eicchornia crassipes (Mart.) Solms-Laub for aquaremediation of hexavalent chromium in chromite mine effluent of South Kaliapani, Odisha, India	2023	Environmental Science and Pollution Research	9441344	Scopus
46	Mansingh P., Pattanayak B.K., Pati B., Elzaghmouri B., Habboush A.K.	PREMORBID BRAIN VOLUME AGAINST ALZHEIMER'S DISEASE USING MULTIMODAL BIG MEDICAL DATA ANALYSIS	2023	ARPN Journal of Engineering and Applied Sciences	18196608	Scopus
47	Suryamani Patro, Chandrashree Lenka, Anushriya Sahoo	Prevalence of Anemia among College Going Adolescent Girls of Ganjam District, Odisha: A Cross-sectional Study.	2023	Biological Forum – An International Journal	0975-1130	UGC CARE
48	Das P.K., Das B.P., Das B.K., Dash P.	hyperaccumulators	2023	International Journal of Phytoremediation	15226514	Scopus
49	Sinha R.K., Bisoy S.K., Pati B., Khansama R.R., Panigrahi C.R., Kumar S.	Role of Machine Learning Approaches in Predicting COVID-19 New Active Cases Using Multiple Models	2023	Lecture Notes in Networks and Systems	23673370	Scopus
50	Mahanty B., Mishra R., Joshi R.K.	Sexual differentiation in dioecious cucurbits-A molecular perspective	2023	Research Journal of Biotechnology	9736263	Scopus
51	Nanda, Sarmistha; Panigrahi, Chhabi Rani; Pati, Bibudhendu; Mohapatra, Prasant	SMedia: social media data analysis for emergency detection and its type identification	2023	INTERNATIONAL JOURNAL OF COMPUTATIONAL SCIENCE AND ENGINEERING	1742-7185	PubMed
52	Guru, Biplab Kumar; Yadav, Inder Sekhar	Stock market integration and volatility spillovers: new evidence from Asia-Pacific and European markets	2023	JOURNAL OF RISK FINANCE	1526-5943	SCOPUS
53	Guru B.K., Yadav I.S.	Stock market integration and volatility spillovers: new evidence from Asia–Pacific and European markets	2023	Journal of Risk Finance	15265943	Scopus

54	Mishra A., Kumar R., Mishra J., Dutta K., Ahlawat P., Kumar A., Dhanasekaran S., Gupta A.K., Sinha S., Bishi D.K., Gupta P.K., Nayak S.	Strategies facilitating the permeation of nanoparticles through blood-brain barrier: An insight towards the development of brain-targeted drug delivery system	2023	Journal of Drug Delivery Science and Technology	17732247	Scopus
55	Mohanty M., Mohapatra S.	Synergistic effect of PGPR and PSB for alleviation of chromium toxicity in Vigna radiata (L.) R. Wilczek seedlings	2023	International Journal of Phytoremediation	15226514	Scopus
56	Sarkar J.L., Majumder A., Panigrahi C.R., Roy S., Pati B.	Tourism recommendation system: a survey and future research directions	2023	Multimedia Tools and Applications	13807501	Scopus
57	Nair A., Chakraborty I., Kumar Verma R., Panigrahi C.R., Pati B.	Virtual Reality in E-commerce: A Study	2023	Lecture Notes in Networks and Systems	23673370	Scopus
58	Guru B.K., Pradhan A.K., Bandaru R.	Volatility contagion between oil and the stock markets of G7 countries plus India and China	2023	Resources Policy	3014207	Scopus
59	Dr Sarita Mishra	Well Being of Performing Artists : A Bio Statistical Survey	2023	Biological Forum- An International Journal	2249-3239	UGC CARE
60	Das S., Sandeep I.S., Mohapatra P., Kar B., Sahoo R.K., Subudhi E., Nayak S., Mohanty S.	A comparative study of essential oil profile, antibacterial and antioxidant activities of thirty Piper betle landraces towards selection of industrially important chemotypes	2022	Industrial Crops and Products	9266690	Scopus
61	Dr. Jyotirmayee Udgata	A Comparative Study of Physical Properties of Paddy, Unpolished and Polished Rice of Kullan Thondi Rice Variety	2022	International Journal of Food and Nutritional Sciences	2319 –1775	UGC CARE
62	Mahapatra S.K., Pattanayak B.K., Pati B.	A Hybrid Connected Approach of Technologies to Enhance Academic Performance	2022	Lecture Notes in Networks and Systems	23673370	Scopus
63	Mahakud R., Pattanayak B.K., Pati B.	A Hybrid Multi-class Classification Model for the Detection of Leaf Disease using XGBoost and SVM	2022	International Journal of Engineering Trends and Technology	23490918	Scopus
64	Mishra S., Dash D., Al- Tawaha A.R.M.S., Das A.P.	A Review on Heavy Metal Ion Adsorption on Synthetic Microfiber Surface in Aquatic Environments	2022	Applied Biochemistry and Biotechnology	2732289	Scopus
65	Das P.K., Das B.P., Dash P.	A super-tolerant bacteria strain improves phytoremediation of Cr (VI) contaminated soil with Pongamia pinnata	2022	Rhizosphere	24522198	Scopus
66	Bebortta S., Senapati D., Panigrahi C.R., Pati B.	Adaptive Performance Modeling Framework for QoS-Aware Offloading in MEC-Based IIoT Systems	2022	IEEE Internet of Things Journal	23274662	Scopus
67	Bebortta S., Senapati D., Panigrahi C.R., Pati B.	An Adaptive Modeling and Performance Evaluation Framework for Edge-Enabled Green IoT Systems	2022	IEEE Transactions on Green Communications and Networking	24732400	Scopus
68	Nanda S., Panigrahi C.R., Pati B.	An Architectural Framework to Manage Heterogeneous Emergencies	2022	Lecture Notes in Networks and Systems	23673370	Scopus

		An effective watermarking technique	<u> </u>			
69	Swain M., Swain D.	using BTC and SVD for image authentication and quality recovery	2022	Integration	1679260	Scopus
70	Bebortta S., Dalabehera A.R., Pati B., Panigrahi C.R., Nanda G.R., Sahu B., Senapati D.	An intelligent spatial stream processing	2022	Smart Health	23526483	Scopus
71	Das P.K., Das B.P., Dash P.	Analytical study on hexavalent chromium accumulation in plant parts of Pongamia pinnata (L.) Pierre and remediation of contaminated soil	2022	Journal of Applied Biology and Biotechnology	2347212X	Scopus
72	Begum S., Rath S.K., Rath C.C.	Applications of Microbial Communities for the Remediation of Industrial and Mining Toxic Metal Waste: A Review	2022	Geomicrobiology Journal	1490451	Scopus
73	Chakraborty U., Biswal S.K.	Are online reviews credible? The effects of online reviews for the adoption of MOOCs for E-learning	2022	Journal of Decision Systems	12460125	Scopus
74	Padhiari B.M., Ray A., Champati B.B., Jena S., Sahoo A., Kuanar A., Halder T., Ghosh B., Naik P.K., Patnaik J., Mohanty S., Panda P.C., Nayak S.	Artificial neural network (ANN) model for prediction and optimization of bacoside A content in Bacopa monnieri: a statistical approach and experimental validation	2022	Plant Biosystems	11263504	Scopus
75	Champati, Bibhuti Bhusan; Padhiari, Bhuban Mohan; Ray, Asit; Jena, Sudipta; Sahoo, Ambika; Patnaik, Jeetendranath; Mohanty, Sujata; Naik, Pradeep Kumar; Panda, Pratap Chandra; Nayak, Sanghamitra	Assessment of Variation in Shatavarin IV Content in Asparagus racemosus through HPTLC Analysis and Identification of Elite Germplasm from Eastern India	2022	PHARMACOGNOSY MAGAZINE	0976-4062	Pub Med
76	Mansingh P., Pattanayak B.K., Pati B.	Big Medical Image Analysis: Alzheimer's Disease Classification Using Convolutional Autoencoder	2022	Computacion y Sistemas	14055546	Scopus
77	Lahiri D., Nag M., Dey A., Sarkar T., Joshi S., Pandit S., Das A.P., Pati S., Pattanaik S., Tilak V.K., Ray R.R.	Biofilm Mediated Degradation of Petroleum Products	2022	Geomicrobiology Journal	1490451	Scopus
78	Pradhan D., Mahanty A., Mohanty S., Samantaray K., Mohanty B.P.	Brewer's spent yeast replacement in carp diet leads to muscle biomass production, recycling, waste management and resource conservation	2022	Fish Physiology and Biochemistry	9201742	Scopus
79	Pradhan, Debashish; Mahanty, Arabinda; Mohanty, Sasmita; Samantaray, Kasturi; Mohanty, Bimal Prasanna	Brewer's spent yeast replacement in carp diet leads to muscle biomass production, recycling, waste management and resource conservation	2022	FISH PHYSIOLOGY AND BIOCHEMISTRY	1573-5168	Pub Med
80	Nayak S., Panigrahi C.R., Pati B., Nanda S., Hsieh M Y.	Comparative Analysis of HAR Datasets Using Classification Algorithms	2022	Computer Science and Information Systems	18200214	Scopus
81	Dr . Sanghamitra Bhanja	Daroti kathara oja-teja	2022	Nabanita		UGC CARE

82	Tripathy B., Dash A., Das A.P.	Detection of Environmental Microfiber Pollutants through Vibrational Spectroscopic Techniques: Recent Advances of Environmental Monitoring and Future Prospects	2022	Critical Reviews in Analytical Chemistry	10408347	Scopus
83	Mishra S., Dash D., Das A.P.	Detection, characterization and possible biofragmentation of synthetic microfibers released from domestic laundering wastewater as an emerging source of marine pollution	2022	Marine Pollution Bulletin	0025326X	Scopus
84	Prof. Chandrashree Lenka	Development of Nutri- rich cakes with Saoya Chunk Flour and it's quality evaluation	2022	International Journal of Food and Nutrition Science	2319 –1775	UGC CARE
85	Biswal P., Ghosh S., Pal A., Das A.P.	Exploration of Probiotic Microbial Biodiversity in Acidic Environments (Curd) and Their Futuristic Pharmaceutical Applications	2022	Geomicrobiology Journal	1490451	Scopus
86	Panda B., Panigrahi C.R., Pati B.	Exploratory Data Analysis and Sentiment Analysis of Drug Reviews	2022	Computacion y Sistemas	14055546	Scopus
87	Mohapatra S.M.	Export performance: a study of labour and capital intensive manufacturing industries in India	2022	Transnational Corporations Review	19186444	Scopus
88	Nayak B.B., Achary K.G., Singh S.	Expression of Estrogen Receptor Alpha (ESR1) in Breast Cancer: Role in Critical Diagnosis	2022	Research Journal of Biotechnology	9736263	Scopus
89	Gupta S., Sharma A., Paneerselvan S., Kandoi S., Patra B., Bishi D.K., Verma R.S.	Generation and transplantation of hepatocytes-like cells using human origin hepatogenic serum for acute liver injury treatment	2022	Xenotransplantation	0908665X	Scopus
90	Mallick T., Mishra R., Mohanty S., Joshi R.K.	Genome Wide Analysis of the Potato Soft Rot Pathogen Pectobacterium carotovorum Strain ICMP 5702 to Predict Novel Insights into Its Genetic Features	2022	Plant Pathology Journal	15982254	Scopus
91	Dr . Sanghamitra Bhanja	Gourhari Das se Sanghamitra ke Barta	2022	Socio Economic Challenges		UGC CARE
92	Sethi P.C., Sahu N., Behera P.K.	Group security using ECC	2022	International Journal of Information Technology (Singapore)	25112104	Scopus
93	Sarkar J.L., V R., Majumder A., Pati B., Panigrahi C.R., Wang W., Qureshi N.M.F., Su C., Dev K.	I-Health: SDN-Based Fog Architecture for IIoT Applications in Healthcare	2022	IEEE/ACM Transactions on Computational Biology and Bioinformatics	15455963	Scopus
94	Sahoo A., Mohanty P., Sethi P.C.	Image Encryption Using RSA Algorithm	2022	Lecture Notes in Networks and Systems	23673370	Scopus
95	Mohapatra P., Ray A., Jena S., Nayak S., Mohanty S.	Influence of various drying methods on physicochemical characteristics, antioxidant activity, and bioactive compounds in Centella asiatica L. leaves: a comparative study	2022	Biotechnologia	8607796	Scopus

	1	I- 0.1. 1 1. 1	1	I-	1 1	
	Mahakud R., Pattanayak	Internet of things and multi-class deep		Indonesian Journal of		_
96	B.K., Pati B.	feature-fusion based classification of	2022	Electrical Engineering	25024752	Scopus
		tomato leaf disease		and Computer Science		
97	Dr . Sanghamitra Bhanja	Jibana prema o swapnayana	2022	Nabanita		UGC CARE
98	SS Mohanty and Madhusmita Pati	Life Writing in Odisha	2022	Journal of Harbin Enginnering University	1006-7043	UGC CARE
99	Majumder A., Sarkar J.L., Pati B., Panigrahi C.R., Ramasamy V., Roy S., Kumar V.	MERIT: Multi-Itinerary Tourist Recommendation Engine for Industrial Internet of Things	2022	INFOCOM WKSHPS 2022 - IEEE Conference on Computer Communications Workshops		Scopus
100	Panda B., Panigrahi C.R., Pati B.	Methodologies and Tools of Sentiment Analysis: A Review	2022	Smart Innovation, Systems and Technologies	21903018	Scopus
101	Nanda S., Kumar G., Mishra R., Joshi R.K.	Microbe-Assisted Alleviation of Heavy Metal Toxicity in Plants: A Review	2022	Geomicrobiology Journal	1490451	Scopus
102	Sahoo P.P., Singh S., Rout P.K., Mishra S., Das A.P.	Microbial remediation of plastic pollutants generated from discarded and abandoned marine fishing nets	2022	Biotechnology and Genetic Engineering Reviews	2648725	Scopus
103	Mahanty B., Mishra R., Joshi R.K.	Molecular characterization of Zn(II)2Cys6 cluster gene family and their association with pathogenicity of the onion basal rot pathogen, Fusarium oxysporum f. sp. cepae	2022	Physiological and Molecular Plant Pathology	8855765	Scopus
104	Girma B., Panda A.N., Roy P.C., Ray L., Mohanty S., Chowdhary G.	Molecular, biochemical, and comparative genome analysis of a rhizobacterial strain Klebsiella Sp. KBG6.2 imparting salt stress tolerance to Oryza sativa L.	2022	Environmental and Experimental Botany	988472	Scopus
105	BR Abha Ayushree	Nutraceuticals: A Boon to Mankind	2022	International Journal of Food and Nutritional Sciences	2319-1775	UGC CARE
106	Dr. Jyotirmayee Udgata	Nutritional status of early adolescent girls and mid-day meal programme in middle schools: A study in Mayurbhanj district of Odisha	2022	International Journal of Food and Nutritional Sciences	2319 –1775	UGC CARE
107	Parida S., Pati B., Nayak S.C., Panigrahi C.R., Weng TH.	PE-DCA: Penalty Elimination Based Data Center Allocation Technique Using Guided Local Search for IaaS Cloud	2022	Computer Science and Information Systems	18200214	Scopus
108	Nasim N., Sandeep I.S., Mohanty S.	Plant-derived natural products for drug discovery: current approaches and prospects	2022	Nucleus (India)	0029568X	Scopus
109	Mohanty I., Banerjee S., Mahanty A., Mohanty S., Nayak N.R., Parija S.C., Mohanty B.P.	Proteomic Profiling and Pathway Analysis of Acid StressInduced Vasorelaxation of Mesenteric Arteries In Vitro	2022	Genes	20734425	Scopus
110	Dr . Sanghamitra Bhanja	Punah sarjanara chitrasala	2022	Dhishana		UGC CARE
111	Bhattacharjee J., Mishra S., Das A.P.	Recent Advances in Sensor-Based Detection of Toxic Dyes for Bioremediation Application: a Review	2022	Applied Biochemistry and Biotechnology	2732289	Scopus

112	Das A.P., Ghosh S.	Role of Microorganisms in Extenuation of Mining and Industrial Wastes	2022	Geomicrobiology Journal	1490451	Scopus
113	Wen Y., Onwe J.C., Haseeb M., Saini S., Matuka A., Sahoo D.	Role of technological innovation, renewable and non-renewable energy, and economic growth on environmental quality. Evidence from African countries	2022	Frontiers in Energy Research	2296598X	Scopus
114	Faheem Ud Din Dar	Sartre's Human Freedom and its Political Consciousness	2022	International Journal of Creative Research Thoughts, Vol-10, Issue 2, ISSN 2320-2882, February 2022.pp.a38- a41.	2F3:F58320- 2882	UGC CARE
115	Mohanty A., Parida S., Nayak S.C., Pati B., Panigrahi C.R.	Study and Impact Analysis of Machine Learning Approaches for Smart Healthcare in Predicting Mellitus Diabetes on Clinical Data	2022	Intelligent Systems Reference Library	18684394	Scopus
116	Pattnaik S., Sahoo B.K., Panigrahi C.R., Pattanayak B.K., Pati B.	Test Case Generation Using Symbolic Execution	2022	Computacion y Sistemas	14055546	Scopus
117	Ledwani S., Chakraborty S., Digal S.K.	The Evolution of Indian Journal of Finance: A Retrospective Review and Future Directions	2022	Indian Journal of Finance	9738711	Scopus
118	Mishra S., Das A.P.	Treatment of the Wastewater Polluted with Synthetic Microfiber Released from Washing Machine	2022	Lecture Notes in Civil Engineering	23662557	Scopus
119	Behera A., Panigrahi C.R., Pati B.	Unstructured Log Analysis for System Anomaly Detectionâ€"A Study	2022	Lecture Notes on Data Engineering and Communications Technologies	23674512	Scopus
120	Behera A., Behera S., Panigrahi C.R., Weng TH.	Using unstructured logs generated in complex large-scale micro-service-based architecture for data analysis	2022	International Journal of Business Intelligence and Data Mining	17438187	Scopus
121	Trivedi R., Pati B., Panigrahi C.R.	wPOI: Weather-Aware POI Recommendation Engine	2022	Computacion y Sistemas	14055546	Scopus
122	Chakroborty S., Panda P.	A comprehensive overview of the synthesis of tetrahydrocarbazoles and its biological properties	2021	Mini-Reviews in Organic Chemistry	1570193X	Scopus
123	Rallapalli S., Guhathakurta S., Bishi D.K., Subbarayan R., Mathapati S., Korrapati P.S.	A critical appraisal of humanized alternatives to fetal bovine serum for clinical applications of umbilical cord derived mesenchymal stromal cells	2021	Biotechnology Letters	1415492	Scopus
124	Banerjee A., Pujari A.K., Rani Panigrahi C., Pati B., Chandan Nayak S., Weng T H.	A new method for weighted ensemble clustering and coupled ensemble selection	2021	Connection Science	9540091	Scopus
125	Nanda S., Panigrahi C.R., Pati B., Mishra A.	A Novel Approach to Detect Emergency Using Machine Learning	2021	Advances in Intelligent Systems and Computing	21945357	Scopus
126	Bebortta S., Singh A.K., Pati B., Senapati D.	A Robust Energy Optimization and Data Reduction Scheme for IoT Based Indoor Environments Using Local Processing Framework	2021	Journal of Network and Systems Management	10647570	Scopus

127	Mishra R., Mohanty J.N., Mahanty B., Joshi R.K.	A single transcript CRISPR/Cas9 mediated mutagenesis of CaERF28 confers anthracnose resistance in chilli pepper (Capsicum annuum L.)	2021	Planta	320935	Scopus
128	Swain M., Swain D.	A Spatial Domain Technique for Digital Image Authentication and Tamper Recovery	2021	Advances in Intelligent Systems and Computing	21945357	Scopus
129	Sibanarayan Mishra and Dr. Aparajita Biswal	Accessibility and Utilization of agricultural credit in Odisha: Constraints and Opportunities	2021	Dogo Rangsang Research Journal	2347-7180	UGC CARE
130	Chabattula S.C., Gupta P.K., Tripathi S.K., Gahtori R., Padhi P., Mahapatra S., Biswal B.K., Singh S.K., Dua K., Ruokolainen J., Mishra Y.K., Jha N.K., Bishi D.K., Kesari K.K.	Anticancer therapeutic efficacy of biogenic Am-ZnO nanoparticles on 2D and 3D tumor models	2021	Materials Today Chemistry	24685194	Scopus
131	Ramasamy V., Panigrahi C.R., Sarkar J.L., Pati B., Majumder A., Rath M., Peng SL.	Application of deep learning strategies to assess COVID-19 patients	2021	EAI/Springer Innovations in Communication and Computing	25228595	Scopus
132	Mansingh P., Pattanayak B.K., Pati B.	Bigdata analytics and deep learning in early detection of neurogenerative diseases	2021	Smart Innovation, Systems and Technologies	21903018	Scopus
133	Dr . Sanghamitra Bhanja	Bistapana abartare kokua	2021	Sahitya Godhuli		UGC CARE
134	Dr . Sanghamitra Bhanja	Chandrasekhar ratha nka prabandhare darsanika bodhibada	2021	Srujana Swapna		UGC CARE
135	Dr . Sanghamitra Bhanja	Chhaya Saudha ra abasisha jhankara	2021	Istahar		UGC CARE
136	Das P.K., Das B.P., Dash P.	Chromite mining pollution, environmental impact, toxicity and phytoremediation: a review	2021	Environmental Chemistry Letters	16103653	Scopus
137	Das B., Swain D., Balabantaray B.K., Hansda R., Shukla V.	Copy-Move Forgery Detection Using Scale Invariant Feature Transform	2021	Advances in Intelligent Systems and Computing	21945357	Scopus
138	Nanda S., Panigrahi C.R., Pati B., Rath M., Weng T H.	COVID-19 risk assessment using the C4.5 algorithm	2021	EAI/Springer Innovations in Communication and Computing	25228595	Scopus
139	Das Mohapatra S., Nayak S.C., Parida S., Panigrahi C.R., Pati B.	COVTrac: Covid-19 Tracker and Social Distancing App	2021	Advances in Intelligent Systems and Computing	21945357	Scopus
140	Ramasamy V., Gomathy B., Sarkar J.L., Panigrahi C.R., Pati B., Majumder A.	DCQSH: Dynamic conflict-free query scheduling in heterogeneous networks during emergency	2021	Computacion y Sistemas	14055546	Scopus
141	Faheem Ud Din Dar	De-Centring the Mind and Problems of Nihilism: A Postmodern Perspective	2021	KALA: The Journal of Indian Art History Congress, Volume-25, No.11:2020-2021,ISSN 0975-7945. pp.12-15	0975-7945	UGC CARE

142	Gahtori R., Abomughaid M.M., Negi N., Krishnan S., Dhanasekaran S., Pandit S., Priya K., Bishi D.K., Prasad R., Gupta P.K.	Delineating the role of phytocompounds against anti-bacterial drug Resistance-An update	2021	Biocell	3279545	Scopus
143	Sethi P.C., Behera P.K.	Effective online teaching learning during COVID-19 pandemic	2021	Journal of Physics: Conference Series	17426588	Scopus
144	Swain D., Sahoo S.S.	Empowering the Visually Impaired Learners with Text-to-Speech-Based Solution	2021	Advances in Intelligent Systems and Computing	21945357	Scopus
145	Banerjee A., Pujari A.K., Panigrahi C.R., Pati B.	Entropy Based Cluster Selection	2021	Advances in Intelligent Systems and Computing	21945357	Scopus
146	Mohapatra D., Rath S.K., Mohapatra P.K.	Evaluating a preparation of malathion- tolerant Aspergillus niger MRU01 for accelerated removal of four organophosphorus insecticides	2021	Journal of Chemical Technology and Biotechnology	2682575	Scopus
147	Baliyarsingh B., Mishra A., Rath S.	Evaluation of insecticidal and repellency activity of leaf extracts of Andrographis paniculata against Tribolium castaneum (red flour beetle)	2021	International Journal of Tropical Insect Science	17427584	Scopus
148	Mohapatra P., Ray A., Sandeep I.S., Parida R., Mohanty S.	Genetic and biochemical stability of in vitro raised and conventionally propagated Centella asiatica - A valuable medicinal herb	2021	South African Journal of Botany	2546299	Scopus
149	Mishra R., Zheng W., Joshi R.K., Kaijun Z.	Genome Editing Strategies Towards Enhancement of Rice Disease Resistance	2021	Rice Science	16726308	Scopus
150	Sharma R., Mahanty B., Mishra R., Joshi R.K.	Genome wide identification and expression analysis of pepper C2H2 zinc finger transcription factors in response to anthracnose pathogen Colletotrichum truncatum	2021	3 Biotech	2190572X	Scopus
151	Biswal A., Nanda S., Panigrahi C.R., Cowlessur S.K., Pati B.	Human Activity Recognition Using Machine Learning: A Review	2021	Advances in Intelligent Systems and Computing	21945357	Scopus
152	Pattanayak U.	Impact of minor irrigation on agricultural production: An inter-crop analysis in Odisha	2021	Indian Journal of Economics and Development	22775412	Scopus
153	Panigrahi S., Rath C.C.	In vitro characterization of antimicrobial activity of an endophytic bacterium Enterobacter cloacae (MG001451) isolated from Ocimum sanctum	2021	South African Journal of Botany	2546299	Scopus
154	Mohapatra P., Ray A., Jena S., Nayak S., Mohanty S.	Influence of extraction methods and solvent system on the chemical composition and antioxidant activity of Centella asiatica L. leaves	2021	Biocatalysis and Agricultural Biotechnology	18788181	Scopus
155	Mohanty J., Mishra S., Patra S., Pati B., Panigrahi C.R.	IoT Security, Challenges, and Solutions: A Review	2021	Advances in Intelligent Systems and Computing	21945357	Scopus

	T			ı		
156	Verma R.K., Singh P., Panigrahi C.R., Pati B.	ISS: Intelligent Security System Using Facial Recognition	2021	Advances in Intelligent Systems and Computing	21945357	Scopus
157	Dr . Sanghamitra Bhanja	Jibanara jalachhabi eka aalochana	2021	Kadambini		UGC CARE
158	Parida S., Pati B., Nayak S.C., Panigrahi C.R.	JOB-DCA: A Cost Minimizing Jaya Optimization-Based Data Center Allocation Policy for IaaS Cloud Model	2021	Advances in Intelligent Systems and Computing	21945357	Scopus
159	Sahoo B.C., Singh S., Sahoo S., Kar S.K., Mohanty S., Nayak S., Kar B.	Mining of trait specific gene candidates through mRNA sequencing emphasizing on expression study of terpenoid biosynthesis genes in betelvine cash crop	2021	Industrial Crops and Products	9266690	Scopus
160	Panigrahi C.R., Sarkar J.L., Pati B., Buyya R., Mohapatra P., Majumder A.	Mobile Cloud Computing and Wireless Sensor Networks: A review, integration architecture, and future directions	2021	IET Networks	20474954	Scopus
161	Mishra M., Choudhury P., Pati B.	Modified ride-NN optimizer for the IoT based plant disease detection	2021	Journal of Ambient Intelligence and Humanized Computing	18685137	Scopus
162	Satyabrata N., Rukmini M., Kumar J.R.	Molecular basis of insect resistance in plants: Current updates and future prospects	2021	Research Journal of Biotechnology	9736263	Scopus
163	Mukherjee T., Pati B., Senapati D.	Performance Evaluation of Composite Fading Channels Using q-Weibull Distribution	2021	Advances in Intelligent Systems and Computing	21945357	Scopus
164	Mohanty M., Mohanty S., Bhuyan S.K., Bhuyan R.	Phytoperspective of Moringa oleifera for oral health care: An innovative ethnomedicinal approach	2021	Phytotherapy Research	0951418X	Scopus
165	Ghosh S., Gandhi M., van Hullebusch E.D., Das A.P.	Proteomic insights into Lysinibacillus spmediated biosolubilization of manganese	2021	Environmental Science and Pollution Research	9441344	Scopus
166	Sharma V., Dash S.K., Govarthanan K., Gahtori R., Negi N., Barani M., Tomar R., Chakraborty S., Mathapati S., Bishi D.K., Negi P., Dua K., Singh S.K., Gundamaraju R., Dey A., Ruokolainen J., Thakur V.K., Kesari K.K., Jha N.K., Gupta P.K., Ojha S.	Recent advances in cardiac tissue engineering for the management of myocardium infarction	2021	Cells	20734409	Scopus
167	Gupta P.K., Gahtori R., Govarthanan K., Sharma V., Pappuru S., Pandit S., Mathuriya A.S., Dholpuria S., Bishi D.K.	Recent trends in biodegradable polyester nanomaterials for cancer therapy	2021	Materials Science and Engineering C	9284931	Scopus
168	Dewangan P., Paikaray B.K., Swain D., Chakravarty S.	Reversible Region-Based Embedding in Images for Secured Telemedicine Approach	2021	Advances in Intelligent Systems and Computing	21945357	Scopus

169	Paikaray B.K., Swain D.,	Reversible selective embedding for DICOM image security and integrity	2021	International Journal of Electronic Security and	1751911X	Scopus
	Chakravarty S.	using visual cryptography		Digital Forensics		1
170	Panda P., Pal K., Chakroborty S.	Robust molecular trends in Pd-catalyzed C(sp2/sp3)-H activation reactions – A review	2021	Results in Chemistry	22117156	Scopus
171	Biswal P., Pal A., Das A.P.	Screening for probiotic potential of lactobacillus rhamnosus strain CRD4	2021	Biointerface Research in Applied Chemistry	20695837	Scopus
172	Ram S.K., Das B.B., Pati B., Panigrahi C.R., Mahapatra K.K.	SEHS: Solar Energy Harvesting System for IoT Edge Node Devices	2021	Advances in Intelligent Systems and Computing	21945357	Scopus
173	Sarkar J.L., Ramasamy V., Majumder A., Panigrahi C.R., Gomathy B., Pati B., Saha A.K.	SensMask: An intelligent mask for assisting patients during COVID-19 emergencies	2021	Computacion y Sistemas	14055546	Scopus
174	Panda P., Pal K., Chakroborty S.	Smart advancements of key challenges in graphene-assembly glucose sensor technologies: A mini review	2021	Materials Letters	0167577X	Scopus
175	Das B.B., Ram S.K., Pati B., Panigrahi C.R., Babu K.S., Mohapatra R.K.	SVM and Ensemble-SVM in EEG- Based Person Identification	2021	Advances in Intelligent Systems and Computing	21945357	Scopus
176	Swain D., Sahoo S.S.	Transforming the Lives of Socially Dependent to Self-dependent Using IoT	2021	Advances in Intelligent Systems and Computing	21945357	Scopus
177	Mondal J., Swain D.	A 3-layer RDH method in encrypted domain for medical information security	2020	International Journal of Electronic Security and Digital Forensics	1751911X	Scopus
178	Ganguly S., Mitra T., Mahanty A., Mohanty S., Mohanty B.P.	A comparative metabolomics study on anadromous clupeid Tenualosa ilisha for better understanding the influence of habitat on nutritional composition	2020	Metabolomics	15733882	Scopus
179	Mohapatra S., Panigrahi C.R., Pati B., Mishra M.	A Comparative Study of Task Scheduling Algorithm in Cloud Computing	2020	Advances in Intelligent Systems and Computing	21945357	Scopus
180	Swain M., Swain D., Paikaray B.K.	A competitive analysis on digital image tamper detection and its secure recovery techniques using watermarking	2020	Advances in Intelligent Systems and Computing	21945357	Scopus
181	Naik S.K., Behera S., Rath S.K., Patra J.K.	A comprehensive scientific overview of blepharispermum subsessile DC. (asteraceae), a conservation concern medicinal plant with promising pharmaceutical potential	2020	Indian Journal of Traditional Knowledge	9725938	Scopus
182	Parida S., Pati B.	A Cost Efficient Service Broker Policy for Data Center Allocation in IaaS Cloud Model	2020	Wireless Personal Communications	9296212	Scopus
183	Banerjee A., Pujari A.K., Pati B., Panigrahi C.R.	A new unsupervised method for boundary perception and word-like segmentation of sequence	2020	International Journal of Computational Science and Engineering	17427185	Scopus
184	Bebortta S., Rajput N.K., Pati B., Senapati D.	A real-time smart waste management based on cognitive iot framework	2020	Lecture Notes in Electrical Engineering	18761100	Scopus

185	Verma R.K., Panigrahi C.R., Pati B., Sarkar J.L.	An Efficient Approach for Running Multimedia Applications Using Mobile Cloud Computing	2020	Advances in Intelligent Systems and Computing	21945357	Scopus
186	Paikaray B.K., Dewangan P., Swain D., Chakravarty S.	An extensive study on medical image security with ROI preservation: techniques, evaluations, and future directions	2020	Advances in Intelligent Systems and Computing	21945357	Scopus
187	Mohanty S., Pal A., Sharma T., Singh S., Badireenath Konkimalla V., Si S.C.	Anti-arthritic effect of sulforaphane (Sfn) in fca-induced arthritic rats by suppressing pro-inflammatory cytokines and tissue regeneration	2020	International Journal of Pharmaceutical Research	9752366	Scopus
188	Ray A., Halder T., Jena S., Sahoo A., Ghosh B., Mohanty S., Mahapatra N., Nayak S.	Application of artificial neural network (ANN) model for prediction and optimization of coronarin D content in Hedychium coronarium	2020	Industrial Crops and Products	9266690	Scopus
189	Kar S.	Assimilation and Integration of Buddha Consciousness in the Cult of Lord JagannÄtha	2020	Journal of Indian Council of Philosophical Research	9707794	Scopus
190	Mishra R., Joshi R.K., Zhao K.	Base editing in crops: current advances, limitations and future implications	2020	Plant Biotechnology Journal	14677644	Scopus
191	Biswal P., Pal A., Das A.P.	Biosensor for detection of bacteria with probiotic potential and food pathogens	2020	Letters in Applied NanoBioScience	22846808	Scopus
192	Panigrahi S., Mohanty S., Rath C.C.	Characterization of endophytic bacteria Enterobacter cloacae MG00145 isolated from Ocimum sanctum with Indole Acetic Acid (IAA) production and plant growth promoting capabilities against selected crops	2020	South African Journal of Botany	2546299	Scopus
193	Rath M., Pati B., Panigrahi C.R., Peng SL.	Control of congestion and traffic light using intelligent approaches in smart city	2020	International Journal of Wireless and Mobile Computing	17411084	Scopus
194	Ramasamy V., Gomathy B., Sarkar J.L., Panigrahi C.R., Pati B., Majumder A.	EMC2: An emergency management system using mobile cloud computing	2020	IET Networks	20474954	Scopus
195	Joshi R.K., Bharat S.S., Mishra R.	Engineering drought tolerance in plants through CRISPR/Cas genome editing	2020	3 Biotech	2190572X	Scopus
196	Amrita B., Sumita J., Kumar J.R.	Enhanced accumulation of phenolics in the β-cryptogein co-transformed hairy roots of Plumbago zeylanica L.	2020	Research Journal of Biotechnology	9736263	Scopus
197	Chang, Jou-Ming; Chamnongthai, Kosin; Pati, Bibudhendu	Guest Editorial Special Issue for JCSSE 2019	2020	JOURNAL OF INTERNET TECHNOLOGY	1607-9264	Pub Med
	Sharma S., Saha A.K., Ramasamy V., Sarkar J.L., Panigrahi C.R.	hBOSOS: An Ensemble of Butterfly Optimization Algorithm and Symbiosis Organisms Search for Global Optimization	2020	Advances in Intelligent Systems and Computing	21945357	Scopus
199	Dr . Sanghamitra Bhanja	Hindi-Odia sahityara dui sachidananda	2020	Vidya Warta	2319-9318	UGC CARE
200	Acharya Jyotirmayee	Lessons for Women Group Enterprises Management from One Tambon One Product Rural Development Programme in Thailand	2020	Prataya	2456-9194	UGC CARE

201	Dr . Sanghamitra Bhanja	Maa Rama Devi the great women of jeeanpathe	2020	International Journal of research of analitical reviews	2348-1269	UGC CARE
202	Sarkar J.L., Panigrahi C.R., Pati B., Saha A.K., Majumder A.	MAAS: A mobile cloud assisted architecture for handling emergency situations	2020	International Journal of Communication Systems	10745351	Scopus
203	Dr . Sanghamitra Bhanja	Mahatama Gandhi & women empowerment	2020	Konark -Odisha sahiya ekademi		UGC CARE
204	Rath M., Pati B., Pattanayak B.K.	Manifold surveillance issues in wireless network and the secured protocol	2020	International Journal of Information Security and Privacy	19301650	Scopus
205	Sarkar J.L., Majumder A., Panigrahi C.R., Roy S.	MULTITOUR: A multiple itinerary tourists recommendation engine	2020	Electronic Commerce Research and Applications	15674223	Scopus
206	Panda P., Chakroborty S.	Navigating the Synthesis of Quinoline Hybrid Molecules as Promising Anticancer Agents	2020	ChemistrySelect	23656549	Scopus
207	Dr . Sanghamitra Bhanja	Niladribhusan nka kabya drustira swatantra	2020	Samakaleena bharatiya sahitya		UGC CARE
208	Mohanty B.P., Ganguly S., Mahanty A., Mitra T., Mohanty S.	Nutrigenomics and fish	2020	CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources	17498848	Scopus
209	Parida S., Pati B., Nayak S.C., Panigrahi C.R.	Offer Based Auction Mechanism for Virtual Machine Allocation in Cloud Environment	2020	Advances in Intelligent Systems and Computing	21945357	Scopus
210	Mohanty M., Kumar Patra H.	Phytoassessment of in situ weed diversity for their chromium distribution pattern and accumulation indices of abundant weeds at South Kaliapani chromite mining area with their phytoremediation prospective	2020	Ecotoxicology and Environmental Safety	1476513	Scopus
211	Nasim N., Sandeep I.S., Sahoo A., Das S., Panda M.K., Acharya L., RamaRao V.V., Nayak S., Mohanty S.	Population genetic structure and diversity analysis in economically important Pandanus odorifer (Forssk.) Kuntze accessions employing ISSR and SSR markers	2020	Industrial Crops and Products	0926-6690	Scopus
212	Das M., Swain D., Paikaray B.K.	Privacy preservation in ROI of medical images using LSB manipulation	2020	Advances in Intelligent Systems and Computing	21945357	Scopus
213	Mohanty B.P., Mahanty A., Mitra T., Mohanty S., Naik A.K., Parija S.C.	Proteomic and transcriptomic changes in rat liver following oral feeding of formaldehyde	2020	Chemosphere	456535	Scopus
214	Dash B., Ray A., Sahoo A., Jena S., Singh S., Kar B., Patnaik J., Panda P.C., Mohanty S., Nayak S.	Quantitative and chemical fingerprint analysis for quality control of Zingiber zerumbet based on HPTLC combined with chemometric methods	2020	Plant Biosystems	11263504	Scopus
215	Das P.K., Das B.P., Dash P.	Role of Energy Crops to Meet the Rural Energy Needs: An Overview	2020	Energy, Environment, and Sustainability	25228366	Scopus
216	Dr . Sanghamitra Bhanja	Sanskrit Language	2020	Mahanadi		UGC CARE

		<u> </u>				
217	Singh D., Pati B., Panigrahi C.R., Swagatika S.	Security Issues in IoT and their Countermeasures in Smart City Applications	2020	Advances in Intelligent Systems and Computing	21945357	Scopus
218	Dr . Sanghamitra Bhanja	Sishupanara namra Prabakta shri Birabara Ota	2020	Asian Journal of Business Ethics		UGC CARE
219	Singh R.P., Mishra S., Das A.P.	Synthetic microfibers: Pollution toxicity and remediation	2020	Chemosphere	456535	Scopus
220	Mishra S., Singh R.P., Rath C.C., Das A.P.	Synthetic microfibers: Source, transport and their remediation	2020	Journal of Water Process Engineering	22147144	Scopus
221	Dr . Sanghamitra Bhanja	Tribal festival in Odisha	2020	International journalof research of analitical reviews	2348-1269	UGC CARE
222	Verma R.K., Panigrahi C.R., Pati B., Sarkar J.L., Majumder A.	A mobile cloudlet assisted architecture for handling multimedia applications	2019	Computacion y Sistemas	14055546	Scopus
223	Giri S.K., Panigrahi C.R., Pati B., Sarkar J.L.	A novel approach to minimize energy consumption in cloud using task consolidation mechanism	2019	Advances in Intelligent Systems and Computing	21945357	Scopus
224	Dr . Sanghamitra Bhanja	Adibasi parba parbani	2019	Sahitya Godhuli		UGC CARE
225	Dr . Sanghamitra Bhanja	Amruta sandhani aupanyasika Archana Nayak	2019	International Geographical Education		UGC CARE
226	Dr . Sanghamitra Bhanja	Dalita Bimarsa	2019	Istahar		UGC CARE
227	Panigrahi C.R., Sarkar J.L., Tiwary M., Pati B., Mohapatra P.	DATALET: An approach to manage big volume of data in cyber foraged environment	2019	Journal of Parallel and Distributed Computing	7437315	Scopus
228	Mohapatra, D. ,Panigrahi, S., & Behura, S	Deconstructing the Gender Binary: A study of Gender -Fluid Mythological Figures	2019	Think India Journal, Vol-22- Issue-14- December-2019	0971-1260	UGC CARE
229	Rath M., Pati B., Pattanayak B.K.	Design and development of secured framework for efficient routing in vehicular ad-hoc network	2019	International Journal of Business Data Communications and Networking	15480631	Scopus
230	Ray M., Achary K.G., Nayak S., Singh S.	Development of a colloidal gold strip- based immunochromatographic assay for rapid detection of Fusarium oxysporum in ginger	2019	Journal of the Science of Food and Agriculture	225142	Scopus
231	Das S., Ray A., Nasim N., Nayak S., Mohanty S.	Effect of different extraction techniques on total phenolic and flavonoid contents, and antioxidant activity of betelvine and quantification of its phenolic constituents by validated HPTLC method	2019	3 Biotech	2190572X	Scopus
232	Nanda S., Mohanty B., Joshi R.K.	Endophyte-Mediated Host Stress Tolerance as a Means for Crop Improvement	2019	Reference Series in Phytochemistry	2511834X	Scopus
233	Dr . Sanghamitra Bhanja	Galpahina galpasrasta : shree abhs	2019	Gokarnika		UGC CARE
234	Priyadarshini S., Sulava S., Bhol R., Jena S.	Green synthesis of silver nanoparticles using Azadirachta indica and Ocimum sanctum leaf extract	2019	Current Science	113891	Scopus

235	Prabhakar A., Mishra S., Das A.P.	Isolation and Identification of Lead (Pb) Solubilizing Bacteria from Automobile Waste and Its Potential for Recovery of Lead from End of Life Waste Batteries	2019	Geomicrobiology Journal	1490451	Scopus
236	Mishra S., Rath C.C., Das A.P.	Marine microfiber pollution: A review on present status and future challenges	2019	Marine Pollution Bulletin	0025326X	Scopus
237	Verma R.K., Panigrahi C.R., Ramasamy V., Pati B., Krishna Prasad P.E.S.N.	MBA: Mobile cloud computing approach for handling big data applications	2019	Advances in Intelligent Systems and Computing	21945357	Scopus
238	Verma R.K., Panigrahi C.R., Pati B., Sarkar J.L.	Mmedia: An efficient transmission policy for multimedia applications using mobile cloud computing	2019	International Journal of Sensors, Wireless Communications and Control	22103279	Scopus
239	Biswal P., Pal A., Das P.	Molecular identification of native lactic acid bacteria isolated from curd samples with probiotic potential	2019	Biointerface Research in Applied Chemistry	20695837	Scopus
240	Mohapatra S., Panigrahi C.R., Pati B., Mishra M.	MSA: A task scheduling algorithm for cloud computing	2019	International Journal of Cloud Computing	20439989	Scopus
241	Mohanty J.N., Chand S.K., Joshi R.K.	Multiple microRNAs Regulate the Floral Development and Sex Differentiation in the Dioecious Cucurbit Coccinia grandis (L.) Voigt	2019	Plant Molecular Biology Reporter	7359640	Scopus
242	Panigrahi, S., Behura, S., Mohapatra, D. & Swain, S	Prejudice in times of Natural Disaster: An assessment of Caste Discrimination during Cyclone Fani in Odisha	2019	Integration	0971-1260	UGC CARE
243	Panigrahi, S., Behura, S., Mohapatra, D. & Swain, S	Prejudice in times of Natural Disaster: An assessment of Caste Discrimination during Cyclone Fani in Odisha	2019	Think India Journal, Vol-22- Issue-14- December-2019	0971-1260	UGC CARE
244	Rath M., Pati B., Panigrahi C.R., Sarkar J.L.	QTM: A QoS task monitoring system for mobile ad hoc networks	2019	Advances in Intelligent Systems and Computing	21945357	Scopus
245	Mishra R., Rout E., Mohanty J.N., Joshi R.K.	Sequence-tagged site-based diagnostic markers linked to a novel anthracnose resistance gene RCt1 in chili pepper (Capsicum annuum L.)	2019	3 Biotech	2190572X	Scopus
246	Mishra S., Rout P.K., Das A.P.	Solar photovoltaic panels as next generation waste: A review	2019	Biointerface Research in Applied Chemistry	20695837	Scopus
247	Dr . Sanghamitra Bhanja	Surmya Chetanara Prabandhika	2019	Istahar		UGC CARE
248	Kari V., Raul S.K., Henck J.M., Kitz J., Kramer F., Kosinsky R.L., Übelmesser N., Mansour W.Y., Eggert J., Spitzner M., Najafova Z., Bastians H., Grade M., Gaedcke J., Wegwitz F., Johnsen S.A.	The histone methyltransferase DOT1L is required for proper DNA damage response, DNA repair, and modulates chemotherapy responsiveness	2019	Clinical Epigenetics	18687075	Scopus
249	Dr . Sanghamitra Bhanja	Ananya kabya chetanara amruta prayasa	2018	Istahar		UGC CARE
250	Rath M., Pati B.	Appraisal of soft computing methods in collaboration with smart city applications and wireless network	2018	International Journal of e-Collaboration	15483673	Scopus

251	Raji N.S., SasmitaKar	Career indecision among senior secondary school students: Impact of internet savviness	2018	Indian Journal of Public Health Research and Development	9760245	Scopus
252	Acharya, J. and Patnaik, S.N.	Corporate Social Responsibility on Community Development and Sustainability: Study of Rourkela Steel Plant, A Unit of Sail, India	2018	Saptarshi	0973-3264	UGC CARE
253	Mitra T., Mohanty B.P., Mohanty S., Purohit G.K., Das B.K.	Expression patterns and mutation analysis of p53 in fish Rita rita from polluted riverine environment	2018	Mutation Research - Genetic Toxicology and Environmental Mutagenesis	13835718	Scopus
254	Mitra T., Mahanty A., Ganguly S., Purohit G.K., Mohanty S., Parida P.K., Behera P.R., Raman R.K., Mohanty B.P.	Expression patterns of heat shock protein genes in Rita rita from natural riverine habitat as biomarker response against environmental pollution	2018	Chemosphere	456535	Scopus
255	Mishra Manisha & Barik Sudatta	Gaps in the depiction of Trial by Media in Indian films	2018	Dialog	9754881	UGC CARE
256	Chand S.K., Nanda S., Joshi R.K.	Genetics and molecular mapping of a novel purple blotch-resistant gene ApR1 in onion (Allium cepa L.) using STS and SSR markers	2018	Molecular Breeding	13803743	Scopus
257	Mishra R., Joshi R.K., Zhao K.	Genome editing in rice: recent advances, challenges, and future implications	2018	Frontiers in Plant Science	1664462X	Scopus
258	Kandel, B.K. and Acharya, J.	Impact of IT Factors in Nepali Small Family Business Turnover	2018	Vidyasagar University Journal of Economics	0975-8003	UGC CARE
259	Dr . Sanghamitra Bhanja	Odia - Hindi Sahityara dui biplabi	2018	Konark -Odisha sahiya ekademi		UGC CARE
260	Dr . Sanghamitra Bhanja	Odia katha sahityara bikasakrama	2018	Paurusha		UGC CARE
261	Megha S., Basu U., Joshi R.K., Kav N.N.V.	Physiological studies and genome-wide microRNA profiling of cold-stressed Brassica napus	2018	Plant Physiology and Biochemistry	9819428	Scopus
262	Kar S.	Professional ethics of teacher educators in relation to value pattern		Indian Journal of Public Health Research and Development	9760245	Scopus
263	Dr. Sanghamitra Bhanja	Sukhma Kalara kabayitri	2018	Manjari		UGC CARE

## List of books/book chapters published in edited volumes

SL no.	Name of the teacher	Title of the book/chapters published	Title of the paper	Year of publication	ISBN/ISSN No.	Name of the publisher
1	Alok Prasad Das	Manganese Mining Microorganisms		2023	9780128232644	Elsevier
2	Ambika Sankar Mishra	Research at DME 2023	EMOJI AND COMMUNICATION: A STUDY OF EMOJI USING HABITS OF YOUNG GIRLS	2023	9788196362829	IARA Publication
3	Ananya Behera	Management and Expenditure on Higher Education	COVID-19: Implications for Equity and Inclusion in Higher Education	2023	978-93-5324-963-2	Kalpaz Publications
4	Anima Bag	Applications of Statistics & artificial intelligence in emerging scenarios-2023	Forecasting the impact on crude oil prices in India during Russia Ukrain War	2023	978-93-94958-84-5	Archers &Elevators Publishing House
5	Bibudhendu Pati	Deep Learning in Personalized Healthcare and Decision Support	Review of fog and edge computing-based smart health care system using deep learning approaches	2023	9780443194139	Academic Press, ScienceDirect
6	Dillip Kumar Bishi	Computational Intelligence in Cancer Diagnosis	Deep learning techniques for hepatocellular carcinoma diagnosis	2023	978-0-323-85240-1	Academic Press, ScienceDirect
7	Manas Behera	Driving the Change	Inclusive Higher Education and Neo- liberalism,	2023	978-9350028087	Aakar Books, New Delhi
8	Manisha Mishra	Portrayal of Women and their role in violence in South East Asian folk tales	Women's Identity and Representation in History and Literature	2023	978-93-57048-62-0	Bluerose publishers pvt
9	Monalisha Munda, BR Abha Ayushree	Recent Advances in Home Science (Volume - 5)	Nutrition among Young Children: Problems and Solutions	2023	RAHS-05-03	Integrated Publication
10	Mrs. Heleena Jati	Recent Advances in Home Science (Volume 5)	Food Packaging and Storage	2023	978-9395118-62-0	Integrated Publications, New Delhi
11	Ms Nity	Manthan: Addresses and Papers	A Study on Hallyu: The Influence of K-Pop Group Among Bhubaneswar Youth	2023	978-93-5777-364-5	IIMC, Chandra Sekhar Press, Dhenkanal
12	Sanghamita Bhanja	Pratibha Paricharcha		2023	978-93-90840-32-8	Time pass
13	Sanghamita Bhanja	Prabasi odia sahitya srusti o samikhya (Edited )		2023	978-1-64560-372-6	Black Eagle Books
14	Sanghamita Bhanja	Odia Gandhi Katha (Edited)		2023	978-93-5548-3034	Kendra Sahitya Academy

	G 1 's D1 '	Kichhi katha kichhi		2022	070 1 (45(0 447	DI I F I D I
15	Sanghamita Bhanja	bicahra		2023	978-1-64560-447	Black Eagle Books
16	Sanghamita Bhanja	Binsa satabdira aaloka barttika maa Rama Devi (Edited )		2023	978-81-957224-5-7	COE -RDWU
17	Santosh Kumar Biswal	Strategizing To Survive Economic Uncertainties: Maruti Suzuki India	SAGE Business Case	2023	9781529610451	SAGE
18	Santosh Kumar Biswal	Reporting on Malicious Uses of AI Technologies	A Handbook for Journalism Educators: A Handbook for Journalism Educators Reporting on Artificial Intelligence	2023	978-92-3-100592-3	UNESCO
19	Santosh Kumar Biswal	AI-Based Metaheuristics for Information Security and Digital Media	Use of artificial intelligence and blockchain technologies in detecting and curbing fake news in journalism	2023	9780367615420	CRC Press (Scopus)
20	Santosh Kumar Biswal	AI-Based Metaheuristics for Information Security and Digital Media	Use of technologies in media and communication: Interventions of artificial intelligence in mitigating fake news on social media	2023	9780367615420	CRC Press (Scopus)
21	Sarita Mishra	Value and ethics	Substance abuse	2023	81-8005-438-1	Odisha State Bureau of Text book Preparation and Production, Govt of Odisha
22	Sarita Mishra	Research Trends in Home Science and Extension	Quality of Life of Performing Artist in Odisha: A Study in Health & Psychological Perspective	2023	978-93-5570-663	Akinik Publication, New Delhi
23	Sasmita Mohanty	RECENT APPROACHES IN AQUATIC ECOSYSTEM HEALTH ASSESSMENT		2023	978-93-92851-21-6	Narendra Publishing House, New Delhi
24	Sasmita Mohanty	Outlook of Climate Change and Fish Nutrition	Metabolomic response to high temperature stress in murrel Channa striatus and insights for designer feeds	2023	9789811954993	Springer Nature Singapore Pte Ltd.
25	Sasmita Mohanty	Advances in Fish Research. Vol. VIII (Edited)		2023	978-93-92851-21-6	South India Book Traders
26	Shikha singh	Phytochemicals	A review on marine- based phytochemicals and their application in biomedical research	2023	978-0-443-19143-5	Elsevier
27	Aliva Mohanty	Women in Eco- Tourism: Reflection of Sustainable Livelihood in Odisha,	Women in Eco- Tourism: Reflection of Sustainable Livelihood in Odisha,	2022	9788189110550	Women Press, New Delhi

28	Aliva Mohanty	Emerging Health Issues of Elderly Women of India in Gender Equality and Empowerment: work space, safety and Wellbeing		2022	978-93—9279-811-5	SSDN Publishers & Distributors, New Delhi
29	Alok Prasad Das	Development in Wastewater Treatment Research and Processes	Membrane bioreactor (MBR) as an advanced wastewater treatment technology for removal of synthetic microplastics	2022	9780323855839	Elsevier
30	Ambika Sankar Mishra	Changing landscape of news media & entertainment	Copyright challenges in courseware production	2022	9789356285880	Lake city Publishing
31	Aradhana Sahoo, Pratyasha Mohanty, and Purna Chandra Sethi	Intelligent Systems, Lecture Notes in Networks and Systems	Image Encryption Using RSA Algorithm	2022	978-981-19-0901-6	Springer Nature
32	Chandi Charan Rath	Recent advances in microbiology Research		2022	978-81-954602-3-6	Darshan Publishers, Tamil Nadu, India
33	Chandi Charan Rath	Endophytes: novel microorganisms for plant growth promotion		2022	978-81954602403	Darshan Publishers, Tamil Nadu, India
34	Dillip Kumar Bishi	Advances in Bio- Based Fiber, Moving Towards a Green Society	Advances and applications of biofiber polymer composites in regenerative medicine	2022	978-0-12-824543-9	Woodhead Publishing, ScienceDirect
35	Gouri Prava Samal	Agricultural Comodity Future Markets		2022	978-93-90591-80-0	NIPA GENX ELECTRONIC RESOURCES & SOLUTION P.LTD
36	Itishri Sarangi		The Dissapearance of River from Human Conciousness	2022	978-1-032-31547	Routledge
37	Jamuna Tudu	Earth Systems Protection and Sustainability: Volume 1	Orchid Diversity, Conservation and Sustainability in Northestern India	2022	978-3-030-85829-2	Springer International Publishing
38	Jyotirmayee Udgata	Research: Impediments and Solutions	Statistics in Home Science Research	2022	978-93-91844-48-6	Serials Publications (P) LTD., New Delhi
39	Manas Behera	Dilemmas in World Politics	The Role of New Media in Politics and Democracy	2022	978-9354795307	Sage Publications, New Delhi
40	Prof Madhusmita Pati	Indian Literatures in Diaspora.	Homeland, Hostland and Odia Diaspora: From Boyita to Biman	2022	9781003182795	Routledge
41	Prof Madhusmita Pati	Amitav Ghosh's Culture Chromosome: Anthropology, Epistemology, Ethics, Space.	Ruptured Boundaries and Cosmopolitan Space: The Spatial Imagination of Amitav Ghosh in The Shadow Lines	2022	0924-1426	Brill Publications

		Advances in Fish	Production of Omega-3			
42	Prof. Sasmita Mohanty	Processing Technologies Preservation, Waste Utilization, and Safety Assurance	Capsules from Fish Offal: Recycling of Resources for Sustainable Production and Consumption	2022	9781774911075	Apple Academic Press Inc.
43	Purna Chandra Sethi, Prafulla Kumar behera	Algorithms for Intelligent Systems	Dynamic Network Traffic Management for Secure and Faster Data Transmission	2022	978-981-16-6895-1	Springer Nature
44	Raj Kumar Joshi	Genome Editing Technologies for Crop Improvement		2022	978-981-19-0599-5	Springer Nature Singapore Pte Ltd
45	Raj Kumar Joshi	Genome Editing Technologies for Crop Improvement	Genome editing towards rice improvement	2022	978-981-19-0599-5	Springer Nature Singapore Pte Ltd
46	Raj Kumar Joshi	Genome Editing Technologies for Crop Improvement	Targeted gene replacement in plants using CRISPR-Cas technology	2022	978-981-19-0599-5	Springer Nature Singapore Pte Ltd
47	Raj Kumar Joshi	Genome Editing Technologies for Crop Improvement	Expanding the scope of base editing in crops using Cas9 variants	2022	978-981-19-0599-5	Springer Nature Singapore Pte Ltd
48	Raj Kumar Joshi	Genome Editing Technologies for Crop Improvement	Genome editing is Revolutionizing Crop Improvement	2022	978-981-19-0599-5	Springer Nature Singapore Pte Ltd
49	Raj Kumar Joshi	Genome Editing Technologies for Crop Improvement	Genome editing for the improvement of oilseed crops	2022	978-981-19-0599-5	Springer Nature Singapore Pte Ltd
50	Sanghamita Bhanja	Sunya o purnna rupa		2022	978-93-90881-58-1	Bijayinee Publication
51	Sanghamita Bhanja	Samaja : Darsana o sahitya		2022	978-1-64560-255-2	Black Eagle Books
52	Sanghamita Bhanja	Prachina kabya bitana (Edited)		2022	978-1-64560-288-0	Black Eagle Books
53	Sanghamita Bhanja	Kichhi anubhabra saundarya		2022	93-90881-93-9	Bijayinee Publication
54	Sanghamita Bhanja	Gourhari Das nka saraswata balaya (Edited)		2022	978-1-64560-284-2	Black Eagle Books
55	Santosh Kumar Biswal	New Media: Media Content Production on Multiple Platforms	Ethics in Digital Media: Plagiarism, Copyrights and Attribution	2022	9393998606	Arshia Publications
56	Sasmita Kar	Teaching and Learning during COVID-19 Pandemic	Education during COVID-19 and beyond	2022	978-93-91550-50-9,	N.B.Publications. New Delhi
57	Shikha Singh	Contemporary Medical Biotechnology Research for Human Health	Chapter 19 - Cryopreservation of mesenchymal stem cells (MSCs) derived from bone marrow with carbohydrate additive sucrose and dimethyl sulfoxide (DMSO)	2022	978-0-323-91251-8	Elsevier

58	Snehalata Das	Tulanatmak Sahitya Tatha Hindi Odia Sahitya Ka Tulanatmak Paridrishya		2022	978-81-930505-4-5	PLANET V, CUTTACK
59	Sujata Mohanty	Biotechnology of Anti-diabetic Medicinal Plants	Tissue culture mediated biotechnological intervention in Centella asiatica: A potential antidiabetic plant. Biotechnology of Anti- Diabetic Medicinal Plants	2022	978-981-16-3528-1	Springer Nature
60	Suprit Panigrahi	The Panorama of Odisha's Rural Culture: A Kaleidoscopic View	Indigenous Rural Games of Western Odisha: Heritage and Habits	2022	978-93- 90692-85-9	Mittal Publication
61	Alok Prasad Das	Wastewater Treatment: Cutting Edge Molecular Tools, Techniques and Applied Aspects	Current treatment technologies for removal of microplastic and microfiber pollutants from wastewater	2021	9780128218952	Elsevier
62	Alok Prasad Das	Environmental Pollution and Remediation	Emerging microfiber pollution and its remediation	2021	2662-1681	SPRINGER
63	Alok Prasad Das	Effect of Slag Addition on Compressive Strength and Microstructural Features of Fly Ash Based Geopolymer	Circular Economy in the Construction Industry	2021	9781003217619	CRC Press
64	Bibudhendu Pati	Computational Modeling and Data Analysis in COVID- 19 Research	Analysis of COVID-19 Data using Consensus Clustering Technique	2021	9781003137481	CRC Press
65	Bibudhendu Pati	Computational Intelligence Techniques for Combating COVID- 19	COVID-19 Risk Assessment Using the C4.5 Algorithm	2021	978-3-030-68935-3	Springer
66	Chhabi Rani Panigrahi		Emerging Trends in Biomedical Technologies and Health informatics	2021	9781003137481	CRC Press
67	Chhabi Rani Panigrahi	Analysis of COVID-19 Data using Consensus Clustering Technique		2021	9781003137481	CRC Press
68	Chhabi Rani Panigrahi, B Pati	Advanced Computing and Intelligent Engineering		2021	978-981-334-299-6	Springer Nature
69	Debabala Swain	Machine Learning and Information Processing		2021	978-981-15-1883-6	Springer Nature

70	Kalpana Sahoo	Sustainable Development & Environment: Issues and Challenges	Major Determinants of Agricultural Productivity in India: A Regression Analysis	2021	978-93-91908-06-5	Kunal Books Publisher
71	Madhusmita Pati	Role of Language, Literature and Culture in Nation Building	Sunset and Sunrise at Kunchanjunga: A Lyotardian Reading of Desai's Inheritance of Loss.	2021	978-1-4955-0891-2	Edwin Mellon Press
72	Manas Behera	Indian Agriculture Reforms and Rural Development		2021	978-93-90734-26-9	World Lab Publications
73	Manas Behera	Inclusive Development and Good Governance		2021	978-1-68554-510-9	Notion Press, Chennai
74	Manas Behera	Effect of Covid-19 on sustainable development in India	Covid-19, inclusive democracy and Neo- liberalism in India	2021	978-81948420-6-4	World Lab Publications, Ghaziabad
75	Manisha Mishra	Postcolonail Hangover: Obsession of Fair Skin in Bollywood Songs	Colonial and Postcolonial Literature: Discourses, Disruptions and Intersections	2021	978-93-90891-83-2	Authorpress
76	Manisha Mishra	Characters and Colours: A Study of Literary Texts and Films		2021	978-93-90840-40-3	TIMEPASS PUBLICATIONS
77	Laxmipriya Behera & Dr. Kalpana Sahoo	Sustainable Development & Environment: Issues and Challenges	Linkages between Agricultural Growth and Economic Development in India: A Regression Approach	2021	978-93-91908-06-5	Kunal Books Publisher
78	Prof. Chandi Charan Rath	Endophytic bacteria A novel group of microorganisms: A Review		2021		Darshan Publishers, Tamil Nadu, India
79	Purna Chandra Sethi, Prafulla Kumar behera	KeAi Global Transitions Proceedings	Anomaly detection and optimization using scalable and flexible network data characterization	2021	2666-285X	Elsevier
80	Purna Chandra Sethi, Prafulla Kumar behera	Journal of Physics: Conference Series	Effective Online Teaching Learning during COVID-19 Pandemic	2021	1742-6596	IOP Publishing
81	Raj Kumar Joshi	Molecular Advances in Insect Resistance of Field Crops	MicroRNA-Mediated Insect Resistance in Field Crops	2021	978-3-030-92152-1	Springer Nature Singapore Pte Ltd
82	Sahadev Swain	Management Accounting		2021	9788195005390	Vk Publisher
83	Sahadev Swain	Cost Accounting		2021	789389452419	Vk Publisher
84	Sanghamita Bhanja	Odia sahitya : Puruna o nua		2021	978-93-93100-44-3	Athena Books
85	Sanghamita Bhanja			2021	9-788194-0121-29	Pakhi ghara prakasani
86	Sanghamita Bhanja	Bisthapanara Abartta		2021	81-86354-152-7	Agradutta

	1	A 11			I	
87	Sanghamita Bhanja	Adhunika odia upanyasar bikash		2021	81-7703-148-1	Vidya prakasani
88	Sasmita Kar	Women Education in 21st Century	Challenges of online teaching in the lockdown era: The women perspective	2021	978-93-89224-54-2	Kunal Books, New Delhi
89	Sasmita Kar	National Education Policy 2020	National Education Policy 2020 and revisiting Mother Tongue in the curriculum of Odisha	2021	978-93-91908-18-8	Kunal Books, New Delhi
90	Sasmita Mohanty	Fisheries Biology: New Approaches and Changing Perspectives	Big data science and omics technology	2021	9789389996579	Narendra Publishing House, New Delhi
91	Sujata Mohanty	Medicinal plants: domestication, Biotechnology and regional importance	Cultivation and Utilization of <i>Pandanus</i> odorifer for Industrial Application	2021	978-3-030-74779-4	Springer Nature
92	Aliva Mohanty	Gender Dimensions and Emerging Issues in 21st Century (1st ed.)	Gender Dimensions and Emerging Issues in 21st Century	2020	9789388207744	Kunal Publications, New Delhi.
93	Bibudhendu Pati, CR Panigrahi	Progress in Advanced Computing and Intelligent Engineering		2020	10: 981156583X	Springer Nature
94	Chhabi Rani Panigrahi	Swarm Intelligence for Resource Management in Internet of Things	Swarm Intelligence as a Solution for Technological Problems associated with IoT	2020	9780128182871	Elsevier
95	Debabala Swain	Machine Learning and Information Processing		2020	978-981-334-858-5	Springer Nature
96	Debabala Swain	Applications of Computer in Pharmacy		2020	978-938-87-4420-0.	Walnut
97	Madhusmita Pati	Life Writing in Odisha: A Bibliography		2020	978-93-80968-28-5	Center of Excellence for Translation and Life Writing
98	Manisha Mishra	Reception of English in Odisha		2020	978-93-89382-20-4	MAHANADI BOOKS
99	Manisha Mishra	Of Love NonLove and UnLove		2020	978-93-89163-43-8	TIMEPASS PUBLICATIONS
100	Manisha Mishra	No Mother Tongue in our Tongues: A	Language, Literature & Diversity	2020	9789389947205	Birla Global University
101	Manisha Mishra	Breaking Stereotypes: A Paradigm Shift in the Projection of women in Indian short films	Handbook of Research on Social and Cultural Dynamics in Indian Cinema	2020	9781799835134	IGI GLOBAL PUBLICATIONS

102	Monalisa Mohanty	A Laboratory Handbook on plant Biochemistry.		2020	978-93-89339-60-4	Mahi Publishers, Ahmedabad, India
103	Sahadev Swain	Financial Accounting		2020	978938893565	Vk Publisher
104	Sanghamita Bhanja	Srujana binara niyata sadhika		2020	978-93-88422-94-9	Bijayinee Publication
105	Sanghamita Bhanja	Sarala		2020	13978-93-80824-062	Athena Books
106	Sasmita Kar	Peace Education	Make peace a living reality through Mindfulness and mental healt	2020	9781716800399	Lulu .com: Hillisborough: USA
107	Aliva Mohanty	Reflections on Gender: Mapping the Territory	Empowering Working Women of India: A Challenge for Gender Justice	2019	978-93-87631-22-9	Delton Publishing House, New Delhi.
108	Chandi Charan Rath	Evaluation of medicinal value of selected threatened medicinal plants available in Bhubaneswar, Odisha,India; Medico Biowealth of Odisha		2019		(Ed.) Ambika Prasad Research Foundation
109	Chhabi Rani Panigrahi	Principles of Software Engineering and System Design.		2019	978-93-80381-65-7 .	Yes Dee Publishing Pvt Ltd.
110	Geetanjali Naik	Women Empowerment: A Myth or A Reality	Women Empowerment in India: From Pre Independence to Post Independence Period	2019	978-93-87631-23-6	
111	Madhusmita Pati	Literature and Art of Communication		2019	9781108816625	Cambridge University Press
112	Sabat Kumar Digal		Women Entrepreneurship and its Sustainability: A Study into its Viability in Odisha	2019	978-93-8 6578-39-6.	
113	Sabat Kumar Digal	Issues in Banking and Finance,	Corporate Governance under the New Companies Act, 2013: A Comparative Study of Six Top Ranking Companies in India	2019	978-81-938887-9-7.	
114	Sabat Kumar Digal	Corporate Law and Tax Compliances		2019	978-93-5274-577-7	Laxmi Publications Pvt. Ltd.,
115	Sabat Kumar Digal	Contemporary Issues and Challenges in Finance and Taxation	Impact of Borrowings on Stock Prices: Evidence from Listed Manufacturing Firms in India	2019	978-93-86714-64-0.	
116	Sahadev Swain	Cost and Management Accounting		2019	978-9388272-54-4	

	1	I.,			T	
117	Sanghamita Bhanja	Shree Jagannath o kabi Upendra Bhanja		2019	81-87989-50-5	Mahabir Publication
118	Sanghamita Bhanja	Samahita chetanara kabi		2019	978-81-940153-6-9	Bishnupriya ota kammitte
119	Sanghamita Bhanja	eka mulyayan		2019	81-7400-6257	Sarala sahitya sansada
120	Sanghamita Bhanja	Mahhatma Gandhi o nari jagarana		2019	978-93-87637-44-3	Odisha sahitya Academy
121	Sasmita Mohanty	Advances in Fish Research. Vol. VII	Muscle proteomics of Indian major carp Catla catla (Hamilton)	2019	9789387590489	Narendra Publishing House, New Delhi
122	Sasmita Mohanty	Advances in Fish Research. Vol. VII	Omics Technology In Fisheries And Aquaculture	2019	9789387590489	Narendra Publishing House, New Delhi
123	Sasmita Mohanty	Advances in Fish Research. Vol. VII	Eye lens of catfish Rita rita-age-related changes in lens lipids and proteins under omics platform	2019	9789387590489	Narendra Publishing House, New Delhi
124	Shikha Singh	Medicinal plants: towards optimization and prediction of drug yield.	Medicinal plants: towards optimization and prediction of drug yield.	2019	978-613-9-91206-3	LAP Lambert Academic Publishing
125	Shikha Singh	Biotechnology for Sustainable Utilization of Bioresources	Characteristics Features of Mesenchymal Stem Cells	2019	978-93-88982-00-9	Daya Publishing House®Astral International Pvt. Ltd.
126	Snehalata Das	TRASLATION OF THE ODIA AUTOBIOGRAPH Y NAMED- Atmajeevani Pandit Nilakantha Das		2019	978-93-87637-27-6	ODISHA SAHITYA AKADEMI
127	Suprit Panigrahi	Women's Studies: Facts and Facets.	Lived experiences of Mothers of Autistic Children: A Feministic Lens.	2019	-	
128	Suprit Panigrahi	Women Perspectives Issues & Concerns	Pay Rs 500 now and save Rs 5000000 later: An account of Female Foeticide and Infanticide in India	2019	9387631249	Delton Publishing House
129	Suprit Panigrahi	Conference Proceedings	Understanding Menstruation from the eyes of Adolescents: A study on the attitude of Indian girls towards Menstruation	2019	978-93-85822-88-9	
130	Suprit Panigrahi	Conference Proceedings	A cross-sectional study on Attitude, Knowledge and Practices of College Students towards Menstrual Hygiene Management in Bhubaneswar	2019	978-93-85822-95-7	
131	Aliva Mohanty	Women Refugees of India: Risk and Challenges	Women Refugees of India: Risk and Challenges	2018	978-93-86714-52-7	Kunal Publications, New Delhi

	1	<b>T</b>			T	
132	Aliva Mohanty	Women in Indian Society on a Resurgent Path: A New Perspectives (1st ed.)	Women in Indian Society on a Resurgent Path: A New Perspectives	2018	978-93-86714-51-0	Kunal Publications, New Delhi.
133	Aliva Mohanty	Women Empowerment, Microfinance and Development	Women Empowerment, Microfinance and Development	2018	81-8324-902-7	Mittal Publications
134	Aliva Mohanty	Women on the Edge of Progress: reflections from Third World Countries.	Gender Perspectives of Agriculture in Rural Economy of Odisha: Some Reflections.	2018	978-81-8435-601-4	Adhyayan Publishers, New Delhi.
135	Aliva Mohanty	Women Issues in Developing Countries: Some Reflections	Socio-Cultural Implications of Displacement on Rural Women of Odisha: Some Reflections	2018	978-93-87631-08-3	Delton Publishing House
136	Aliva Mohanty	Women in Indian Society on a Resurgent Path	Gender Construction through Electronic Media: An assessnt by the Television Viewers of Odisha	2018	978-93-86714-51-0	Kunal Books, New Delhi.
137	Aliva Mohanty	Women Empowerment: Theory and Practice	Protest Movement: An Effective Mechanism for Empowering the Displaced Women of Odisha	2018	978-81-934214-6-8	Imperial Edusystems Private Ltd, Bhubaneswar
138	Aliva Mohanty	Gender Perspectives from Global Lens	Reproductive Health problems of Adolescent Girls in Rural Odisha	2018	978-81-938077-4-3	Adhyayan Publishers, New Delhi.
139	Aparajita Biswal	Costal Eco-System and Its Impact on Livelihood strategies of Costal People: A case Study in Odisha	NA	2018	81-8324-912-4	Mittal Publications
140	Bimla Patra	Katha lekhikaon ki kahaniyon me naree		2018	817984060-3	SONAM PRAKASHAN, CUTTACK
141	Raj Kumar Joshi	Endophytes and Secondary metabolism- Reference series in phytochemistry	Endophyte-mediated host stress tolerance as a means for crop improvement	2018	978-3-319-90484-9	Springer Nature Singapore Pte Ltd
142	Sabat Kumar Digal	Frontiers of Digital Finance	Digital Economy and its Implications on the Small Traders: A Study in the City of Bhubaneswar, Odisha	2018	978-93-5321-300-8.	
143	Sanghamita Bhanja	Srasta-srusti o Ananya Prabandha		2018	93-85797-18-2	Kitab Vawan
144	Sanghamita Bhanja	Chhanda ragara kabi Manasihn		2018	97-88193-77-3017	Odisha sahitya parishada
145	Sanghamita Bhanja	Analocita giti kabi Bibhudatta		2018	978-81-923567-1-6	Odisha sahitya parishada
146	Snehalata Das	Sahitya Hi Kyun		2018	978-81-930505-2-1	PLANET V, CUTTACK

147	Snehalata Das	Odia Kabayatri Kunatala Kumari Sabat Ka Rachana Sansar		2018	978-81-930505-7-6	PLANET V, CUTTACK
148	Snehalata Das	Nibandh Ekadash		2018	978-93-841809-1-1	DREAM HOUSE PUBLISHING HOUSE, CUTTACK
149	Snehalata Das	Hindi Odia Sahitya: Adikal		2018	978-81-930505-1-4	PLANET V, CUTTACK
150	SP Mohanty	Women Empowerment	Competencies among students and teachers for the 21st century: Women perspective (pp. 267-276)	2018	978-81-937246-3-7	Divya Prakashani, Bhubaneswar
151	Suprit Panigrahi	Management: A study of United	Menstrual Hygiene Management: A study of United Kingdom and India	2018	10: 3330044624	LAP LAMBERT Academic Publishing, United Kingdom
152	Suprit Panigrahi	Food Security Status in Odisha	Food Security Status in Odisha	2018	10: 3659851566	LAP LAMBERT Academic Publishing, United Kingdom
153	Suprit Panigrahi	Conference Proceedings	Menstrual Hygiene Management in Odisha: A Case of Rural village of Odisha	2018	978-93-86435-64-4	
154	Sabat Kumar Digal	Twelfth Biennial Conference on Entrepreneurship	Promoting Entrepreneurship through One Panchayat One Product (OPOP): A Study into its Dynamics and Feasibility in the Tribal Areas of the State of Odisha (	2017	978-93-80574-94-3.	
155	Sanghamita Bhanja	Hasya dhurina srasta Fatura nanda		2017	81-87989-47-3	Mahabir Publication
156	Sanghamita Bhanja	Galapa dhurina srasta Fakiramohan nka khyudra galpa		2017	81-87989-34-0	Mahabir Publication

## Total number of Patents awarded year-wise during the last five years

SI no.	Name of the Teacher	Patent number	Title of the patent	Year of Award/ Publish of patent
1	Dr. Raj Kumar Joshi	202022104748 (German patent)	A system for rapid detection of disease resistant onion plants using nucleotide specific markers	2023
2	Prof. Sasmita Mohanty	202023101314 (German patent)	A system for evaluating the effect of brewer's yeast-based diet on fish physiology	2023
3	Dr. Raj Kumar Joshi	202022100303 (German patent)	A system for an efficient identification of purple blotch resistance in onion	2022
4	Dr. Raj Kumar Joshi	2021104155 (Australian patent)	Methods for molecular mapping and developing diagnostic markers for detecting anthracnose resistance in chili pepper	2021
5	Dr. Raj Kumar Joshi	2021105189 (Australian patent)	A method for creating novel anthracnose resistant pepper plants using genome modification technique	2021
6	Dr. Bibudhendu Pati	2020102321 (Australian patent)	Datalet: an approach to manage big volume of data in cyber foraged environment	2020
7	Dr. Debabala Swain	202131025147 (Indian patent)	A SMART AND SAFETY CANEELDERLY PERSONS	2021
8	Dr. Debabala Swain	202231010931 (Indian patent)	A smart health watcher with emergency alert system using IOMT	2022
9	Dr. Shakti Kanta Rath	202031056520 (Indian patent)	A Field Compatible Bio- composition For Degradation of Organophosphate Insecticides	2020 (filed & under evaluation)
10	Dr. Alok Prasad Das	201931005027 (Indian patent)	A modified cloth filter for washing machine and method for removal of microfibers	2019 (filed & under evaluation)
11	Dr. Sasmita Behera	201931047543 (Indian patent)	A new cooking device for beginners to master food items individually/collectively thereof	2019 (filed & under evaluation)

## ANNEXURE-V

## Number of functional MoUs / linkage undertaken during the last five years

Sl. No.	Year of signing MoU	Name of the organization with whom MOU/ Collaboration being signed	Duration	Purpose of MOU/Collaboration
1	2018-19	Centurion University of Technology and Management, BBSR	2019-20	Research collaboration and Paper Publication, Skill Development
2	2018-19	Institute of Life Science (ILS), BBSR	2018-till date	Collaborative Research and Project works, Student Training, Faculty visits and exchange programme
3	2018-19	Central Institute of Freshwater Aquaculture, BBSR	2018-till date	Collaborative Research, Training, and exchange of Knowledge
4	1919-20	Kalinga International Foundation	2019-till date	Maritime Connectivity, Regional Connectivity, Connecting Women and Civil society
5	2019-20	Miranda House, University of Delhi	3 yrs (29/11/2019 -2022)	Research collaboration and Paper Publication, Student and faculty exchange
6	2019-20	SNDT University, Maharashtra	2019-20	Collaborative Research, Training, and exchange of Knowledge
7	2021-22	KISS University, BBSR	3yrs (09/09/2021 -2024)	Academic and Research collaboration, Training, Faculty and Student Development Studies
8	2021-22	Inflibnet Centre, Gandhi Nagar	19/08/2021- till date	Digitization of Library Resources
9	2021-22	TCIL, New Delhi	15/09/2021- till date	Modernization of Class rooms with smart and virtual class room facilities
10	2021-22	NIIT Foundation, New Delhi	01/09/2023 2yrs (2021- 22 and 2022-23)	Skill Based Training and Employment opportunity
11	2022-23	Child and Women Development Society, Bhubaneswar	5 yrs (28/01/2023 -2028)	Skill based and Life Skill training to students
12	2022-23	IIT, Bhubaneswar	3 Yrs (28/03/2023 till 2026)	For Setting up of Centre of Excellence in AI and Robotics
13	2022-23	Jewels International Chetana College of Special Education, Bhubaneswar	3 Yrs (27/03/2023 -2026)	Collaboration in various academic, internship, research projects, training and faculty and students' development

14	2022-23	Centre for Youth and Social Development, BBSR	5 Yrs (25/01/2023 - till 2028)	Research and collaboration towards improving the quality of lives of the different communities
15	2022-23	ICAR-Central Institute for Women in Agriculture (ICAR-CIWA)	3 Yrs (7/03/23)	Collaborative Research, Training, and exchange of Knowledge
16	2022-23	Nandi Foundation, Hyderabad	1 Yr 01/08/22	Skill Based Training and Employment opportunity
17	2022-23	BBSR City Knowledge Innovation Cluster Foundation, Bhubaneswar	1yr (16/05/23)	Upgradation of scientific, technological and innovation infrastructure
18	2022-23	Concentrix Daksh Services India Private Limited, New Delhi	1yr (05/05/23)	Collaborative Research, Training, and exchange of Knowledge
19	2022-23	G M University Sambalpur	13/06/23- till date	Academic and Collaborative Research, Training, and exchange of Knowledge
20	2022-23	SAN BEDA University	06-01-23- till date	Academic and Research Collaboration, Faculty exchange, Social and Cultural Exchange
21	2023-4	All India Society for Electronics and Computer Technology (AISECT), Bhubaneswar	09-12-23- till date	Skill Based Training and Employment opportunity
22	2023-24	Hanseo University	13/06/23- till date	Academic and Research collaboration
23	2023-24	Indian Women Network, Odisha- Confederation of Indian Industry	09-12-23	Industry oriented and Skill Based Training
24	2023-24	Weneurs Forum	21/08/23- till date	Industry oriented and Skill Based Training
25	2023-24	WeGrow Pvt Ltd	08-04-23- till date	IPR related Activity
26	2023-24	Dr. P.M. IASE, Sambalpur	08-04-23- till date	Academic and Research collaboration
27	2023-24	Diverseus Society Trust, BBSR	24/07/23- till date	Skill Based Training and Employment opportunity for visually impaired students
28	2023-24	FICCI Ladies Organization, BBSR	1 Yrs (24/07/23)	Skill Based Training and Employment opportunity