GANGADHAR MEHER UNIVERSITY

AMRUTA VIHAR, SAMBALPUR (ODISHA)-768004

It is declared that the Gangadhar Meher University offers 77 programmes and all the programmes have project or internship component. The structure of the syllabus of for each programme are attached herwith. The project or internship components are highlighted in yellow colour.

Director, IQAC
Gangadhar Meher University
Sambalpur

REGISTRAR
GANGADHAR MEHER UNIVERSITY
SAMBALPUR

ANTHROPOLOGY UNDERGRADUATE SYLLABUS FOR HONOURS

Sl.No	Semester	Number	Title of the Course	Marks Theory-60 Mid-Term-15 Practical-25	Credit Theory-4	Practical-2
1	1st	CORE PAPER-1	Introduction to Biological Anthropology	75	6	
			Practical	25		
2		CORE PAPER -2	Introduction to Socio-cultural Anthropology	75	6	
			Practical	25		
3		GE1.	Introduction to Biological Anthropology	75	6	
			Practical	25		
4		ABILITY ENHANCEMENT COMPULSORY COURSE-1		100	4	
5	2nd	CORE PAPER -3	Archaeological Anthropology	75	6	
			Practical	25		
6		CORE PAPER -4	Fundamentals of Human Origin & Evolution	75	6	
			Practical	25		
7		GE2.	Introduction to Socio-Cultural Anthropology	75	6	
			Practical	25		
8		ABILITY ENHANCEMENT COMPULSORY COURSE-2		100	4	
9	3rd	CORE PAPER -5	Tribes and Peasants in India	75	6	

			Practical	25		
10		CORE	Human Ecology	75	6	
			Practical	25		

		PAPER -6			
11		CORE PAPER -7	Biological Diversity in Human Populations	75	6
			Practical	25	
12		GE 3.	Archaeological Anthropology	75	6
			Practical	25	
13		SKILL ENHANCEMENT COURSE-1		100	4
14	4th	CORE PAPER -8	Theories of Culture and Society	75	6
			Practical	25	
15		CORE PAPER -9	Human Growth and Development	75	6
			Practical	25	
16		CORE PAPER-10	Research Methods	75	6
			Practical	25	
17		GE4.	Anthropology of India	75	6
			Practical	25	
18		SKILL ENHANCEMENT COURSE-2		100	4
19	5th	CORE PAPER -11	Prehistoric Archaeology of India	75	6
			Practical	25	
20		CORE PAPER-12	Anthropology in Practice	75	6
			Practical	25	
21		DSE1	Anthropology of Religion, Politics and Economy **(Compulsory)**	75	6
			Practical	25	
22		DSE2.	Tribal Cultures of India**(Compulsory)**	75	6
			Practical	25	

			Forensic Anthropology	75	
23		CORE PAPER-13	Forensic Anthropology	75	6
			Practical	25	
24		CORE PAPER -14	Fieldwork and Dissertation	100	6
25	6th	DSE-3(Any one paper from these three options i.e. from 3.1 to 3.3)	DSE 3.1 Anthropology of India (Optional)	75	6
			Practical	25	
			DSE 3.2 Human Genetics(Optional)	75	6
			Practical	25	
			DSE 3.3 Demographic Anthropology (Optional)	75	6
			Practical	25	
26		DSE-4	Museum and Museology	75	6
			Practical	25	
TOTAL				2600	148

HONOURS PAPERS:

Core Papers – 14 papers
Discipline Specific Elective (DSE) – 4 papers
Generic Elective (GE) for non Anthropology students – 4 papers, If the university prescribes two papers Please take GE1 and GE2
Marks per paper - Midterm : 15 marks, End term : 60 marks, Practical: 25 Total – 100 marks
Credit per paper – Theory : 4 , Practical : 2 Total- 6
Teaching hours per paper – 40 hours (theory) + 10 hours (practical)

take ownership of their learning basing on being ready to learn, setting learning goals, engaging in the learning process, and evaluating learning.

- **Multicultural competence:** Capacity to understand, to cooperate and to communicate effectively with people from different cultures and socio-economic backgrounds. Emphasizes the ability to understand, appreciate and interact with people from cultures or belief systems different from one's own. This idea reflects the goal to be able to connect with and understand others more authentically.

- **Moral and ethical awareness/reasoning**: Promotes to maintain doing good, not doing harm and protecting the autonomy, wellbeing, safety and dignity of all research participants. Researchers should be as objective as possible and avoid ethnocentricity. It refers to the set of standards that enable people to live cooperatively in groups. It's what societies determine to be "right" and "acceptable." Sometimes, acting in a moral manner means individuals must sacrifice their own short-term interests to benefit society. Moreover, capable of demonstrating the ability to identify ethical issues related to one's work, avoid unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights; appreciating environmental and sustainability issues; and adopting objective, unbiased and truthful actions in all aspects of work**.**

- **Leadership** readiness/qualities: Capability for mapping out the tasks of a team or an organization, and setting direction, formulating an inspiring vision, building a team who can help achieve the vision, motivating and inspiring team members to engage with that vision, and using management skills to guide people to the right destination, in a smooth and efficient way.

Post Graduate Programme:
ANTHROPOLOGY
Structure

Post graduate programme comprising two years, will be divided into 4(four) semesters each of six month duration.

Year	Semesters	
First year	Semester I	Semester II
Second year	Semester III	Semester IV

The detailed of title of papers, credit hours, division of marks etc. of all the papers of all semester is given below.
SYLLABUS M.A./M.Sc. COURSES

PAPER CODE	TITLE OF THE PAPER	MARKS	Duration (in hours)	Credit
SEMESTER I				
101	Fundamentals of Social Anthropology	Full Mark 100 (20 Mid Term +80 End Term)	40	4
102	Fundamentals of Physical/Biological Anthropology	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
103	Fundamentals of Archaeological Anthropology	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
104	Research Methodology	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
105 (Practical)	A: Fundamentals of Physical /Biological Anthropology (50 marks) B: Fundamentals Archaeological Anthropology (50 marks)	Full Mark -100	40	4
		Total marks = 500	200	20
SEMESTER II				

201	Social Institutions	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
202	Human Genetics	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
203	Anthropology of India	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
204	Statistical Application and Anthropological Research	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
205 (Practical)	Practical/ Project	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
206	Medical Anthropology	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
		Total marks = 600	240	**24**

SEMESTER III

301	Demographic Anthropology	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
302	Anthropology of Museum	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
303	Anthropological Theory	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
304 A	Tribal Studies	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
304 B	Human Growth, Development and Nutrition	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
305 (Practical)	Fieldwork Training and Museum visit	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
IDSE - 306 A	Bio-Cultural Dynamics of Indian Population	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
306 B	Anthropology in Practice	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
306 C	Prehistory in India	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
		Total marks = 600	240	**24**

SEMESTER IV

401	Applied Anthropology (Biological and Social)	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
402	Anthropology of Marginalized Communities	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
403	Ecological Anthropology	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
404 A	Human Population Genetics	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
404 B	Anthropology of Development	Full Mark 100 (20 Mid Term + 80 End Term)	40	4
405	Dissertation and Viva	Full Mark – 100	40	4

		Total marks = 500	40	
	GRAND TOTAL	**2200**	200	**88**

*DSE - Disciplinary Specific Elective paper. The student has to select any one paper as per his/her choice
*IDSE - Interdisciplinary Specific Elective Paper. The student has to select any one paper as per his/her choice.

PHILOSOPHY OF DOCTORATE (Ph.D.)

ANTHROPOLOGY

(Syllabus for Course Work)

2021

GANGADHAR MEHER UNIVERSITY

AMRUT VIHAR, SAMBALPUR

ODISHA, 768004

SYLLABUS AT A GLANCE
Ph.D Course work in Anthropology

Paper No	Title of Paper		Maximum Marks	Credits Assigned
711	Recent Trends in Anthropology		80+20=100	4
712	Research Methodology I		80+20=100	4
713	Research Methodology II		80+20=100	4
714	Dissertation Or Review Writing/Presentation/Viva- voce)	150+25+25	150+25+25 =200	8
			500	20 Credits

Programme Structure

Post graduate programme comprising two years, will be divided into 4 (four) semesters each of six months duration.

Year	Semesters	
First Year	Semester I	Semester II
Second Year	Semester III	Semester IV

The detail of title of papers, credit hours, division of marks etc of all the papers of all semesters is given below.
- There will be two elective groups namely:
- Discipline Specific Elective in SemII.
- Interdisciplinary Elective in SemIII.
- A student has to select one of the DSE paper in Sem II and one of the papers in Sem III as offered by the department at the beginning of the semester II and semester IIIrespectively.
- Each paper will be of 100 marks out of which 80 marks shall be allocated for semester examination and 20 marks for internal assessment (Mid Term Examination).
- There will be four lecture hours of teaching per week for each paper.
- Duration of examination of each paper shall be of three hours.

Pass Percentage:
- The minimum marks required to pass any paper shall be 40 percent in each paper and 40 percent in aggregate of a semester.
- No students will be allowed to avail more than three (3) chances to pass in any paper inclusive of first attempt.

Semester-1

Papers		Marks		Total	Duration	Credit
Paper No	Title	Mid Term	End Term	Marks	(Hrs)	Hours
101	Cell & Molecular Biology	20	80	100	4	4
102	Microbiology	20	80	100	4	4
103	Biochemistry	20	80	100	4	4
104	Bioinstrumentation	20	80	100	4	4
105	Lab course		100	100	4	4
Total				500	20	20

Semester-2

Papers		Marks		Total	Duration	Credit
Paper No	Title	Mid Term	End Term	Marks	(Hrs)	Hours
201	Plant and Animal tissue culture	20	80	100	4	4
202	Genetics	20	80	100	4	4

203	Biostatistics	20	80	100	4	4
204	Cancer biology	20	80	100	4	4
205	Lab course		100	100	4	4
DSEPapers*						
206 A	Animal Physiology	20	80	100	4	4
206 B	Plant Physiology	20	80	100	4	4
206 C	Bioenergetics and Metabolism	20	80	100	4	4
Total				**600**		**24**

*Discipline Specific Elective Paper. Any one paper can be opted by students of this Department.

Semester-3

Papers		Marks		Total	Duration	Credit
Paper No	Title	Mid Term	End Term	Marks	(Hrs)	Hours
301	Genetic Engineering	20	80	100	4	4
302	Immunology and Immuno-techniques	20	80	100	4	4
303	Bioinformatics and Computational Biology	20	80	100	4	4
304	Environmental Biotechnology and Ecology	20	80	100	4	4
305	Lab Course		100	100	4	4
Value added Course						
A	Biofertilizers					3
B	Entrepreneurship in biotechnology					3
IDSEPapers**						
306 A	Medical Biotechnology	20	80	100	4	4
306 B	Developmental Biology (Plants and Animals)	20	80	100	4	4
306 C	Bioprocess technology	20	80	100	4	4
Total				**600**		**24**

**Inter Discipline Specific Elective Paper. Any one paper can be opted by students of other Departments.

Semester-IV

Papers		Marks		Total	Duration	Credit
Paper No	Title	Mid Term	End Term	Marks	(Hrs)	Hours
401	Research Methodology	20	80	100	4	4
402	Agricultural Biotechnology	20	80	100	4	4
403	IPR, Biosafety and Bioethics	20	80	100	4	4
404	Genomics proteomics and metabolomics	20	80	100	4	4
405	Project work and Seminar Presentation			100	4	4
Total				**500**	**20**	**20**
20 Papers	**Grand Total**			**2200**		**88**

COURSES OF STUDIES

FOR Ph.D PROGRAM

Of Biotechnology

(Effective from January 2023-24)

GANGADHAR MEHER UNIVERSITY, SAMBALPUR, ODISHA

SEMESTER SYSTEM OF Ph.D.

Sl No.	Paper	Code	Credit	(Marks) Mid Term + Term End
1	Recent Trends in Biotechnology	BT-711	4	100 (20+80)
2	Research Methodology - I	BT-712	4	100 (20+80)
3	Research Methodology - II	BT-713	4	100 (20+80)
4	Dissertation or Review writing/presentation /viva-voce	BT-714	8	150+25+25=200
5			20	500

Structure of the Color indicates
Red: Employability   **Green: Entrepreneurship**   **Blue: Skill Development**

Semester	Course	Course Name	Credit	Total marks
Semester-I	AECC-I		4	100
	C-1 (Theory)	Microbiology and Phycology	4	75
	C-1 (Practical)	Microbiology and Phycology	2	25
	C-2 (Theory)	Biomolecules and Cell Biology	4	75
	C-2 (Practical)	Biomolecules and Cell Biology	2	25
	GE -1A (Theory)	Biodiversity (Microbes, Algae, Fungi & Archegoniate)	4	75
	GE -1A(Practical)	Biodiversity (Microbes, Algae, Fungi & Archegoniate)	2	25
Semester-II	AECC-II		4	100
	C-3 (Theory)	Mycology and Phytopathology	4	75
	C-3 (Practical)	Mycology and Phytopathology	2	25
	C-4 (Theory)	Archegoniate	4	75
	C-4 (Practical)	Archegoniate	2	25
	GE -2A (Theory)	Plant Physiology & Metabolism	4	75
	GE -2A(Practical)	Plant Physiology & Metabolism	2	25
Semester-III	C-5 (Theory)	Anatomy of Angiosperms	4	75
	C-5 (Practical)	Anatomy of Angiosperms	2	25
	C-6 (Theory)	Economic Botany	4	75
	C-6 (Practical)	Economic Botany	2	25
	C-7 (Theory)	Genetics	4	75
	C-7 (Practical)	Genetics	2	25
	SEC-1		4	100
	GE -1B (Theory)	Plant Ecology & Taxonomy	4	75
	GE -1B (Practical)	Plant Ecology & Taxonomy	2	25
Semester-IV	C-8 (Theory)	Molecular Biology	4	75
	C-8 (Practical)	Molecular Biology	2	25
	C-9 (Theory)	Plant Ecology & Phytogeography	4	75
	C-9 (Practical)	Plant Ecology & Phytogeography	2	25

	C-10 (Theory)	Plant Systematics	4	75
	C-10 (Practical)	Plant Systematics	2	25
	SEC II		4	100
	GE-2B (Theory)	Plant Anatomy , Embryology & Biotechnology	4	75
	GE-2B(Practical)	Plant Anatomy , Embryology & Biotechnology	2	25
Semester-V	C-11 (Theory)	Reproductive Biology of Angiosperms	4	75
	C-11 (Practical)	Reproductive Biology of Angiosperms	2	25
	C-12 (Theory)	Plant Physiology	4	75
	C-12 (Practical)	Plant Physiology	2	25
	DSE - 1 (Theory)	Analytical Techniques in Plants Sciences	4	75
	DSE - 1 (Practical)	Analytical Techniques in Plants Sciences	2	25
	DSE - 2 (Theory)	Natural Resource Management	4	75
	DSE - 2 (Practical)	Natural Resource Management	2	25
Semester-VI	C-13 (Theory)	Plant Metabolism	4	75
	C-13 (Practical)	Plant Metabolism	2	25
	C-14 (Theory)	Plant Biotechnology	4	75
	C-14 (Practical)	Plant Biotechnology	2	25
	DSE - 3 (Theory)	Horticulture Practices & Post Harvest Technology	4	75
	DSE-3 (Practical)	Horticulture Practices & Post Harvest Technology	2	25
	DSE – 4 Project work	Project Work	6	100
		Total	**148**	**2600**

BOTANY

1st Year: Semester-I

Paper				Total Marks	Duration (Hrs)	Credit Hours
Paper No	Title	Mid Term	End Term			
101	**CRYPTOGAMS**	**20**	80	100	3	4
102	**TRADITIONAL AND MODERN TAXONOMY**	**20**	80	100	3	4
103	**ARCHEGONIATE**	**20**	80	100	3	4
104	**CYTOLOGY**	**20**	80	100	3	4
105	**PRACTICALS RELATED TO -101 to -104**		100	100	3	4
Total		**80**	420	500	15	20

1st Year: Semester-II

Paper				Total Marks	Duration (Hrs)	Credit Hours
Paper No	Title	Mid Term	End Term			
201	**BIOCHEMISTRY-1**	**20**	80	100	3	4
202	**BIOCHEMISTRY-2**	**20**	80	100	3	4
203	**GENETICS**	**20**	80	100	3	4
204	**DEVELOPMENTAL BIOLOGY**	**20**	80	100	3	4
205	**PRACTICALS PERTAINING TO PAPERS -201 TO -204**		100	100	3	4
DSE Papers*						
206A	**ADVANCED MICROBIOLOGY**	**20**	80	100	3	4
206B	**ADVANCED GENETICS**	**20**	80	100	3	4
206C	**PLANT BIOTECHNOLOGY AND PRODUCTION OF TRANSGENICS**	**20**	80	100	3	4
Total		**100**	500	600	18	24

*Discipline Specific Elective Paper. Any one paper can be opted by students of this Department.

2nd Year: Semester-III

Paper				Total Marks	Duration (Hrs)	Credit Hours
Paper No	**Title**	**Mid Term**	**End Term**			
301	**PLANT PHYSIOLOGY-1**	**20**	80	100	3	4
302	**PLANT PHYSIOLOGY-2**	**20**	80	100	3	4
303	**ECOLOGY AND ECOSYSTEM**	**20**	80	100	3	4
304	**MICROBIOLOGY, PLANT PATHOLOGY AND IMMUNOLOGY**	**20**	80	100	3	4
305	**PRACTICALS PERTAINING TO 301 TO 304**		100	100	3	4
IDSE Papers*						
306A	**ORIGIN OF LIFE**	**20**	80	100	3	4
306B	**MOLECULES AND THEIR INTERACTION RELAVENT TO BIOLOGY**	**20**	80	100	3	4
306C	**CELL BIOLOGY**	**20**	80	100	3	4
Total		**100**	500	600	18	24

*Inter Discipline Specific Elective Paper. Any one paper can be opted by students of other Departments.

2nd Year: Semester-IV

Paper				Total Marks	Duration (Hrs)	Credit Hours
Paper No	**Title**	**Mid Term**	**End Term**			
401	**PLANTS IN HUMAN WELFARE AND BIODIVERSITY ASSESSMENT**	**20**	80	100	3	4
402	**EVOLUTION AND PLANT BREEDING**	**20**	80	100	3	4
403	**MOLECULAR BIOLOGY AND BIOTECHNOLOGY**	**20**	80	100	3	4
404	**BIOSTATISTICS, INSTRUMENTATION**	**20**	80	100	3	4
405	**Project Work Report and VIVA VOCE(Non Practical Papers)**		**100**	**100**	**3**	**4**
Total		**80**	420	500	15	20

COURSES AND ITS CORRESPONDING COLOUR SPECIFICATIONS

Employability	Entrepreneurship	Skill Development

Course Structure for Bachelor of Business Administration (Honors)

Semester	Course Name	Course Offered	Title Of Paper	Credits	Marks
I 4 Papers 400 marks 24 Credits	AECC	Ability Enhancement Compulsory Course-I	Environmental Studies	6	100 (20+80)
	Generic Elective	Generic Elective -1	Entrepreneurship Development	6	100 (20+80)
	Core Course	Core Course-I	Fundamentals of Management & Organizational Behavior	6	100 (20+80)
		Core Course-II	Statistics for Business Decisions	6	100 (20+80)
II 4 Papers 400 marks 24 Credits	AECC	Ability Enhancement Compulsory Course II	English Communications / Odia / Hindi	6	100 (20+80)
	Generic Elective	Generic Elective -II	Production & Operations Management	6	100 (20+80)
	Core Course	Core Course-III	Managerial Economics	6	100 (20+80)
		Core Course-IV	Business Accounting	6	100 (20+80)
III 5 paper 500 Marks 30 Credits	SEC	Skill Enhancement Course -I	communicative English and English writing skill	6	100 (20+80)
	Generic Elective	Generic Elective - III	India's Diversity & Business	6	100 (20+80)
	Core Course	Core Course-V	Macroeconomics	6	100 (20+80)
		Core Course-VI	Principles of Marketing	6	100 (20+80)
		Core Course-VII	Management Accounting	6	100 (20+80)
IV 5 Papers 500 Marks 30 Credits	SEC	Skill Enhancement Course -II	E-Commerce	6	100 (20+80)
	Generic Elective	Generic Elective - IV	Ethics & Corporate Social Responsibility	6	100 (20+80)
	Core Course	Core Course-VIII	Business Research	6	100 (20+80)
		Core Course-IX	Human Resources Management	6	100 (20+80)
		Core Course-X	Financial Management	6	100 (20+80)

V 4 Paper 400 marks 24 credits	DSE	Discipline Specific Elective I	International Finance	6	100 (20+80)
		Discipline Specific Elective -II	Advertising & Brand Management	6	100 (20+80)
	Core Course	Core Course-XI	Quantitative Techniques for Management	6	100 (20+80)
		Core Course-XII	Legal Aspects of Business	6	100 (20+80)
VI 4 paper 400 marks 24 credits	DSE ✓	Discipline Specific Elective -III	Performance & Compensation Management	6	100 (20+80)
		Discipline Specific Elective- IV	Dissertation/ Project work	6	100
	Core Course	Core Course-XIII	Business Policy & Strategy	6	100 (20+80)
		Core Course-XIV	Financial Institutions & Market	6	100 (20+80)
			Total Credits	156	2600

Teaching Learning Process:

Teaching and learning is a continuous process which is surrounded by students' attitude to the knowledge, academic curiosity, reading & practicing, creativity, thinking ability and extending knowledge levels. Therefore, the teaching learning process of the program focuses on learner-centric pedagogies, and interactive and participatory pedagogies. Planning for teaching constitute a critical dimension. The teaching and learning process revolves around a well-structured and sequenced acquisition of knowledge and skills.

Teaching and learning under this program involves classroom lectures as well tutorials. The tutorials allow a closer interaction between the students and the teacher as each student gets individual attention. For a visual and better learning outcome, instructors will use ICT facilities, e-learning platforms and other innovative e-content platforms for student-centric learning methods. As part of *participative teaching-learning practices* few courses include seminars, presentations and group discussions. To cater the needs of slow and advance learners, special, remedial and peer teaching classes will be encouraged. Apart from these, exposure visits, special lectures by invited experts, workshops, and National/International seminars are to be held to augment knowledge, encourage innovative ideas and expose the students to global academic and research advancement. There is also the provision of mentor- mentee for each class where the mentor can keep track of each student's progress and address her/his individual difficulties. For the experiential learning course on project work is offered (i.e. short-term projects, research projects, assignments and field works), which is the integral components of the program that enable the students to solve practical problems. The provision of written assignments and projects submitted by students as part of the course, are also to be discussed in special classes. For each course students will be assigned regular home assignments and will be tested periodically through quizzes and class tests to ensure that they have properly learnt the course material.

MATCHING INDICATOR

Matching Percentage	Level Indicator
>71	3
51-70	2
<50	1

COURSES AND ITS CORRESPONDING COLOUR SPECIFICATIONS

Employability	Entrepreneurship	Skill Development

MBA COURSE STRUCTURE AND DETAIL SYLLABUS (UNDER SEMESTER SYSTEM)

SEMESTER-I

Paper	Title of Paper	Term End	Mid Term Int.	Mid Term GD/Sem*	Full Marks	Duration for T.E. Exam.
CP – 101	Management Process and Organization Behavior	70	20	10	100	3hrs
CP – 102	Quantitative Method	70	20	10	100	3hrs
CP – 103	Managerial Economics	70	20	10	100	3hrs
CP – 104	Environment Management	70	20	10	100	3hrs
CP – 105	Managerial Skill Development	70	20	10	100	3hrs
CP – 106	Indian Ethos and Values	70	20	10	100	3hrs
CP – 107	Accounting for Managers	70	20	10	100	3hrs
CP – 108	Computer for Managers	70	20	10	100	3hrs

SEMESTER-II

Paper	Title of Paper	Term End	Mid Term Int.	Mid Term GD/Sem*	Full Marks	Duration for T.E. Exam.
CP – 201	Organization Effectiveness and Change	70	20	10	100	3hrs
CP – 202	Management Science	70	20	10	100	3hrs
CP – 203	Human Resource Management	70	20	10	100	3hrs
CP – 204	Financial Management	70	20	10	100	3hrs
CP – 205	Marketing Management	70	20	10	100	3hrs
CP – 206	Production and Operations Management	70	20	10	100	3hrs
CP – 207	Research Methodology	70	20	10	100	3hrs
CP - 208	International Business Environment and Management	70	20	10	100	3hrs

SEMESTER-III
Common Papers

Paper	Title of Paper	Full Marks				Duration for T.E. Exam.
		Term End	Mid Term		Full Marks	
			Int	GD/Sem*		
CP-301	Business Policy and Strategic Analysis	70	20	10	100	3hrs
CP-302	Decision Support Systems	70	20	10	100	3hrs
CP-303	Business Legislation	70	20	10	100	3hrs
CP-304	Summer Training Project	70	20	10	100	3hrs
* PLUS ANY ONE GROUP OF THE FOLLOWING MAJOR SPECIALISATION AREA						

MAJOR SPECIALISATION AREA – FINANCE

FM-305	Securities Analysis and Portfolio Management	70	20	10	100	3hrs
FM-306	Corporate Restructuring	70	20	10	100	3hrs
FM-307	International Accounting	70	20	10	100	3hrs
FM-308	Financial Derivatives	70	20	10	100	3hrs
FM-309	Project Planning, Analysis and Management	70	20	10	100	3hrs
FM-310	International Finance	70	20	10	100	3hrs

MAJOR SPECIALISATION AREA – MARKETING

MM-305	Consumer Behaviour	70	20	10	100	3hrs
MM-306	Advertising Management	70	20	10	100	3hrs
MM-307	Marketing of Services	70	20	10	100	3hrs
MM-308	International Marketing	70	20	10	100	3hrs
MM-309	Sales and Distribution Management	70	20	10	100	3hrs
MM-310	Retail Management	70	20	10	100	3hrs

MAJOR SPECIALISATION AREA – HUMAN RESOURCE

HR-305	Management of Industrial Relations	70	20	10	100	3hrs
HR-306	Performance and Compensation Management	70	20	10	100	3hrs
HR-307	Legal framework Governing Human Relations	70	20	10	100	3hrs
HR-308	Management Training and Development	70	20	10	100	3hrs
HR-309	Human Resource Development: Strategies and System	70	20	10	100	3hrs
HR-310	Human Resource Planning and Development	70	20	10	100	3hrs

SEMESTER-IV

Paper	Title of Paper	Term End	Mid Term		Full Marks	Duration for T.E. Exam.
			Int	GD/ Sem *		
CP-401	Corporate Evolution and Strategic Management	70	20	10	100	3hrs
CP-402	Project study	70	20	10	200	6hrs

PLUS ANY ONE GROUP OF THE FOLLOWING **MINOR SPECIALISATION** AREA

MINOR SPECIALISATION AREA – FINANCE

FM-403	Securities Analysis and Portfolio Management	70	20	10	100	3hrs
FM-404	International Finance	70	20	10	100	3hrs
FM-405	Management Control System	70	20	10	100	3hrs

MINOR SPECIALISATION AREA – MARKETING

MM-403	Advertising Management		20	10	100	3hrs
MM-404	International Marketing	70	20	10	100	3hrs
MM-405	Sales and Distribution Management	70	20	10	100	3hrs

MINOR SPECIALISATION AREA – HUMAN RESOURCE

HR-403	Human Resource Planning and Development	70	20	10	100	3hrs
HR-404	Management Training and Development	70	20	10	100	3hrs
HR-405	Human Resource Development : Strategies and System	70	20	10	100	3hrs

MINOR SPECIALISATION AREA – IT

IT-403	System analysis and design	70	15	15	100	3hrs
IT-404	Application development using oracle	60	15		75	3hrs
IT-405	Internet programming for e-commerce	60	15		75	3hrs
IT-406	Practical	35	15		50	3hrs

VALUE ADDED COURSES

In addition to its standard curriculum, the school offers a diverse range of supplementary courses aimed at bolstering students' skills, employability, and entrepreneurial acumen. These courses go beyond the core syllabus and are tailored to meet market demands, catering to various industrial needs and addressing different facets of social sustainability. The offerings span from data analytics to tax preparation, weaving to portfolio management, providing students with a well-rounded skill set to thrive in today's

COURSES AND ITS CORRESPONDING COLOUR SPECIFI ATIONS

Employability	Entrepreneurship	Skill Development

MBA-FM COURSE STRUCTURE AND DETAIL SYLLABUS (UNDER SEMESTER SYSTEM)

SEMESTER-I

Paper	Title of Paper	Term End	Mid Term Int.	Mid Term GD/Sem*	Full Marks	Duration for T.E. Exam.
MFM – 101	Management Concept And Organization Behaviour	70	20	10	100	3hrs
MFM – 102	Economic Analysis For Decision Making	70	20	10	100	3hrs
MFM – 103	Financial Accounting	70	20	10	100	3hrs
MFM – 104	Quantitative Techniques For Management	70	20	10	100	3hrs
MFM – 105	Marketing Management	70	20,	10	100	3hrs
MFM – 106	Financial Management	70	20,	10	100	3hrs
MFM – 107	Business And Financial Environment	70	20,	10	100	3hrs
MFM – 108	Financial Markets And Instruments	70	20,	10	100	3hrs

SEMESTER-II

Paper	Title of Paper	Term End	Mid Term Int.	Mid Term GD/Sem*	Full Marks	Duration for T.E. Exam.
MFM – 201	Management Of Financial Institutions	70	20,	10	100	3hrs
MFM – 202	Accounting For Managerial Decisions	70	20,	10	100	3hrs
MFM – 203	Risk And Insurance Management	70	20,	10	100	3hrs
MFM – 204	Investment Analysis And Equity Research	70	20,	10	100	3hrs
MFM – 205	Advanced Financial Management	70	20,	10	100	3hrs
MFM – 206	International Business	70	20,	10	100	3hrs
MFM – 207	Mutual Fund & Portfolio Management	70	20,	10	100	3hrs
MFM – 208	Research Methodology& Business Communication	70	20,	10	100	3hrs

Semester –III

Paper	Title of Paper	Term End	Mid Term		Full Marks	Duration for T.E. Exam.
			Int.	GD/Sem*		
MFM – 301	Financial Derivatives & Commodity Market	70	20,	10	100	3hrs
MFM – 302	International Finance	70	20,	10	100	3hrs
MFM – 303	I.T. For Managers	70	20,	10	100	3hrs
MFM – 304	Strategic Management	70	20,	10	100	3hrs
MFM – 305	Tax planning & Management	70	20,	10	100	3hrs
MFM- 306	Services Marketing	70	20,	10	100	3hrs
MFM – 307	Corporate Restructuring & Financial Engineering	70	20,	10	100	3hrs
MFM-308	Training Report				100	

Semester-IV

Paper	Title of Paper	Term End	Mid Term		Full Marks	Duration for T.E. Exam.
			Int.	GD/Sem*		
MFM – 401	Strategic Financial Management	70	20,	10	100	3hrs
MFM – 402	Corporate Governance And Business Ethics	70	20,	10	100	3hrs
MFM – 403	Project Appraisal Planning And Control	70	20,	10	100	3hrs
MFM – 404	Retail Management	70	20,	10	100	3hrs
MFM –405	Business & Corporate Law	70	20,	10	100	3hrs
MFM – 406	Accounting Standards & Corporate Reporting	70	20,	10	100	3hrs
MFM – 407	Entrepreneurship & Small Business Management	70	20,	10	100	3hrs
MFM – 408	Final Project And Viva Voce				100	

Course structure of UG Chemistry Honours

Semester	Course	Course Name	Credits	Total marks
Semester -I	AECC-I	AECC-I	04	100
	C-I	Inorganic Chemistry-I	04	75
	C-I Practical	Inorganic Chemistry-I Lab	02	25
	C-II	Physical Chemistry-I	04	75
	C-II Practical	Physical Chemistry-I Lab	02	25
	GE-I	GE-I	04	75
	GE-I Practical	GE-I Lab	02	25
			22	**400**
Semester -II	AECC-II	AECC-II	04	100
	C-III	Organic Chemistry-I	04	75
	C-III Practical	Organic Chemistry-I Lab	02	25
	C-IV	Physical Chemistry-II	04	75
	C-IV Practical	Physical Chemistry-II	02	25
	GE-II	GE-II	04	75
	GE-II Practical	GE-II Lab	02	25
			22	**400**
Semester -III	C-V	Inorganic Chemistry-II	04	75
	C-V Practical	Inorganic Chemistry-II Lab	02	25
	C-VI	Organic Chemistry-II	04	75
	C-VI Practical	Organic Chemistry-II Lab	02	25
	C-VII	Physical Chemistry-III	04	75
	C-VII Practical	Physical Chemistry-III Lab	02	25
	GE-III	GE-III	04	75
	GE-III Practical	GE-III Lab	02	25
	SEC-I	SEC-I	04	100
			28	**500**
Semester - IV	C-VIII	Inorganic Chemistry-III	04	75
	C-VIII Practical	Inorganic Chemistry-III Lab	02	25
	C-IX	Organic Chemistry-III	04	75
	C-IX Practical	Organic Chemistry-III Lab	02	25
	C-X	Physical Chemistry-IV	04	75
	C-X Practical	Physical Chemistry-IV Lab	02	25
	GE-IV	GE-IV (Theory)	04	75
	GE-IV Practical	GE-IV (Practical)	02	25
	SEC-II	SEC-II	04	100
			28	**500**

Semester	Course	Course Name	Credits	Total marks
Semester -V	C-XI	Organic Chemistry-IV	04	75
	C-XI Practical	Organic Chemistry-IV	02	25
	C-XII	Physical Chemistry-V	04	75
	C-XII Practical	Physical Chemistry-V	02	25
	DSE-I	DSE-I	04	75
	DSE-I Practical	DSE-I Lab	02	25
	DSE-II	DSE-II	04	75
	DSE-II Practical	DSE-II Lab	02	25
			24	**400**
Semester - VI	C-XIII	Inorganic Chemistry- IV	04	75
	C-XIII Practical	Inorganic Chemistry-IV	02	25
	C-XIV	Organic Chemistry-V	04	75
	C-XIV Practical	Organic Chemistry-V	02	25
	DSE-III	DSE-III	04	75
	DSE-III Practical	DSE-III Lab	02	25
	DSE-IV	DSE-IV	04	75
	DSE-IV Practical	DSE-IV Lab	02	25
	OR			
	DSE-IV	Dissertation	06	100*
			24	**400**
		TOTAL	**148**	**2600**

Discipline Specific Elective Papers: (Credit: 06 each)

(4 papers to be selected by students of Chemistry Honours): DSE (1-IV)
1.   Polymer Chemistry
2.   Green Chemistry
3.   Industrial Chemicals & Environment
4.   Inorganic Materials of Industrial Importance
5.   *Dissertation (can be opted as alternative of DSE-IV only and of 6 credits. **Dissertation content: 60, Seminar cumViva: 20)**
6.   Analytical Methods in Chemistry (Alternative)

CHEMISTRY
HONOURS PAPERS:
Core course – 14 papers
Discipline Specific Elective – 4 papers (out of the 6 papers suggested)

Generic Elective for non Chemistry students – 4 papers. Incase the University offers 2 subjects as GE, then papers 1 and 2 will be the GE paper.
Marks per paper - Midterm : 15 marks, End term : 60 marks, Practical- 25 marks Total – 100 marks Credit per paper – 6
Teaching hours per paper – 40 hours Theory classes + 20 hours Practical classes

M.Sc. Chemistry 2021-22

Year	Course Code	Course Name (FIRST SEMESTER)	L	T	P	C	Course Code	Course Name (SECOND SEMESTER)	L	T	P	C
I	CHE 101	Inorganic Chemistry I	3	1	0	4	CHE 201	Inorganic Chemistry II	3	1	0	4
	CHE 102	Organic Chemistry I	3	1	0	4	CHE 202	Organic Chemistry II	3	1	0	4
	CHE 103	Physical Chemistry I	3	1	0	4	CHE 203	Physical chemistry II	3	1	0	4
	CHE 104	Organic spectroscopy	3	1	0	4	CHE 204	Bioinorganic and Supramolecular Chemistry	3	1	0	4
	CHE 105	Inorganic Practical	0	0	12	4	CHE 205	Organic Practical	0	0	12	4
							CHE 206	**DSE (A/ B/ C)	3	1	0	4
			12	4	12	20			15	5	12	24
	Total Contact Hours (L + T + P)			28			Total Contact Hours (L + T + P)			32		

Year	Course Code	Course Name (THIRD SEMESTER)	L	T	P	C	Course Code	Course Name (FOURTH SEMESTER)	L	T	P	C
II	CHE 301	Inorganic Chemistry III	3	1	0	4	CHE 401	Inorganic Chemistry IV	3	1	0	4
	CHE 302	Organic Chemistry III	3	1	0	4	CHE 402	Organic Chemistry IV	3	1	0	4
	CHE 303	Molecular Spectroscopy	3	1	0	4	CHE 403	Physical Chemistry III	3	1	0	4
	CHE 304	Material chemistry	3	1	0	4	CHE 404	Physical Chemistry IV	3	1	0	4
	CHE 305	Physical Practical	0	0	12	4	CHE 405	Project ✓	0	0	12	4
	CHE 306	**IDSE (A/ B/ C)	3	1	0	4						
			15	5	12	24			12	4	12	20
	Total Contact Hours (L + T + P)			32			Total Contact Hours (L + T + P)			28		

22 PAPERS × 100 marks each	Grand Total marks = 2200	Total credits: 88

** DISCIPLINE SPECIFIC ELECTIVE (DSE)

DSE: CHE 206 [Group (A/ B/ C)]	IDSE: CHE 306 [Group (A/ B/ C)]
1. A: Analytical Chemistry	1. A: Environmental Chemistry
2. B: Surface Chemistry and Catalysis	2. B: Industrial Process
3. C: Computational Chemistry and Molecular Modelling	3. C: Matter and Energy Balance

DSE: Discipline specific elective (opted by students of the department. Minimum student strength to run the any course = 8)
IDSE: Inter Discipline specific elective (opted by students of the other department.)

P.G. Department of Chemistry, G.M. University
Syllabus for Ph. D Course work

The Ph.D Course work in Chemistry spans a period of six months beginning from 1st January to 31st July comprising of one semester with the following course structure. Each theory paper i.e CH 711, CH712 and Ch713 carries 100 marks out of which 20 marks are for internal assessment examination. There will be one internal assessment examinations for each theory paper. The duration of an examination for each theory examination is 3 hours. The paper CH714 carries 200 marks which does not have internal examination. The pattern of teaching and examination involved in PhD course work is displayed in the Table given below for 2018 batch.

Semester	Paper Code	Nomenclature	Maximum Marks	Credit
Semester - I	CH-711	Recent Trends in Chemistry	100 (80 + 20)	04
	CH-712	Research Methodology - I	100 (80 + 20)	04
	CH-713	Research Methodology - II	100 (80 + 20)	04
	CH-714	Review Work	200 (Written150, Presentation-25, Viva Voce- 25)	08
Complete Course			**500**	**20**

U.G. Commerce Common Syllabus, Odisha

Paper	Subject	Paper Code	Full Marks	End-term Marks	Mid-term Marks	Credit Points
	Semester I					
1.1	Environmental Science	AECC -1	100	80	20	4
1.2	Financial Accounting	CORE-1	100	80	20	6
1.3	Business Law	CORE-2	100	80	20	6
1.4	Micro Economics	GE-1	100	80	20	6
	Total		**400**			**22**
	Semester II					
2.1	Communicative English/MIL	AECC-2	100	80	20	4
2.2	Cost Accounting	CORE-3	100	80	20	6
2.3	Corporate Law	CORE-4	100	80	20	6
2.4	Macro & Indian Economy	GE-2	100	80	20	6
	Total		**400**			**22**
	Semester III					
3.1	Corporate Accounting	CORE-5	100	80	20	6
3.2	Income-tax Law and Practice	CORE-6	100	80	20	6
3.3	Management Principles andApplication	CORE-7	100	80	20	6
3.4	Business Statistics	GE-3	100	80	20	6
3.5	E-Commerce	SEC-1	100	80	20	4
	Total		**500**			**28**
	Semester IV					
4.1	GST and Indirect Taxes	CORE-8	100	80	20	6
4.2	Fundamentals of DataManagement (End Term Exam = 60, Practical = 25, Mid-term =15	CORE-9	100	60+25	15	6
4.3	Management Accounting	CORE-10	100	80	20	6
4.4	Principles of Marketing	GE-4	100	80	20	6
4.5	Entrepreneurship Development and BusinessEthics	SEC-2	100	80	20	4
	Total		**500**			**28**
	Semester V					

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				100	60+25	15	6
5.1	Computerized Accounting& E-filling of Tax Returns (End Term Exam = 60, Practical = 25, Mid-term = 15		CORE-11				
5.2	Fundamentals of FinancialManagement		CORE-12	100	80	20	6
5.3	Elective I (Any *one* of thefollowing)		DSE-1	100	80	20	6
	A.	Financial					

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	Accounting and Finance	Markets, Institutions &Services					
	B. Banking and Insurance	Indian Banking and Insurance System					
	C. Management	Human Resource Management					
5.4	Elective II (Any *one* of the following)		DSE-2	100	80	20	6
	A. Accounting and Finance	Financial Statement Analysis and Reporting					
	B. Banking and Insurance	Merchant Banking and Financial Services					
	C. Management	International Business					
	Total			**400**			**24**
	Semester VI						
6.1	Auditing and Corporate Governance		CORE-13	100	80	20	6
6.2	Business Mathematics		CORE-14	100	80	20	6
6.3	Elective III (Any *one* of the following)		DSE-3	100	80	20	6
	A. Accounting and Finance	Fundamentals of Corporate Tax Planning					
	B. Banking and Insurance	Fundamentals of Investment					
	C. Management	Consumer Affairs and Customer Care					
6.4	Business Research Methods and Project work	End Term Exam = 50 Project = 30 Viva-voce = 20	DSE-4	100	50 30 Project 20 Viva-voce		6
	Total			**400**			**24**
	Grand Total			**2600**			**148**

COURSE FRAMEWORK

Part-I: Semester-I

Papers		Marks			Total Marks	Duration (Hrs)	Credit Hours
Paper Code	Paper Title	Mid Term	Assignment	End Term			
101	Managerial Economics	20	10	70	100	40	4
102	Advance Business Statistics	20	10	70	100	40	4
103	Managerial Accounting	20	10	70	100	40	4
104	Corporate Accounting	20	10	70	100	40	4
105	Organizational Theory and Behavior	20	10	70	100	40	4
Total					**500**		**20**

Part-I: Semester-II

Papers		Marks			Total Marks	Duration (Hrs)	Credit Hours
Paper Code	Paper Title	Mid Term	Assignment	End Term			
201	Marketing Management	20	10	70	100	40	4
202	Financial Econometrics	20	10	70	100	40	4
203	Quantitative Technique for Business Decisions	20	10	70	100	40	4
204	International Finance	20	10	70	100	40	4
205	Financial Management and Policy	20	10	70	100	40	4
DSE Papers*							
206 A	International Accounting	20	10	70	100	40	4
206 B	Strategic Cost Management	20	10	70	100	40	4
206 C	Corporate Reporting & Analysis	20	10	70	100	40	4
Total					**600**		**24**

*Discipline Specific Elective Paper. Any one paper can be opted by students of this Department.

Part-II: Semester-III

Papers		Marks			Total Marks	Duration (Hrs)	Credit Hours
PaperNo	Title	Mid Term	Assignment	End Term			
301	Computer Application in Business	20	10	70	100	40	4
302	Research Methodology	20	10	70	100	40	4
303	Financial Institutions and Markets	20	10	70	100	40	4
304	Strategic Management	20	10	70	100	40	4
305	Entrepreneurship	20	10	70	100	40	4
IDSE Papers**							
306 A	Financial Institutions and Markets	20	10	70	100	40	4

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306 B	Business Organisation & Entrepreneurship Development	20	10	70	100	40	4
306 C	Fundamentals of Accounting	20	10	70	100	40	4
Total					**600**		**24**

**Inter Discipline Specific Elective Paper. Any one paper can be opted by students of other Departments.

Part-II: Semester-IV

Papers		Marks			Total Marks	Durationn (Hrs)	Credit Hours
Paper Code	Paper Title	Mid Term	Assignment	End Term			
401	Corporate Governance, Ethics and CSR	20	10	70	100	40	4
402	Corporate Tax Structure & Planning	20	10	70	100	40	4
403	Human Resource Management	20	10	70	100	40	4
404	International Business Environment	20	10	70	100	40	4
✓ 405	Project Work Report and VIVA VOCE (Non-Practical Papers)			100	100	40	4
Total					**500**		**20**
22 Papers	*Grand Total*				*2200*		*88*

VALUE ADDED COURSES

A part from the regular courses, the School also renders a variety of value added courses to enhance the skill, employability and entrepreneurship ability of the students. The courses are designed beyond the core curriculum and aligned with the market requirement to cater diverse industrial requirements and to adhere with different dimensions of social sustainability. Such courses of the school are ranging from data analytics to tax filling, weaving to portfolio management. A brief description of the courses is outlined below.

Value Added Courses	Coordinators
Certificate in Data Analytics	Dr Priyabrata Panda
Certificate in Tax Law and Practice	Dr Gnyana Ranjan Bal
Certificate in Weaving	Dr Priyabrata Panda
Certificate in Modern Office Management	Ms Saroja Meher and Ms Jansi Rani Parida
Certificate in Stock Market Investment and Portfolio Evaluation	Dr Gnyana Ranjan Bal
Certificate in E-Filling of Tax Return	Mr Subash Chandra. Jhankar
Certificate in Financial Inclusion and Banking Literacy	Ms Shubbeschha Nayak
Certificate in GST Registration and Return	Mr Ambrish P. Singh

The syllabus and the credit distribution of the above courses can be found at https://www.gmuniversity.ac.in/department/syllabus/commerce/.

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COURSES OF STUDIES

FOR Ph.D PROGRAM

COMMERCE

(UNDER SEMESTER SYSTEM)

(Effective from January 2018)

P.G. DEPARTMENT OF COMMERCE

GANGADHAR MEHER UNIVERSITY,

SAMBALPUR, ODISHA

SEMESTER - I
Paper- 711
Recent Trends in Commerce and Management
Total Mark: 100 (80+20)
CH= 4

A ACCOUNTING:

International Financial Reporting Standard (IFRS) Implementation & Challenges in India
Adoption of IFRS Worldwide & in India, Overview of Ind ASs
Recent Developments in Accounting: Interim Reporting, Segment Reporting, Corporate Social Reporting, Carbon Credit Accounting and Environmental Accounting

B MARKETING AND MANAGEMENT:

Green Marketing, Understanding Green Consumer Behaviour
Marketing Response to the Environment. Revisiting Marketing Process from Social Marketing Perspective
Marketing Ethics
Value Based Management
Risk Management Strategies
Recent Development in Management Thoughts (Peter Drucker, Michel Porter, and Mc Kinsey's 7-S Approach to Management Analysis.)

C FINANCE:

Corporate Capital Structure Management
Behavioural Finance, Efficient Market Hypothesis, Capital Asset Pricing Model and its Application
Indian Securities Market , Financial Inclusion

D INTERNATIONAL BUSINESS:

Theories of International Trade
International Finance
Operational Aspects of International Business
Contemporary issues in International Business Relation
Legal framework of International Business

Course Outcomes:

CO1	Recognize and identify the ensuing changes in the sphere of accounting, marketing and international business to gain advance and updated knowledge.
CO2	Describe and discuss finance and marketing knowledge with professional ethics.
CO3	Apply financial and marketing principles with proper problem identification by using modern source of knowledge.
CO4	Examine the business avenues for the benefits of society at large with environmental sustainability.
CO5	Assess the link between business and society.
CO6	Design and develop a business model to for the benefit of society and economy.

Program Outcomes Relevant to the Course:

PO1	**Knowledge Impartation on Business and Commerce**: Acquire, define and recognize the knowledge on commerce, management, taxation, entrepreneurship, advance statistics and research methodology in addressing business and socio-economic issues.
PO2	**Ability to Pursue Higher Education**: Assemble commerce and management knowledge to enhance ability to pursue professional courses in higher education.
PO3	**Problem Identification**: Identify, interpret and summarize literatures to analyse several business problems and reaching robust inferences by using professional knowledge.
PO4	**Use of Modern Tools and Resources**: Generate, design and select appropriate modern tools and techniques in appraising scientific temper to comprehend different business models
PO5.	**Application of Business Knowledge on Environment and Sustainability**: Apply and execute business knowledge to develop products, services and methods to foster sustainable environmental practices
PO6	**Associating Business and Society**: Synthesize a sense of civic responsibility, social concern and commitment, and moral accountability by providing a

	PO7	**Enhancement of Professional Ethics**: Interpret and employ ethics in professional life to develop a sense of responsibility and accountability.
		platform for socialization.
PO10		**Innovation and Creativity**: Innovate and invent and design new ideas, products, services and methodologies with application of fundamental knowledge.

Mapping Program Objectives, Program Education Objectives with Course Outcomes:

	PO1	PO2	PO3	PO4	PO5	PO6	PEO1	PEO2	PEO3	PEO4
CO1	3	1	1	1	1	1	3	2	3	3
CO2	3	1	2	3	2	1	3	3	2	2
CO3	2	2	3	3	2	1	3	1	2	1
CO4	1	2	3	3	1	3	3	1	1	3
CO5	1	1	2	2	1	3	3	2	2	2
CO6	1	1	1	2	3	3	3	3	2	3

SEMESTER SYSTEM OF Ph. D COMMERCE

SEMESTER - I
Paper -712
Research Methodology-I
Total Mark: 100 (80+20)   CH= 4

Unit-I **SCOPE, PHILOSOPHY AND ETHICS OF RESEARCH AND ETHICS**
i)   Introduction and Scope
ii) Introduction to philosophy: definition, nature and scope, concept, branches
iii) Ethics: definition, moral philosophy, nature of moral judgments and reactions, Research ethics, Institutional ethics committee.
iv) Ethics with respect to science and research
v)   Intellectual honesty and research integrity

Unit-II: **SCIENTIFIC CONDUCT**
i)   Research problem: Identification, Selection, Formulation of research objectives
ii) Research design: Components, Types and Importance
iii) Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP)
iv) Redundant publications: duplicate and overlapping publications, salami slicing
v)   Selective reporting and misrepresentation of data

Unit-III: TECHNICAL WRITING

i) Literature search technique, using SCOPUS, Google Scholar, PUBMED, Web of science, Indian Citation Index, and RG

ii) Types of technical documents; Full length research paper, Short/Brief communications, Letters to editor, Book chapter, Review, Conference report, Project proposal Components of a full length research paper; , Rationale of the paper, Aims and objectives, Hypothesis building, Work plan, Materials and methodology, Results and discussion, Conflict of interest statement,

iii) Components of a research proposal; Project summary Key words, Origin of the proposal, Major objectives Methodology, Instrument facility available in the PI's department, Overview of status of Research and Development in the subject, Importance of the proposed project in the context of current status.

iv) Styles of referencing; APA, MLA, Oxford, Harvard, Chicago, Annotated bibliography, Tools for citing and referencing, Grammarly, Endnote etc, How to cite and how to do referencing

Unit-IV: PUBLICATION ETHICS

i) Publication ethics: definition, introduction and importance

ii) Best practices / standards setting initiatives and guidelines: COPE, WAME, etc.

iii) Conflicts of interest

iv) Publication misconduct: definition, concept, problems that lead to unethical behavior and vice versa, types

v) Violation of publication ethics, Subject specific ethical issues, FFP, authorship,

vi) Identification of publication misconduct, complaints and appeals

vii) Predatory publishers and journals

viii) Plagiarism-Pitfall

ix) Use of plagiarism software like Turnitin, Urkund and other open source software tools, .

SEMESTER SYSTEM OF Ph.D COMMERCE

SEMESTER - I
Paper -713: Research Methodology-I
Total Mark: 100 (80+20)   CH= 4

Unit-I: IPR AND CYBER LAW.

i) Patents, Patent laws, process of patenting a research finding

ii) Intellectual property (IP), Intellectual property right (IPR)

iii) Copyright, Trademarks, GI

iv) Cyber laws

v) COPE

Unit-II: QUANTITATIVE DATA ANALYSIS

i) Types of Data, Data Collection – Methods and Tools

ii) Hypothesis testing

iii) Normal and Binomial distributions and their property

iv) Tests of significance: Student t- test, F- test, *Chi-square* test

v) Correlation and Regression

vi) ANOVA – One-way and Two-way, Multiple-range test

Unit-III: **COMPUTER FUNDAMENTALS**
   i)   Introduction to MS-Office software: MS-Word(Track change)
   ii)   MS-Excel
   iii)   MS-Power Point
   iv)   Features for Statistical Data Analysis Tool Pack, SPSS
   v)   Tables, Figures and Pictures using Excel
   vi)   Preparation of Posters
   vii)   Electronic submission of manuscripts
   viii) Communication skills, oral and poster

Unit-IV: **ADVANCED TOOLS & TECHNIQUES IN RESEARCH**
   i)   Indexing databases
   ii)   Citation databases: Web of Science, Scopus, etc.
   iii)   Research Metrics
   iv)   Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IPP, Cite Score
   v)   Metrics: h-index, g index, i10 index, altmetrics
   vi)   Open access publications and initiatives
   vii)   SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies
   viii) Software tool to identify predatory publications developed by SPPU
   ix)   Journal finder /journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

SEMESTER SYSTEM OF Ph.D COMMERCE

SEMESTER – I

Paper – 714

Marks – 200 (4 CH)

Review Work

(Script-150, Presentation- 25, Viva-Voce-25)

COURSE STRUCTURE OF UG COMPUTER SCIENCE UNDER CBCS				
Semester	**Course Code**	**Course Name**	**Credits**	**Total Marks**
I	AECC-1	Environmental Studies	4	100
	EV-1(Ethics and Values)	Issues related to Women	1	25
	CC-1(Theory) CC-1(Practical)	Programming Using C Programming Using C LAB	4 2	75 25
	CC-2 (Theory) CC-2 (Practical)	Digital Logic Digital Logic LAB	4 2	75 25
	GE-1 (Theory) GE-1 (Practical)	Computer Fundamentals Computer Fundamentals LAB	4 2	75 25
		Total	**23**	**450**
II	AECC-II	MIL(Odia/Hindi/English)	4	100
	EV-2(Ethics and Values)	And Good Citizenship	1	25
	CC-3(Theory) CC-3(Practical)	Programming Using C++ Programming Using C++ LAB	4 2	75 25
	CC-4 (Theory) CC-4 (Practical)	Data Structures Data Structures LAB	4 2	75 25
	GE-2 (Theory) GE-2 (Practical)	C and Data Structures C and Data Structures Lab	4 2	75 25
		Total	**23**	**450**
III	CC-5(Theory) CC-5(Practical)	JAVA Programming JAVA Programming LAB	4 2	75 25
	CC-6(Theory) CC-6(Practical)	Database Systems Database Systems LAB	4 2	75 25
	CC-7(Theory) CC-7(Practical)	Discrete Mathematical Structures Discrete Mathematical Structures	4 2	75 25
	SEC-1	**Student are supposed to read the subject as given by University**	4	100
	EV-3(Ethics and Values)	Issues of Drug, Tobacco and Alcohol Addiction	1	25
	GE-3 (Theory) GE-3 (Practical)	Programming in Python Programming in Python LAB	4 2	75 25
		Total	**29**	**525**
	CC-8(Theory) CC-8(Practical)	Operating Systems Operating Systems LAB	4 2	75 25
	CC-9(Theory) CC-9(Practical)	Computer Networks Computer Networks LAB	4 2	75 25
	CC-10(Theory) CC-10(Practical)	Computer Graphics Computer Graphics LAB	4 2	75 25

IV	SEC-II*	**Students will choose a paper from a group of papers offered by University/Department.**	4	100
	GE-4 (Theory)	Web Technology	4	75
	GE-4 (Practical)	Web Technology LAB	2	25
	EV-4(Ethics and Values)	Ethical Values for Students life	1	25
		Total	**29**	**525**
V	CC-11(Theory)	Web Technology	4	75
	CC-11(Practical)	Web Technology LAB	2	25
	CC-12(Theory)	Software Engineering	4	75
	CC-12(Practical)	Software Engineering LAB	2	25
	DSE-1 (Theory)	Numerical Techniques	4	75
	DSE-1 (Practical)	Numerical Techniques LAB	2	25
	DSE-2 (Theory)	Unix Shell Programming	4	75
	DSE-2 (Practical)	Unix Shell Programming LAB	2	25
	EV-5(Ethics and Values)	Vulnerable section of society: Understanding their issues	1	25
		Total	**25**	**425**
VI	CC-13(Theory)	Artificial Intelligence	4	75
	CC-13(Practical)	Artificial Intelligence LAB	2	25
	CC-14(Theory)	Algorithm Design Techniques	4	75
	CC-14(Practical)	Algorithm Design Techniques LAB	2	25
	DSE-3 (Theory)	Data Science	4	75
	DSE-3 (Practical)	Data Science LAB	2	25
	DSE-4	Project Work/ Dissertation	6	100
	DSE-4 (Theory)	Data Mining	4	75
	DSE-4 (Practical)	Data Mining LAB	2	25
	EV-6(Ethics and Values)	Environmental and Techno Ethics	1	25
		Total	**25**	**425**
		Grand Total	**154**	**2750**

Certificate Course Offered beyond the Prescribed Syllabus					
Semester	**Course Code**	**Course Name**	**Credits**	**Total Marks**	**Contact Hours**
Any Semester		Certificate Course in Machine Learning using Python			

Post Graduate
Programme Structure

Year	Semesters	
First Year	Semester I	Semester II
Second Year	Semester III	Semester IV

Part-I: Semester-I

Papers		Duration (Hrs)	Credit
Paper No	Title		
CSC101	Advanced Operating Systems	4	4
CSC102	Computer Architecture	4	4
CSC103	Data Communication and Networks	4	4
CSC104	Advanced Data Structures	4	4
CSC105	Lab I (Data Structure and Operating System)	6	4
Total			**20**

Part-I: Semester-II

Papers		Duration (Hrs)	Credit
Paper No	Title		
CSC201	Object Oriented Programming	4	4
CSC202	Mobile Computing	4	4
CSC203	Discrete Mathematical Structures	4	4
CSC204	Theory of Computation	4	4
CSC205	Lab II (OOP using Java and TOC)	6	4
	DSE-I Papers		
CSC206 A	**Data Warehousing and Mining**	4	4
CSC206 B	**Wireless Sensor Networks**	4	4
CSC206 C	**Internet of Things**	4	4
CSC206D	**Microprocessor and Microcontroller**	4	4
Total			**24**

Part-II: Semester-III

Papers		Duration (Hrs)	Credit
Paper No	Title		
CSC301	Compiler Construction	4	4
CSC302	Database Management Systems	4	4
CSC303	Design and Analysis of Algorithms	4	4
	DSE-II Papers		
CSC304A	**Data Science**	4	4
CSC304B	**Web Technology**	4	4
CSC304C	**Information Security**	4	4
CSC304D	**Digital Image Processing**	4	4
CSC305	Lab III (Algorithms and DBMS)	6	4
IDSE Papers			
CSC306A	**Network and Internet Technologies**	4	4
CSC306B	**Fundamentals of Computer**	4	4
CSC306C	**Introduction to Programming Using Python**	4	4
CSC306D	**Artificial Intelligence**	4	4
Total			**24**

Part-II: Semester-IV

Papers		Duration(Hrs)	Credit
Paper No	Title		
CSC401	Machine Learning	4	4
CSC402	Software Engineering and OOAD	4	4
CSC403	Cloud Computing	4	4
CSC404	Project Work Report and VIVA VOCE		8
	MOOCs-1		6
	MOOCs-2		
Total			**20+6***
	Grand Total		**88+6***

*Non-Divisional Credits

SEMESTER WISE CREDIT DISTRIBUTION					
Semester	**I**	**II**	**III**	**IV**	**TOTAL**
Total Credit	**20**	**24**	**24**	**20+6***	**88+6***

NB:
- The students are encouraged to take two extra MOOCs courses to earn a maximum of 6 Credits.
- Each theory paper consists of 100 marks(Mid Sem 30,End Sem 70).
- Lab Exam will be of 100 marks.

COURSES OF STUDIES

FOR PHDPROGRAM
(UNDER SEMESTER SYSTEM)

(Effective from January 2022)

GANGADHAR MEHER UNIVERSITY, SAMBALPUR, ODISHA

PROGRAM OUTCOMES(POs):

PO1. **Knowledge and Understanding**: Develop an ability to understand the theoretical foundations of computer science for designing efficient methodologies along with the knowledge of limitations of computing.

PO2. **General, Technical and Professional Skills:** An ability to function effectively as an individual with diversified skills or as a part of a multi-disciplinary team setting to accomplish defined goals.

PO3. **Application of Knowledge and Skills**: Developing problem analysis skills and knowledge and applying the same in real life situation.

PO4. **Research Skills:** Explore research based knowledge and carry out academic investigations on the cutting edge technologies in allied subjects of Computer Science.

PO5. **General Learning Outcomes:** Create, select and apply advanced techniques and tools including modelling complex activities related to Computer Science.

PO6. **Constitutional, Humanistic, Ethical and Moral Values:** Design, develop and evaluate new system components or processes of computer science that meet the desired needs with appropriate considerations of industry, society, public health, safety, culture, environment and sustainable development sticking on to the ethics and values.

PO7: **Employability Job Skills and Entrepreneur Skills:** Prepare the students to take up a career as versatile contributors in industry, academia, research and development or entrepreneurship employing their expertise to advance personal growth while making meaningful contributions to societal progress

PROGRAM SPECIFIC OUTCOMES(PSOs):

PSO1. To shield students from the rapid obsolescence of computer technology, the program focuses on imparting foundational knowledge, fostering critical thinking skills, and cultivating technical expertise.

PSO2. Apply principles of computer science theory and concepts of software development to create effective computing-based solutions.

PSO3. Empowering the students to function as adept computer science professionals across various domains, including industry, advanced studies, research and development, academia, or entrepreneurship.

SEMESTER SYSTEM OFPh.D.

Sl No.	Paper	Semester	Credit	(Marks) Mid Term + Term End	Teaching Hours
1	711(Departmental)	Sem-1	4	100 (20+80)	48Hrs
2	712(Research Methgodology-1)	Sem-1	4	100 (20+80)	48Hrs
3	713(Research Methgodology-2)	Sem-1	4	100 (20+80)	48Hrs
4	714 Review Work	Sem-1	4	200(150+25+25)	48Hrs
	TOTAL		20	500	160 Hrs

Course structure of UG Economics Honours

Semester	Course	Course Name	Credits	Total marks
I	AEC-I	AEC-I	04	100
	C-I	Introductory Microeconomics	06	100
	C-II	Mathematical Methods for Economics I	06	100
	GE-I	Indian Economy	06	100
			22	400
II	AEC-II	AEC-II	04	100
	C-III	Introductory Macroeconomics	06	100
	C-IV	Mathematical Methods for Economics II	06	100
	GE-II	Indian Economy II	06	100
			22	400
III	C-V	Microeconomics I	06	100
	C-VI	Macroeconomics I	06	100
	C-VII	Statistical Methods for Economics	06	100
	GE-III	Introductory Microeconomics	06	100
	SEC-I	SEC-I	04	100
			28	500
IV	C-VIII	Microeconomics II	06	100
	C-IX	Macroeconomics II	06	100
	C-X	Research Methodology	06	100
	GE-IV	Introductory Macroeconomics	06	100
	SEC-II	SEC-II	04	100
			28	500
V	C-XI	Indian Economy I	06	100
	C-XII	Development Economics I	06	100
	DSE-I	1. Economic History of India (1857 -1947)	06	100
	DSE-II	2. Introductory Econometrics 3. Odisha Economy 4. Public Economics 5. Money and Banking	06	100
			24	400
VI	C-XIII	Indian Economy II	06	100
	C-XIV	Development Economics II	06	100
	DSE-III	1. Environmental Economics 2. International Economics 3. Agricultural Economics 4. History of Economic Thought 5. Business Analytics	06	100
	DSE-IV	Project or Dissertation	06	100
			24	100
		Total		2600

The colours indicate as follows:- Red: Employability, Green: Entrepreneurship, Blue: Skill Development

Discipline Specific Elective Papers: (Credit: 06 each) (4 papers to be selected by students of Economics Honours): DSE 1-IV

DSE Group I

1. Economic History of India (1857-1947)
2. Introductory Econometrics
3. Odisha Economy
4. Public Economics
5. Money and Banking

DSE Group II

1. Environmental Economics
2. International Economics
3. Agricultural Economics
4. History of Economic Thought
5. Project *Dissertation (can be opted as alternative of DSE-IV only and of 6 credits. **Dissertation content: 50, Seminar: 30, Viva: 20)**

ECONOMICS

HONOURS PAPERS:

Core course – 14 papers
Discipline Specific Elective – 4 papers (out of the 6 papers suggested)
Generic Elective for Non Economics students – 4 papers. Incase University offers 2 subjects as GE, then papers 1 and 2 will be the GE paper.

Marks per paper - Midterm : 20 marks, End term : 80 marks, Total – 100 marks
Credit per paper – 6
Teaching hours per paper – 50 hours + 10 hours tutorial

Programme Structure of Post-Graduation in Economics, (GMU, Sambalpur)

SEM No.	Course Code	Name of the Course	Credits
I	ECO-101	Micro Economic Theory-I	4
	ECO-102	Macro Economic Theory-I	4
	ECO-103	Economics of Social	4
	ECO-104	Infrastructure-I	4
	ECO-105	Quantitative Techniques & computer applications-I	4
		Development Economics-I	
II	ECO-201	Micro Economic Theory-II	4
	ECO-202	Macro Economic Theory-II	4
	ECO-203	Economics of Social	4
	ECO-204	Infrastructure-II	4
	ECO-205	Quantitative Techniques & computer applications-II	4
		Development Economics-II	
	Electives		
	ECO-206-A	New Institutional Economics	4
	ECO-206-B	Mathematical Economics	4
	ECO-206-C	New Frontiers in Economics	4
	ECO-206-D	Industrial Organization	4
III	ECO-301	Public Economics- I	4
	ECO-302	International economics-I	4
	ECO-303	Environment & Resources Economics-I	4
	ECO-304	Advanced Econometrics-I	4
	ECO-305	Behavioural Economics	4
	Electives		
	ECO-306-A	Indian Economy	4
	ECO-306-B	Regional Economics	4
	ECO-306-C	Indian Financial System	4
	ECO-306-D	Gender Economics	4
	ECO-306-E	Rural Economics	4
IV	ECO-401	Public Economics- II	4
	ECO-402	International economics-II	4
	ECO-403	Environment & Resources	4
	ECO-404	Economics-II	4
		Advanced Econometrics-II	
	ECO-405	Project/Dissertation	4

The Coulurs indicate as follows:- Red: Employability, Green: Entrepreneurship, Blue: Skill Development

COURSES OF STUDIES

FOR PH.D PROGRAM
IN ECONOMICS
(UNDER SEMESTER SYSTEM)
(Effective from January 2019)

SCHOOL OF ECONOMICS
GANGADHAR MEHER UNIVERSITY,
AMRUTA VIHAR, SAMBALPUR,
ODISHA

Paper -711: RECENT TRENDS IN ECONOMICS
Marks-100(80+20)

Unit-I: New Classical Economics
  i.   The New Classical Position
  ii. The Rational Expectations Concepts and Its Implications
  iii. New Classical Policy Conclusions
  iv. The Keynesian Countercritique, the question of Persistence
  v.   The Extreme Informational Assumptions of Rational Expectations
  vi. Auction Market Versus Contractual Views of the Labour Market

Unit-II: Real Business Cycles and New Keynesian Economics
  i.   Real Business Cycle Models- Central Features, A Simple RBC Model
  ii. Macroeconomic Policy in a Real Business Cycle Model, Robert Lucas and Real Business Cycle Theory
  iii. New Keynesian Economics- Sticky Price (Menu Cost) Models, Efficiency Wage Models, Insider-Outsider Models and Hysteresis

Unit-III: Gender Economics
  i.   Amartya Sen's capability theory
  ii. Becker's theory of family and gender discrimination.
  iii. Capability approach and gender: Nussbaum's basic capabilities framework-women empowerment and economic development, Conceptualizing and measuring Empowerment

Unit-IV:
  i.   Globalization and Economic Development - (Bhagwati, Rodrik and Reinert)
  ii. Socio-Economic issues and Regional Imbalance in India and Odisha, Economic backwardness and KBK region of Odisha, Key issues in regional development of Odisha, Farmers' suicide- causes, consequences and solutions, Distressed Migration of Labour- Issues and Challenges
  iii. Goods and Services Tax (GST) - Benefits and expected problems and solutions; Direct Tax code- benefits, problems and solutions; Budgetary trends in contemporary India- a critical evaluation of these trends.
  iv. Aging and Development- The Economics of aging

Paper -712: RESEARCH METHODOLOGY-I
Marks-100(80+20)

Unit- I: Scope of Research and Ethics
  i.   Introduction and Scope
  ii. Research problem: Identification, Selection, Formulation of research objectives
  iii. Research design: Components, Types and Importance
  iv. Research ethics, Institutional ethics committee
  v.   Plagiarism – Pitfall

Unit-II: Technical Writing
  i.   Types of technical documents; Full length research paper, Short/Brief communications, Letters to editor, Book chapter, Review, Conference report, Project proposal

  ii. Components of a full length research paper; Title/Topic statement, Abstract/key words, Aims and objectives, Hypothesis building, Rationale of the paper, Work plan, Materials and methodology, Results and discussion, Key issues and arguments, Acknowledgement, Conflict of interest statement, bibliography, Technical Resumes & Cover Letters

  iii. Components of a research proposal; Project summary Key words, Origin of the proposal, Major Objectives
       Methodology, Overview of status of Research and Development in the subject, Importance of the proposed project in the context of current status, Bibliography

Unit- III:- Scientometrics
  i.   How to cite and how to do referencing
  ii. Literature search technique, using SCOPUS, Google Scholar, PUBMED, Web of Science, Indian Citation Index, and RG
  iii. Styles of referencing; APA, MLA, Oxford, Harvard, Chicago
  iv. Annotated bibliography
  v.   Tools for citing and referencing, Mendeley, Grammarly, Endnote etc

Unit-IV: Presentation and Communication skills
  i.   Tables, Figures and Pictures using Excel
  ii. PowerPoint slide preparation
  iii. Preparation of Posters
  iv. Electronic submission of manuscripts
  v.   Communication skills, oral and poster

Paper -713: RESEARCH METHODOLOGY-II
Marks-100(80+20)

Unit-I: IPR and Cyber Law
   i.   Patents
   ii.   Patent laws, process of patenting a research finding
   iii.   Intellectual property (IP), Intellectual property right (IPR)
   iv.   Copyright, Trademarks, GI
   v.   Cyber laws
   vi.   COPE

Unit II: Quantitative Data Analyses
   i.   Types of data, Data collection - Methods and Tools
   ii.   Hypothesis testing
   iii. Normal and Binomial distributions and their property
   iv. Tests of significance: Student *t*-test, *F*-test, *Chi-square* test
   v.   Correlation and Regression
   vi.   ANOVA – One-way and Two-way, Multiple-range test

Unit-III: Computer Fundamentals
   i.   Introduction to MS-Office software: MS-Word (Track change)
   ii.   MS-Excel
   iii.   MS-Power Point
   iv.   MS-Access
   v.   Features for Statistical data analysis using computers and software, Microsoft Excel Data Analysis ToolPak, SPSS, E-Views, STATA

Unit-IV: Applied Econometrics – Tools & Techniques
   i.   OLS estimation and interpretation; BLUE properties; Matrix approach
   ii.   Violation of assumptions-Multicollinearity, Heteroscadasticity, Autocorrelation
   iii.   Simoultaneous Equation model estimation, LPM, Logit, Probit and Tobit Models
   iv.   Time Series Analysis with E-views/STATA; Unit roots tests,ARCH/GARCH models, VAR models, Cointegration

Paper-714
Marks-200(150+25+25)

RIVIEW WORK
(Report Writing + Seminar Presentation of the Report + Viva-voce)

HONOURS PAPERS:

Core course – 14 papers
Discipline Specific Elective – 4 papers
Generic Elective for Non-Education students – 4 papers. -

Marks per paper – Mid-term: 15 marks, End term: 60 marks, Practical: 25 marks
 Total – 100 marks
Credit per paper – 6

Course structure of UG Education Honors

Semester	Course	Course Name	Credits	Total marks
I	AEC-I	AEC-I	04	100
	C-I	Educational Philosophy	04	75
	C-I Practical		02	25
	C-II	Educational Psychology	04	75
	C-II Practical		02	25
	GE-I	• GE-I(A)	04	75
	GE-I Practical	• GE-I (B)	02	25
			20	
II	AEC-II	AEC-II	04	100
	C-III	Educational Sociology	04	75
	C-III Practical		02	25
	C-IV	Changing Pedagogical Perspective	04	75
	C-IV Practical		02	25
	GE-II	• GE-II(A)	04	75
	GE-II Practical	• GE-II(B)	02	25
			20	

III	C-V C-V Practical	Educational Assessment and Evaluation	04 02	75 25
	C-VI C-VI Practical	Educational Research	04 02	75 25
	C-VII C-VII Practical	Statistics in Education	04 02	75 25
	GE-III GE-III Practical	GE-III(A) Contemporary Trends and Issues in Education GE-III(B)Comparative Education	04 02	75 25
	SEC-I	SEC-I	04	100

			26	
IV	C-VIII C-VIII Practical	History of Education in India	04 02	75 25
	C-IX C-IX Practical	Curriculum Development	04 02	75 25
	C-X C-X Practical	Guidance and Counseling	04 02	75 25
	GE-IV GE-IV Practical	GE-IV(A)Educational Assessment and Evaluation GE-IV(B)- Human Rights and Peace	04 02	75 25
	SEC-II	SEC-II	04	100
			26	
Semester	Course	Course Name	Credits	Total marks
V	C-XI C-XI Practical	Development of Education in Odisha	04 02	75 25
	C-XII C-XII Practical	Information and Communication Technology in Education	04 02	75 25

	DSE-I DSE-I Practical	A. Pedagogy of language (English) B. Pedagogy of language (Odia)	04 02	75 25
	DSE-II DSE-II Practical	A. Pedagogy of Social Sciences B. Pedagogy of Mathematics	04 02	75 25
			24	
VI	C-XIII C-XIII Practical	Contemporary Trends and Issues in Indian Education	04 02	75 25
	C-XIV C-XIV Practical	Educational Management and Leadership	04 02	75 25
	DSE-III	A. Policy and Practices in School Education in India	04	75

	DSE-III Practical	B. Policy and Practices in Higher Education in India C. Learning and Teaching	02	25
	DSE-IV DSE-IV Practical	Inclusive Education (Theory)	04 02	75 25
	OR			
	DSE-IV	Dissertation	06	100*
			24	

Programme Structure at a Glance

M.A. in EDUCATION Programme comprising two years, will be divided into 4 (four) semesters, each of six months duration, total 88 credits and 2200 marks.

Year	Semester	Credit	Marks
1st	I	20	500
	II	24	600
2nd	III	24	600
	IV	20	500
Total		88	2200

Detailed Course Structure and Distributions of Marks

1st Year: Semester-I

Courses		Distributions of Marks		Total Marks	Credit
Course No	Title	Mid Term	End Term		
101	Philosophical Foundation of Education	20	80	100	4
102	Sociological Foundation of Education	20	80	100	4
103	Psychological Foundation of Education	20	80	100	4
104	Recent Trends and Issues in Education	20	80	100	4
105	Practicum c-101 c-102 c-103 c-104		100	100	4
Total				500	20

1st Year: Semester-II

Courses		Distributions of Marks		Total Marks	Credit
Course No	Title	Mid Term	End Term		
201	Educational Measurement and Evaluation	20	80	100	4
202	Educational Management	20	80	100	4
203	Curriculum Development	20	80	100	4
204	Pedagogical Trend and Issues	20	80	100	4
205	Practicum c-201 c-202 c-203 c-204		100	100	4
DSE Papers*					

206(A)	Open and Distance Learning	20	80	100	4
206(B)	Environmental Education and Sustainable Development	20	80	100	4
206(C)	Early Childhood Care and Education	20	80	100	4
206(D)	Comparative Education	20	80	100	4
	Total			600	24

Discipline Specific Elective Paper. Any one paper can be opted by students of this Department. Minimum student's strength to run the course in each elective paper should be 8.

2nd Year: Semester-III

Courses		Distribution of Marks		Total Marks	Credit
Course No	Title of Course	Mid Term	End Term		
301	Research Methodology in Education	20	80	100	4
302	Advanced Educational Statistics	20	80	100	4
303	Advanced Educational Technology	20	80	100	4
304	Development of Education in India	20	80	100	4
305	Practicum c-301(a) c-301(b) c-302	-	100	100	4
IDSE Papers*					
306(A)	Philosophical Foundation of Education	20	80	100	4
306(B)	Sociological Foundation of Education	20	80	100	4
306(C)	Psychological Foundation of Education	20	80	100	4
306(D)	Economics of Education	20	80	100	4
	Total			600	24

Inter Discipline Specific Elective Paper. Any one paper can be opted by students from other Departments.

2nd Year: Semester-IV

Courses		Distributions of Marks		Total Marks	Credit
Course No	Title	Mid Term	End Term		
401	Higher Education in India	20	80	100	4
402	Teacher Education	20	80	100	4
403	Guidance and Counseling in Education	20	80	100	4
404	Inclusive Education	20	80	100	4
405	Dissertation (Practical)		100	100	4
	Total			500	20
22 Papers	Grand Total			2200	88

N.B.: -
There will be two elective groups namely:

- ➢ Discipline Specific Elective in Sem-II
- ➢ Inter Disciplinary Elective in Sem-III.

A student has to select one of the DSE course in Sem-II and one of the courses in Sem-III as offered by the respective Department at the beginning of the semester II and semester-III respectively.

1. Each course will be of 100 marks out of which 80 marks shall be allocated for Term End examination and 20 marks for internal assessment (Mid Term Examination).

2. There will be four lecture hours of teaching per week for each Course and total numbers of classes are given in the detailed syllabus section.

3. Duration of examination for each course hall is three hours.

4. **Pass Percentage:**

   - ➢ The minimum marks required to pass any course shall be 40 percentages in each course and 40 percentages in aggregate of a semester.
     No students will be allowed to avail more than three (3) chances to pass in any course inclusive of first attempt.

COURSES OF STUDY
FOR
DOCTOR OF PHILOSOPHY IN EDUCATION

Session 2018 – 19 onwards

GANGADHAR MEHER UNIVERSITY
SAMBALPUR, ODISHA-768004

Course pattern for Ph.D in Education

Semester	Paper code	Nomenclature	Maximum marks	Credit hours
Semester -I	711	Recent Trends in Education	100(80+20)	04
	712	Research Methodology- I	100(80+20)	04
	713	Research Methodology-II	100(80+20)	04
	714	Review Work	200 (Written-150 Presentation -25 Viva voce -25)	08
Complete Course			500	20

COURSES OF STUDIES

For

Four Years Integrated BA/BSc B.Ed.

(CBCS System)

Session 2021-2022 onwards

**SCHOOL OF EDUCATION
GANGADHAR MEHER UNIVERSITY,
AMRUTA VIHAR, SAMBALPUR, ODISHA-768004**

Programme Objectives of Integrated BA/BSc B.Ed.

➢ To develop disciplinary area-specific skills, generic skills and attributes of the pupil-teachers.

➢ Demonstrate core values such as

    1) Commitment to the profession or job requirements; values that guide the profession; and seeking out new challenges/assignments that improve student learning;

    2) Honouring diversity and ensuring inclusion by treating all students and colleagues with respect and dignity, showing respect for and sensitivity to gender, cultural and religious difference; and challenging prejudice, biases and intolerance in the workplace etc.;

    3) Ethical integrity which involves maintaining ethical standards; resisting pressure in decision making; displays honest behaviour; and not abusing power/authority.

➢ Core competencies such as

    1) Communication skills required to articulate thoughts and ideas clearly/effectively using oral and written communication skills, and to present information and explanations in a well-structures and logical manner;

    2) Working effectively with students and their parents which involves interacting with students, parents and community members to know the students, their family and social and cultural contexts; determining learning readiness/prerequisites required by students; and Identifying their learning difficulties; and

    3) Drive for achieving improved student learning outcomes.

➢ Demonstrate professional/technical knowledge (What prospective teachers are expected to know) of the physical, social and intellectual development and characteristics of students and how these may affect learning; undertaking research into how students learn and the implications for teaching; and identifying teaching strategies that are responsive to the learning strengths and needs of students from diverse linguistic, cultural, religious and socioeconomic backgrounds.

➢ Demonstrate knowledge and understanding of: strategies for differentiating teaching to meet the specific learning needs of students across the full range of abilities; teaching strategies that support participation and learning of differently-abled students; both school education and teacher education-related subjects, including concepts, substance and structure of the content, and approaches to organising content into an effective learning sequence.

➢ Demonstrate knowledge required to design learning sequences and lesson plans; implement teaching strategies using ICT to improve teaching-learning process; set explicit, challenging and achievable learning goals for all students; and plan and implement well-structured learning and teaching programmes or lesson sequences that engage students and promote learning.

➢ Demonstrate professional competencies/practice (What prospective teachers will be able to do) that are required to select and use relevant teaching strategies to develop

knowledge, skills, problem solving and critical and creative thinking; select and/or create and use a range of resources, including ICT, to engage students in their learning; use effective verbal and non-verbal communication strategies to support student understanding, participation, engagement and achievement; evaluate teaching and learning programmes using evidence, including feedback from students and student assessment data, to inform planning; establish and implement inclusive and positive interactions to engage and support student participation in classroom activities.

➢ Demonstrate professional competencies/practice that are required to manage classroom activities by establishing and maintaining orderly and workable routines to create an environment where student time is spent on learning tasks; manage challenging behaviour by establishing and negotiating clear expectations with students and address discipline issues promptly, fairly and respectfully; ensure students' well-being and safety within school by implementing school and/or system, curriculum and legislative requirements; and incorporate strategies to promote the safe, responsible and ethical use of ICT in learning and teaching.

➢ Demonstrate professional competencies/practice that are required to develop, select and use informal and formal, diagnostic, formative and summative assessment strategies to assess student learning; provide timely, effective and appropriate feedback to students about their achievement relative to their learning goals; participate in assessment moderation activities to support consistent and comparable assessment of student learning; use student assessment data to analyse and evaluate student understanding of subject/content, identifying interventions and modifying teaching practice; and report on student achievement, making use of accurate and reliable records.

➢ Demonstrate competencies and actions required for keeping oneself professionally engaged and participate in learning to update knowledge and practice, targeted to professional needs and school and/or system priorities; contribute to collegial discussions and apply constructive feedback from colleagues to improve professional knowledge and practice; meet codes of ethics and conduct established by the education systems and schools; establish and maintain respectful collaborative relationships with parents/guardians regarding their children's learning and well-being and anticipate in professional and community networks and forums to broaden knowledge and improve practice.

Programme Structure at a Glance

Integrated BA/BSc B.Ed. programme comprising four years, will be divided into eight (08) semesters, 84 credits and 2000 marks

Year	Semester	Credit	Marks
1st	I	08	200
	II	08	200
2nd	III	04	100
	IV	04	100
3rd	V	08	200
	VI	08	200
4th	VII	24	550
	VIII	20	450
Total		**84**	**2000**

Semester Wise Detailed Course Structure and Distributions of Marks

The detail of title of papers, credit hours, division of marks etc. of all the papers of all semesters is given below.

SEMESTER-I

Papers		Distribution of Marks				
Papers No.	Title	Theory		Practical	Total Marks	Credit Hours
		Mid Term	End Term			
PE-1	Basics in Education	15	60	25	100	04
PE-2	Childhood and Growing Up	15	60	25	100	04
Total					**200**	**08**

SEMESTER-II

Papers		Distribution of Marks				
Papers No.	Title	Theory		Practical	Total Marks	Credit
		Mid Term	End Term			
PE-3	Learning and Teaching	15	60	25	100	04
PE-4	Assessing Learning	15	60	25	100	04
Total					**200**	**08**

SEMESTER-III

Papers		Distribution of Marks			Total Marks	Credit
Papers No.	Title	Theory		Practical		
		Mid Term	End Term			
PE-5	Knowledge and Curriculum	15	60	25	100	04
Total					**100**	**04**

SEMESTER-IV

Papers		Distribution of Marks			Total Marks	Credit
Papers No.	Title	Theory		Practical		
		Mid Term	End Term			
CPS-1	Language across curriculum	10	40	-------	50	02
EPC-1	Learning to Function as a Teacher	Internal Practicum		50	50	02
Total					**100**	**04**

SEMESTER-V

Papers		Distribution of Marks			Total Marks	Credit
Papers No.	Title	Theory		Practical		
		Mid Term	End Term			
CPS-2 (Part-I)	**Pedagogy of** Odia, English, Mathematics Biology	15	60	25	100	04
CPS-3 (Part-I)	**Pedagogy of** Social Science and Physical Science	15	60	25	100	04
Total					**200**	**08**

SEMESTER-VI

Papers		Distribution of Marks			Total Marks	Credit
Papers No.	Title	Theory		Practical		
		Mid Term	End Term			
CPS-2 (Part-II)	**Pedagogy of** Odia, English, Mathematics and Biology	15	60	25	100	04
CPS-3 (Part-II)	**Pedagogy of** Social Science and Physical Science	15	60	25	100	04
Total					200	08

SEMESTER-VII

Papers		Distribution of Marks		Total Marks	Credit
Papers No.	Title	Theory	Practical		
EPC-4	Understanding the Self	--------	50	50	02
EPC-5	Arts in Education	--------	50	50	02
EPC 6	ICT Practicum	--------	50	50	02
EPC 7	Library resources	--------	50	50	02
EPC-8	Reading and Reflecting on Texts	---------	50	50	02
EF 1	School Exposure	---------	-----------	Grade	02
EF-2	School Exposure(Multicultural Placement)	-----------	50	50	02
EF 3	School Internship	----------	250	250	10
Total		Nil	550	550+Grade	24

SEMESTER-VIII

Papers		Distribution of Marks			Total Marks	Credit
Papers No.	Title	Theory		Practical		
		Mid Term	End Term			
PE-6	Creating an Inclusive Classroom	10	40	----------	50	02
PE-7	Educational Planning, Management and Leadership	15	60	25	100	04
PE-8	Schooling , Socialization and Identity	15	60	25	100	04
PE-9	Vision for Indian education	15	60	25	100	04
EPC 2	Understanding ICT and Its Application	10	40	--------	50	02
EPC 3	Health, Yoga and Physical Education	10	40	--------	50	02
EF 4	Working with Community	-------	-------	-------	Grade	02
Total					**450+Grade**	**20**

Course structure of UG English Honours

Semester	Course	Course Name	Credits	Total marks
I	AECC-I	AECC-I	04	100
	C-I	British Poetry and Drama: 14th to 17th Centuries	06	100
	C-II	British Poetry and Drama: 17th and 18th Century	06	100
	GE-I	Academic Writing and Composition	06	100
			22	
II	AECC-II	AECC-II	04	100
	C-III	British Prose: 18th Century	06	100
	C-IV	Indian Writing in English	06	100
	GE-II	Gender and Human Rights	06	100
			22	
III	C-V	British Romantic Literature	06	100
	C-VI	British Literature 19th Century	06	100
	C-VII	British Literature: Early 20th Century	06	100
	GE-III	Nation, Culture, India	06	100
	SEC-I	SEC-I	04	100
			28	
IV	C-VIII	American Literature	06	100

Semester	Course	Course Name	Credits	Total marks
	C-IX	European Classical Literature	06	100
	C-X	Women's Writing	06	100
	GE-IV	Language and Linguistics	06	100
	SEC-II	SEC-II	04	100
			28	
V	C-XI	Modern European Drama	06	100
	C-XII	Indian Classical Literature	06	100
	DSE-I	Literary Theory	06	100
	DSE-II	World Literature	06	100
			24	
VI	C-XIII	Postcolonial Literatures	06	100
	C-XIV	Popular Literature	06	100
	DSE-III	Partition Literature	06	100
	DSE-IV	Writing for Mass Media	06	100
	OR			
	DSE-IV	Dissertation	06	100*
			24	

School of English

Gangadhar Meher University, Sambalpur

M.A. English Syllabus (effective from 2021 new admission batch)
Under Choice-Based Credit System

Objectives of the program:

- To familiarise the students with the representative authors of every age and movement.

- To help them study different genres of literature in the context of socio-cultural background of the age and initiate serious engagement with the texts through close reading and analytical writing.

- To orient the learners towards the concepts of literary theory and criticism and introduce them to various schools of thought evident in academic deliberations.

- To open up avenues of research and specialisation by giving learners a choice to focus on a particular area of literature and introduce the students to the concept of research and the terminology associated with it.

- To familiarise the learners with World Literature in English to facilitate cross-cultural perspectives and to sensitise them towards the complexities of dealings shared by the minorities.

- To improve the linguistic competence along with the literary competence of students.

Semester-I

ENG 101: Renaissance Literature and Thought (4 Credits)

ENG 102: 17th Century English Literature and Thought (4 Credits)

ENG 103: 18th Century English Literature and Thought (4 Credits)

ENG 104: Literature and Thought of the Romantic Period (4 Credits)

ENG 105: Structure of the English Language (4 Credits)

Semester-II

ENG 201: Victorian Literature and Thought (4 Credits)

ENG 202: 20th Century English Literature and Thought (4 Credits)

ENG 203: European Novels in Translation (4 Credits)

ENG 204: Women's Writing (4 Credits)

ENG 205: English Criticism upto Eliot (4 Credits)

ENG 206 A: Life Writing* (4 Credits)

ENG 206 B: Literature and Environment* (4 Credits)

ENG 206 C: Literature and Law* (4 Credits)

*This paper shall be offered as an Elective paper.

Semester-III

ENG 301: Theoretical Approaches to Literature (4 Credits)

ENG 302: Postcolonial Literature (4 Credits)

ENG 303: Gender Studies (4 Credits)

ENG 304: Translation Studies (4 Credits)

ENG 305: Travel Narratives (4 Credits)

ENG 306 A: Communication Skills** (4 Credits)

ENG 306 B: Creative Writing** (4 Credits)

ENG 306 C: Introduction to Professional Writing** (4 Credits)

**This paper shall be offered as an Elective paper and shall be offered to students of other departments.

Semester-IV (Any *ONE* out of the following electives)

Elective A: Indian Literature (20 Credits)

ENG 401: Plural Voices: Poetry and Short Stories

ENG 402: Writing the Region/Nation: Fiction

ENG 403: Caste and Gender: Fiction

ENG 404: Identities: Drama

ENG 405: Dissertation

Elective B: American Literature (20 Credits)

ENG 401: The Beginnings

ENG 402: American Fiction

ENG 403: Race and Gender

ENG 404: The Twentieth Century: Poetry and Drama

ENG 405: Dissertation

[Total Credits: 80 (20 credits per semester) + 8 (extra credits) = 88 Credits]

Programme Learning Outcomes (PLOs):

After completion of this academic program, the students will be able to:

- Demonstrate comprehensive knowledge related to the Socio-cultural and intellectual background of different literary periods and literary trends.

- Identify and discuss representative writers of different periods and their seminal works.

- Acquaint with works written by different sections of people (gender, racial and ethnic minorities) and make critical responses from different perspectives

- Understand and examine the development of various genres and sub-genres of literature and literary devices and familiarise themselves with key concepts and theoretical practices related to different schools of thought and the latest critical trends in the field of literary theory and criticism.

- Formulate critical arguments on literary texts with an improved skill for close reading and critical analysis using literary theory and develop a scholarly composition.

- Delve deep into different areas of Literature and explore research possibilities in the field by critically evaluating the thematic and aesthetic issues in identifying subversive strategies employed by writers in literary texts.

- Apply the knowledge to explore career avenues in a global world such as professional writing, translation, teaching English at different levels, mass media, journalism, aviation communication and personality development.

SYLLABUS

For

PHD COURSE WORK IN ENGLISH

School of English
Gangadhar Meher University
Amruta Vihar, Sambalpur

Ph.D. Coursework in English
Semester-I

Paper code	Nomenclature	Maximum marks	Credit hours
711	Changing Trends in Literary Studies	100	4 credits
712	Research methodology- 1	100	4 credits
713	Research methodology- 2	100	4 credits
714	Dissertation/ Report	200	8 credits
		500	22 credits

Table 3: Undergraduate in Geography (Hon.) - Course Summary

Semester		CORE COURSE (14)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Elective Course (AEEC) (2) (Skill Based)	Elective: Discipline Specific DSE (4)	Elective: Generic (GE) (4)
I	CC1	Geomorphology	English Communication/ Odia/ Hindi			GE-I [A] Geography of India; Or GE-I [B] Sustainable Development
	CCII	Cartography				
II	CCIII	Human Geography	Environmental Studies			GE-II Geography of Odisha; Or,
	CCIV	Climatology				
III	CCV	Oceanography		SEC -I Communicative English and English Writing		GE-III Climatology
	CCVI	Statistical Methods in Geography				
	CCVII	Geography of Odisha				
IV	CCVIII	Evolution of Geographical Thought		SEC II University Option		GE- IV [A] Human Geography Or, GE-IV[B] Climate Change & Vulnerability;
	CCIX	Economic Geography				
	CCX	Environmental Geography				
V	CCXI	Regional Planning and Development			DSE-I Population Geography; Or, DSE –II [A] Resource Geography; Or, DSE-II [B] Geography of Crime and Policing	
	CCXII	Remote Sensing & GIS				
VI	CCXIII	Geography of India			DSE –III [A] Urban Geography DSE-III [B] Population and Society	
	CC XIV	Disaster management			DSE – IV or Dissertation/ Project Work	

New course added in 2023-2024

Geography (Honors)

Core course – 14 papers, Discipline Specific Elective – 4 papers
Generic Elective for Non Geography students – 4 papers.
Incase University offers 2 subjects as GE, then papers 1 and 2 will be the GE paper.

Marks per paper - Midterm: 15 marks, End term : 60 marks, Practical:25 Total – 100 marks;
Credit per paper – 6; Teaching hours per paper – 50 hours + 10 hours tutorial;
The detail syllabus for undergraduate in Geography is as follows.

Post Graduate
Programme Structure

The Master's programme is a two-year course divided into four semesters each of six-month duration. A student is required to complete 88 credits for the completion of course and the award of degree.

year	semesters	
First year	Semester I	Semester II
Second year	Semester III	Semester IV

The information about the title of courses, credit hours, division of marks etc. of all semester is given below.

Part-I: Semester-I

Papers		Marks			Total Marks	Duration (Hrs)	Credit Hours
Paper No	Title	Mid Term	Assign ments	End Term			
101	Advanced Geomorphology	20	10	70	100	3	4
102	Geographical Thought	20	10	70	100	3	4
103	Population Geography	20	10	70	100	3	4
104	Geography of India	20	10	70	100	3	4
105	Cartographic Techniques (Practical)				100	3	4
Total					500		20

Part-I: Semester-II

Papers		Marks			Total Marks	Duration (Hrs)	Credit Hours
Paper No	Title	Mid Term	Assign ments	End Term			
201	Climatology	20	10	70	100	3	4
202	Economic Geography	20	10	70	100	3	4
203	Statistical Methods in Geography	20	10	70	100	3	4
204	Fundamentals of GIS & Remote Sensing	20	10	70	100	3	4
205	Remote Sensing & GIS Applications (Practical)				100	3	4
DSE Papers*							
206 A	Geography of Tourism	20	10	70	100	3	4
206 B	Geography of Odisha	20	10	70	100	3	4
206 C	Political Geography	20	10	70	100	3	4
Total					600		24

*Discipline Specific Elective Paper. Any one paper can be opted by Masters students of School of Geography. Minimum student strength to run the course in each elective paper should be 8.

Part-II: Semester-III

Paper No	Title	Mid Term	Assignments	End Term	Total Marks	Duration (Hrs)	Credit Hours
301	Oceanography	20	10	70	100	3	4
302	Socio and Cultural Geography	20	10	70	100	3	4
303	Settlement Geography	20	10	70	100	3	4
304	Remote Sensing and Image Processing	20	10	70	100	3	4
305	Field survey Methods (Practical)				100	3	4
IDSE Papers**							
306 A	Introduction to Geography	20	10	70	100	3	4
306 B	Human Geography	20	10	70	100	3	4
306 C	Economic Geography	20	10	70	100	3	4
	Total				600		24

**Inter discipline specific elective paper. Any one paper can be opted by students of other Schools of G. M. University.

Part-II: Semester-IV

Paper No	Title	Mid Term	Assignments	End Term	Total Marks	Duration (Hrs)	Credit Hours
401	Regional Development & Planning	20	10	70	100	3	4
402	Environmental Geography	20	10	70	100	3	4
403	Disaster Management	20	10	70	100	3	4
404	Urbanisation and Migration	20	10	70	100	3	4
405	Project work report and VIVA VOCE (practical papers)			50+50	100	3	4
	Total				500		20
22 papers	Grand Total				2200		88

Semester	Core Courses No. of Papers	Credits (Per Paper)	Total Credits	Discipline Specific Elective No. of Papers	Credits (Per Paper)	Total Credits	Inter Discipline Specific Elective No. of Papers	Credits (Per Paper)	Total Credits	Total No. of Papers	Credits (Per Paper)	Grand Total Credits
I	5	4	20	Nil	NA	NA	Nil	NA	NA	5	4	20
II	5	4	20	1	4	4	Nil	NA	NA	6	4	24
III	5	4	20	Nil	NA	NA	1	4	4	6	4	24
IV	5	4	20	Nil	NA	NA	Nil	NA	NA	5	4	20
Total	20	4	80	1	4	4	1	4	4	22	4	88

COURSES OF STUDIES

FOR M.PHIL AND PHD PROGRAM
(UNDER SEMESTER SYSTEM)

(Effective from January 2020)

GANGADHAR MEHER UNIVERSITY, SAMBALPUR, ODISHA

Sl No.	Paper	Semester	Credit	(Marks) Mid Term + Term End	Teaching Hours
1	611 (Departmental)	Sem-1	4	100 (20+80)	60 Hrs
2	612(Research Methgodology-1)	Sem-1	4	100 (20+80)	60 Hrs
3	613(Research Methgodology-2)	Sem-1	4	100 (20+80)	60 Hrs
4	Teaching Assignment & Seminar Presentation	Sem-1	4	100 (0+100)	60 Hrs
5	Dissertation	Sem-2	08	200	120 Hrs
	TOTAL		24	600 (60+540)	360 Hrs

Revised Syllabus of pre-registration course work for M.Phil. and Ph.D in GMU.

PAPER-612/712
RESEARCH METHODOLOGY-1

Unit-I
SCOPE, PHILOSOPHY AND ETHICS OF RESEARCH AND ETHICS
  i)   Introduction and Scope
  ii)   Introduction to philosophy: definition, nature and scope, concept, branches
  iii) Ethics: definition, moral philosophy, nature of moral judgments and reactions, Research ethics, Institutional ethics committee.
  iv)   Ethics with respect to science and research
  v)   Intellectual honesty and research integrity

Unit-II
SCIENTIFIC CONDUCT
  i)   Research problem: Identification, Selection, Formulation of research objectives
  ii)   Research design: Components, Types and Importance
  iii) Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP)
  iv)   Redundant publications: duplicate and overlapping publications, salami slicing
  v)   Selective reporting and misrepresentation of data

Unit-III
TECHNICAL WRITING
  i)   Literature search technique, using SCOPUS, Google Scholar, PUBMED, Web of science, Indian Citation Index, and RG
  ii)   Types of technical documents; Full length research paper, Short/Brief communications, Letters to editor, Book chapter, Review, Conference report, Project proposal Components of a full length research paper; , Rationale of the paper, Aims and objectives, Hypothesis building, Work plan, Materials and methodology, Results and discussion, Conflict of interest statement,
  iii) Components of a research proposal; Project summary Key words, Origin of the proposal, Major objectives Methodology, Instrument facility available in the PI's department, Overview of status of Research and Development in the subject, Importance of the

COURSE STRUCTURE OF UG HINDI HONOURS UNDER CBCS

Course Code	Course Name	Marks		Total Marks	Credit Hours
		Mid Term	End Term		
CC-I	हिन्दी साहित्य का इतिहास(भाग-1)	20	80	100	6
CC-II	भक्तिकानीन हिंदी कविता (निर्गुण एवं रामभक्ति काव्यधारा)	20	80	100	6
GE-I	मध्यकालीन इतिहास और भक्ति कविता	20	80	100	6
AECC-I	Environmental Studies	20	80	100	4
EV-I(Ethics and Values)	Issue related to women			25	1
	Total			425	23

Course Code	Course Name	Marks		Total Marks	Credit Hours
		Mid Term	End Term		
CC-III	हिन्दी साहित्य का इतिहास(भाग-2)	20	80	100	6
CC-IV	कृष्ण भक्ति एवं रीतिकलीन हिन्दी कविता	20	80	100	6
GE-II	साहित्य और संदर्भ : विविधवाद	20	80	100	6
AECC-II	MIL, Communication English/Odia/Hindi	20	80	100	4
EV-II(Ethics and Values)	Values and Good Citizenship			25	1
	Total			425	23

Course Code	Course Name	Marks		Total Marks	Credit Hours
		Mid Term	End Term		

Course Code	Course Name	Mid Term	End Term	Total Marks	Credit Hours
CC-V	अनुवाद सिद्धांत	20	80	100	6
CC-VI	हिन्दी कथा साहित्य(उपन्यास)	20	80	100	6
CC-VII	हिन्दी कथा साहित्य(कहानी)	20	80	100	6
GE-III	साहित्यिक पत्रकारिता(हिन्दी)	20	80	100	6
SEC-I	Communicative English	20	80	100	4
EV-III (Ethics and Values)	Issues of Drug, Tobacco and Alcohol Addiction			25	1
	Total			525	29

Semester-IV

Course Code	Course Name	Marks		Total Marks	Credit Hours
		Mid Term	End Term		
CC-VIII	कथाइत्तर गद्य साहित्य	20	80	100	6
CC-IX	आधुनिक हिन्दी कविता(1)	20	80	100	6
CC-X	भाषा विज्ञान और हिन्दी भाषा	20	80	100	6
GE-IV	हिन्दी सिनेमा और उसका अध्ययन	20	80	100	6
SEC-II	दृश्य श्रव्य माध्यम लेखन	20	80	100	4
EV-IV(Ethics and Values)	Ethical Values for students life			25	1
	Total			525	29

Semester-V

Course Code	Course Name	Marks		Total Marks	Credit Hours
		Mid Term	End Term		
CC-XI	हिन्दी नाटक और रंगमंच	20	80	100	6
CC-XII	भारतीय काव्य शास्त्र	20	80	100	6

DSE-I	तुलसीदास	20	80	100	6
DSE-II	प्रेमचंद	20	80	100	6
EV-V(Ethics and Values)	Vulnerable section of Society: Understanding their issues			25	1
	Total			425	25

Semester-VI

Course Code	Course Name	Marks		Total Marks	Credit Hours
		Mid Term	End Term		
CC-XIII	आधुनिक हिन्दी कविता(2)	20	80	100	6
CC-XIV	पाश्चात्य काव्य शास्त्र	20	80	100	6
DSE-III	कार्यालयी हिन्दी	20	80	100	6
DSE-IV	विज्ञापन अवधारणा और प्रयोजनमूलक आयाम परियोजना कार्य	20	80	100	6
EV-VI (Ethics and Values)	Environmental and Techno Ethics			25	1
	Total			425	25
	Grand Total			**2750**	**154**

5. Pass Percentage:

  ➢ The minimum marks required to pass any paper shall be 40 percent in each paper and 40 percent in aggregate of a semester.

  ➢ No students will be allowed to avail more than three (3) chances to pass in any paper inclusive of first attempt.

Part-I : Semester-I

Sl No.	Papers			Marks			Total Marks	Duration (Hrs)	Credit Hours
	Paper No	Title		Mid Term	Internal assessment	End Term			
1	101	हिन्दी भाषा और उसका विकास		20	10	70	100	3	4
2	102	भारतीय काव्य शास्त्र और आलोचना		20	10	70	100	3	4
3	103	हिन्दी साहित्य का इतिहास-1		20	10	70	100	3	4
4	104	आदिकालीन काव्य और भक्ति काव्य		20	10	70	100	3	4
5	105	रीति काव्य		20	10	70	100	3	4
	Total						500		20

Part-I : Semester-II

	Papers			Marks			Total Marks	Duration (Hrs)	Credit Hours
	Paper No	Title		Mid Term	Internal assessment	End Term			
6	201	भाषा विज्ञान		20	10	70	100	3	4
7	202	हिन्दी साहित्य का इतिहास-2		20	10	70	100	3	4
8	203	आधुनिक काव्य-1		20	10	70	100	3	4
9	204	कथा साहित्य- 1		20	10	70	100	3	4
10	205	पाश्चात्य काव्य चिंतन		20	10	70	100	3	4

Sl No	Paper No	Title	Mid Term	Internal assessment	End Term	Total Marks	Duration (Hrs)	Credit Hours
		DSE Papers*						
11	206(A)	प्रेमचंद	20	10	70	100	3	4
	206(B)	तुलसीदास	20	10	70	100	3	4
	206(C)	जय शंकर प्रसाद	20	10	70	100	3	4
	Total					600		24

*Discipline Specific Elective Paper. Any one paper can be opted by students of this Department

Part-II : Semester-III

Sl No	Papers		Marks			Total Marks	Duration (Hrs)	Credit Hours
	Paper No	Title	Mid Term	Internal assessment	End Term			
12	301	आधुनिक काव्य-2	20	10	70	100	3	4
13	302	कथा साहित्य- 2	20	10	70	100	3	4
14	303	दलित साहित्य	20	10	70	100	3	4
15	304	शोध प्रविधि	20	10	70	100	3	4
16	305	हिन्दी नाटक और एकाँकी	20	10	70	100	3	4
		IDSE Papers**						
17	306(A)	प्रयोजनमूलक हिन्दी	20	10	70	100	3	4
	306(B)	तुलनात्मक साहित्य	20	10	70	100	3	4
	306(C)	हिन्दी पत्रकारिता	20	10	70	100	3	4
	Total					600		24

**Inter Discipline Specific Elective Paper. Any one paper can be opted by students of other Departments.

Part-II : Semester-IV

Sl No.	Papers			Marks			Total Marks	Duration (Hrs)	Credit Hours
	Paper No	Title		Mid Term	Internal assessment	End Term			
18	401	हिन्दी आलीचक और आलोचना		20	10	70	100	3	4
19	402	निबंध तथा अन्य गद्य विधाएं		20	10	70	100	3	4
20	403	हिन्दी महिला कथाकार		20	10	70	100	3	4
21	404	भारतीय उपन्यास		20	10	70	100	3	4
22	405	लघु शोध प्रबंध प्रस्तुत एवं (मौखिकी)				100	100	3	4
	Total						500		20
	22 Papers	Grand Total					2200		88

Programme Outcomes(Hindi)

1)To make the students competent in various walks of life

2)To make the students job ready and enhance their employability.

3)To make the students aware of and responsible towards gender, religion, and class equality

4)To enhance critical thinking by making them participate in social activities and imbibe human values among them.

5)To encourage the students to participate in research at different levels through projects, interviews, surveys and field visits.

Program Specific Outcomes

On completion of M.A Hindi, students will be able :

1) To understand the basic concept and subject of Hindi and its origin.

2) To make or not the importance of subject Hindi and its Branches.

3) To understand various aspects of Hindi literature with the process of reaching a method and giving a new mode and direction.

4) To make an attempt in different areas and theory such as vocabulary and vice versa.

पाठ्यक्रम
SYLLABUS

पीएच.डी.
Ph.D.
कार्यक्रम
PROGRAMME
हिन्दी
HINDI

गंगाधर मेहेर विश्वविद्यालय

GANGADHAR MEHER UNIVERSITY
अमृत विहार, संबलपुर, ओड़िशा(भारत)–768004
Amrut Vihar, Sambalpur, Odisha(India)-768004

SYLLABUS
Ph.D. PROGRAMME IN HINDI
G.M. UNIVERSITY, SAMBALPUR

Semester – I

Paper No.	Title of Paper	Maximum Marks	Credits assigned
711	Recent Trends in the Subject	80 + 20 = 100	4 Credits
712	Research Methodology-I	80 + 20 = 100	4 Credits
713	Research Methodology-II	80 + 20 = 100	4 Credits
714	Dissertation or review Writing/ Presentation/Viva-Voce	150+25+25=200	8 Credits
	Total	500	20 Credits

Semester	Course	Course Name	Credit	Total marks
Course Structure of U.G. History Honours				
Semester- I	AECC-I	AECC-I	4	100
	C 1	History of India-I	6	100
	C 2	Social Formations and Cultural Patterns of the Ancient World	6	100
	GE-I	History of India-I (Early Times to 1750)	6	100
Semester- II	AECC-II	AECC-II	4	100
	C 3	History of India-II	6	100
	C 4	Social Formations and Cultural Patterns ofthe Medieval World	6	100
	GE-II-	History of India – II (1750-1950)	6	100
Semester- III	C 5	History of India- III(c.750-1206)	6	100
	C 6	Rise of Modern West-I	6	100
	C 7	History of India- IV(c.1206-1526)	6	100
	GE-III-	Rise of the Modern West – I	6	100
	SEC-I	SEC-I	4	100
Semester- IV	C 8	Rise of Modern West-II	6	100
	C 9	History of India- V(c.1526-1750)	6	100
	C 10	Historical Theories and Methods	6	100
	SEC-II	SEC-II- Museology and Archives	4	100
	GE-IV	Rise of the Modern West – II	6	100
Semester- V	C 11	History of Modern Europe-I(c.1780-1880)	6	100
	C 12	History of India- VII(1750-1857)	6	100
	DSE-I	History and Culture of Odisha - I	6	100
	DSE-II	History and Culture of Odisha - II	6	100
Semester- VI	C 13	History of India- VIII(C.1857-1950)	6	100
	C 14	History of Modern Europe-II(1880-1939)	6	100
	DSE-III	History and Culture of Odisha- III	6	100
	DSE-IV	Project Report	6	100
		Total	**148**	**2600**

By the end of two years, students are expected to acquire the following competencies which would also be reflected in their learning Outcomes

Competencies	Learning Outcomes
Critical and Creative Thinking Competency	✓ apply learning in the liberal arts to everyday life ✓ make connections among disciplines of study ✓ read critically ✓ ask relevant, detailed, and probing questions ✓ recognize the differences among facts, opinions, and judgments and recognize and meaningfully respond to logical fallacies ✓ express aesthetic appreciation and insight ✓ solicit feedback, evaluate, and revise creative products.
Self Awareness	⬩ Recognize their own multiple identities, experiences and biases and how these affect their ability to perceive past ⬩ Actively seek, evaluate, and, when appropriate, incorporate feedback ⬩ Evaluate and reflect on their actions and modify as necessary
Vigilant Citizenry Competency	⬩ Apply insight of the past to analyse the present ⬩ Participate in the public issues ⬩ Write up using past as a resource to understand the past ⬩ Understand the diversities and multiplicities of India
Heritage Awareness Competency	⬩ Awareness of Public Archaeology ⬩ Awareness of the antiquarian values of building, structure and laws thereof

Association

Name of Association: **Constructing the Past (Facebook Page, You Tube Page)**
Motto of Association**- History makes and unmakes Identity**

Name of Outreach Forum **– Constructing the Past** (Cultural Heritage and Historical tradition)
Motto of OUTREACH – **Public Archaeology** *i.e.,* **Make People aware of local, regional and National heritage**

Strategies: Excavations and Explorations, Heritage Walk and Talk, Writing, Debate

Course Outline and Scheme of Examination

Semester	Paper	Name of the Course	Credit/Mark
Semester I	HIS -101	MAJOR DEVELOPMENTS IN ANCIENT INDIA	4/(20 Mid sem+80 end semester)
	HIS -102	INDIANCIVILISATION (ANCIENT PERIOD)	4/(20 Mid sem+80 end semester)

	HIS -103	ARCHAEOLOGICAL THEORY AND METHODS	4/(20 Mid sem+80 end semester)
	HIS -104	MODERRN WORLD (1500-1848)	4/(20 Mid sem+80 end semester)
	HIS -105	MODERN WORLD II (19TH& EARLY 20TH CENTURY)	4/(20 Mid sem+80 end semester)
Semester II (DSE only one paper is offered	HIS -201	UNDERSTANDING EARLY MEDIEVAL INDIA	4/(20 Mid sem+80 end semester)
	HIS -202	STATE FORMATION IN MEDIEVAL INDIA (1200-1526)	4/(20 Mid sem+80 end semester)
	HIS -203	MUGHUL INDIA	4/(20 Mid sem+80 end semester)
	HIS -204	MODERN WORLD (20th century)	4/(20 Mid sem+80 end semester)
	HIS -205	ODISHA: THE MAKING OF A REGION (EARLY BEGINNINGS TO THE GAJAPATIS)	4/(20 Mid sem+80 end semester)
	HIS -206 (DSE)	WOMEN: INDIAN HISTORY	4/(20 Mid sem+80 end semester)
Semester III Only one IDSE Paper is offered to PG students other than history	HIS -301	ODISHA: MAKING OF A REGION- II (1568-1948)	4/(20 Mid sem+80 end semester)
	HIS -302	CULTURAL HISTORY OF ODISHA	4/(20 Mid sem+80 end semester)
	HIS -303	COLONIAL STATE-EXPANSION, ORGANIZATION AND STRUCTURE (1757- 1947)	4/(20 Mid sem+80 end semester)
	HIS -304	COLONIAL ECONOMY	4/(20 Mid sem+80 end semester)
	HIS -305	NATIONAL RESPONSES TO COLONIAL RULE	4/(20 Mid sem+80 end semester)
	HIS -306 A(IDSE)	WOMEN INDIAN HISTORY **OR**	4/(20 Mid sem+80 end semester)
	HIS -306	LAW AND SOCIETY IN COLONIAL	4/(20 Mid

	BA(IDSE)	INDIA	sem+80 end semester)
Semester IV	HIS -401	INDIAN HISTORIOGRAPHY	4/(20 Mid sem+80 end semester)
	HIS -402	CONCEPT OF HISTORIOGRAPHY & RESEARCH METHODOLOGY	4/(20 Mid sem+80 end semester)
	HIS -403	SOCIO CULTURAL HISTORY OF MODERN INDIA	4/(20 Mid sem+80 end semester)
	HIS -404	EPIGRAPHY AND NUMISMATIC	4/(20 Mid sem+80 end semester)
	HIS -405	DISSERTATION	4/(50+50 Viva)

PAPER- 101

MAJOR DEVELOPMENTS IN ANCIENT INDIA

Course Objectives:

The course is essentially designed to introduce students of history to the fundamentals of prehistory, prehistoric tool technology and the role of palaeo-environment within which prehistoric cultures evolved. The course will also explore some of the major themes of our human past, beginning from evolution of early hominids to the origins of agriculture and animal domestication. The student is acquainted with the cultural features of the Neolithic and Chalcolithic phases. They will learn about the origin of the Indian civilization, trade and urbanizations of ancient civilization, like Harappan civilization, Vedic civilizations, later Vedic civilizations etc.

Unit-I: Pre Historic Antecedents
1. Paleo Environment in Pleistocene Epoch and Human Evolution
2. Site distribution, Tool Typology & Technology from Lower Paleolithic to Neolithic,
3. Pastoralism and Sedantism: Archaeological evidence from Mesolithic and Neolithic sites of India, including the evidence of emergence of art and religion

Unit-II: Proto History: Harappa and Culture in Transition
1. Origin and geographical Scope, Three Phases: Early, Mature and Late: Anticipation of Mature Phase and relapse to village Culture in the Post Urban Phase
2. Major Features of Mature Phase: Homogeneity and diversity in Two Planning: Selected sites: Dholavira, Mohenjodaro, Kalibangan, Rakhigarhi, Lothal, Banawali; Town planning, Art and Craft Specialization; Trade: Internal and contact with Persian Gulf, Iran, Mesopotamia and Central Asia: Lapis Lazuli Trade,Decline of Mature

SCHEME FOR CHOICE BASED CREDIT SYSTEM
B. Sc. Information Science & Telecommunication (IST) Core 2023-24

Semester	CODE	CORE COURSE (14)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement: Elective Course (SEC) (2)	Elective: Discipline Specific DSE (4)	Elective: Generic (GE) (4)
I	CCI	Fundamentals of Computing and Programming with C (FCPC)	Environmental Studies			GE-I Physics
	CCII	Electronics Circuits(EC)				
II	CCIII	Data Structure	English Communication /Odia/ Hindi			GE-II Mathematics
	CCIV	Computer System Architecture (CSA)				
III	CCV	Operating System (OS)		SEC -I Communicative English and English Writing Skills		GE-III E-Commerce & E-BUSINESS (ECEB)
	CCVI	Digital Electronics (DE)				
	CCVII	Discrete Mathematics (DM)				
IV	CCVIII	Microprocessor& Microcontrollers (MPMC)		SEC -II Cloud Computing (CC)		GE-IV Foundations of Management & Organizational Behavior
	CCIX	Analog & Digital Communication(ADC)				
	CCX	OOP with Core JAVA(JAVA)				
V	CCXI	Database Management System (DBMS)			DSE-I Software Engineering(SE)/ Web Technology	
	CCXII	Optical Fiber Communication (OFC)			DSE–II Internet of Things (IoT)/ Computer Graphics (CG)/ Python	
VI	CCXIII	Digital Signal Processing (DSP)			DSE-III Design &Analysis of Algorithm (DAA)/ Embedded Systems Design (ESD)/ Artificial Intelligence & Machine Learning (AI&ML)	
	CCXIV	Data Communication & Computer Networks (DCCN)			DSE–IV Internship/ Project	

Post Graduate
Programme Structure
School of Library and Information Science
G.M. University, Sambalpur
Syllabus 2023-24

The Post Graduate Programme comprising two years, will be divided into 4 (four) semesters each of six months duration.

Year	Semesters	
First Year	Semester I	Semester II
Second Year	Semester III	Semester IV

The details of title of papers, credit hours, division of marks etc of all the papers of all semesters is given below.

1. There will be two elective groups namely:

   ➢ Discipline Specific Elective in Sem II.

   ➢ Interdisciplinary Elective in Sem III.

A student has to select one of the DSE paper in Sem II and one of the paper in Sem III as offered by the respective department at the beginning of semester II and semester III respectively.

2. Each paper will be of 100 marks out of which 70 marks shall be allocated for semester examination and 30 marks for internal assessment (Mid Term Examination).

3. There will be four lecture hours of teaching per week for each paper.

4. Duration of examination of each paper shall be three hours.

5. Pass Percentage:

   ➢ The minimum marks required to pass any paper shall be 40 percent in each paper and 40 percent in aggregate of a semester.

   ➢ No students will be allowed to avail more than three (3) chances to pass in any paper inclusive of first attempt.

Semester-I: Part-I

Papers		Marks		Total Marks	Duration (Hrs)	Credit Hours
Paper No	Title	Mid Term	End Term			
101	Foundation of Library and Information Science	30	70	100	3	4
102	Organization of Knowledge – Classification Theory	30	70	100	3	4
103	Organization of Knowledge – Cataloguing Theory	30	70	100	3	4
104	Management of Library & Information Centres	30	70	100	3	4
105	Organization of Knowledge – Classification Practice and Cataloguing Practice	-	100	100	3	4
Total				**500**		**20**

Semester-II: Part-I

Papers		Marks		Total Marks	Duration (Hrs)	Credit Hours
Paper No	Title	Mid Term	End Term			
201	Search Strategies and Techniques	30	70	100	3	4
202	Information Sources & Services	30	70	100	3	4
203	Basics of Information and Communication Technology & Application in Libraries	30	70	100	3	4
204	Personality Development & Communication Skill	30	70	100	3	4
205	ICT and Library Management Software-Practice	-	100	100	3	4
DSE Papers* (Any one)						
206 A	Preservation & Conservation of Library Materials	30	70	100	3	4
206 B	Community Information Service	30	70	100	3	4
206 C	Information Resource Development	30	70	100	3	4
	Total			600		24

*Discipline Specific Elective Paper. Any one paper can be opted by students of this Department.

Semester-III: Part-II

Papers		Marks		Total Marks	Duration (Hrs)	Credit Hours
Paper No	Title	Mid Term	End Term			
301	Information Retrieval	30	70	100	3	4
302	Digital Library and Content Management	30	70	100	3	4
303	Academic Library System	30	70	100	3	4
304	Web Technologies	30	70	100	3	4
305	Internship and Content Management Software Practice	-	100	100	3	4
IDSE Papers**						
306 A	Intellectual Property Rights & Copyright	30	70	100	3	4
306 B	Internet & Its Applications	30	70	100	3	4
306 C	Electronic Publishing (E-Publishing)	30	70	100	3	4
306 D	Open Access & Scholarly Communications	30	70	100	3	4
	Total			**600**		**24**

**Inter Discipline Specific Elective Paper. Any one paper can be opted by students of other Departments.

Semester-IV: Part-II

Papers		Marks		Total Marks	Duration (Hrs)	Credit Hours
Paper No	Title	Mid Term	End Term			
401	Research Methodology	30	70	100	3	4
402	Information System and Networks	30	70	100	3	4
403	Knowledge Management	30	70	100	3	4
404	Information Literacy	30	70	100	3	4
405	Dissertation/Project and Viva-voce	-	100	100	3	4
Total				**500**		**20**
22 Papers	**Grand Total**			**2200**		**88**

Employability	Entrepreneurship	Skill Development

COURSES OF STUDIES

FOR PHD PROGRAM
(UNDER SEMESTER SYSTEM)
2023-24

GANGADHAR MEHER UNIVERSITY, SAMBALPUR, ODISHA

SEMESTER SYSTEM OF PHD

Sl No.	Paper	Semester	Credit	(Marks) Mid Term + Term End	Teaching Hours
1	711 (Departmental)	Sem-1	4	100 (20+80)	60 Hrs
2	712 (Research Methgodology-1)	Sem-1	4	100 (20+80)	60 Hrs
3	713 (Research Methgodology-2)	Sem-1	4	100 (20+80)	60 Hrs
4	Teaching Assignment	Sem-1	4	100 (0+100)	60 Hrs
5	Dissertation	Sem-2	08	200	120 Hrs
	TOTAL		24	600 (60+540)	360 Hrs

Revised Syllabus of pre-registration course work for PhD in GMU.

School of Library and Information Science
Course No. 711: PhD Course work

RESEARCH TRENDS IN LIBRARY AND INFORMATION SCIENCE

Objectives: **1.** To acquaint the students with the basic concept and research trend in Library and Information Science.
2. To acquaint with the basic concept of Information Communication Technology & Networking.
.
Course Outcomes: After completion of the course, students will be able
CO-1 Understand the basic concept of research trends in the subject.
CO-2 To analyze the role of consortia and information Centre.
CO-3 To apply the concept of Networking and IPR in electronic environment.
CO-4 To implement the different models and research communication channel in information science.

Unit-I Trends and Developments in Library and Information Management
- Resource Management and Development: Human, Financial, E-Resources and Open Educational Resources
- Digital Library: Components, Digitization tools and technologies, Digital Library Initiatives in India, Open Access Initiative
- Marketing of information Products and Services
- Disaster Management, Digital Information Resources Management, Knowledge Management

A Brief Overview of Syllabus

Semester	Course	Course Name	Credits	Marks	Total Marks
I	AECC-I	AECC-I	04		100
	C-I(Theory)	Calculus	04	75	100
	C-I(Practical)		02	25	
	C-II(Theory)	Discrete Mathematics	05	75	100
	C-II(Practical)		01	25	
	GE-I(Theory)	Calculus and Differential	05	75	100
	GE-I(Practical)	Equations	01	25	
		Total	22		400
II	AECC-II	AECC-II	04		100
	C-III(Theory)	Real Analysis	05	75	100
	C-III(Practical)		01	25	
	C-IV (Theory)	Differential Equations	04	75	100
	C-IV(Practical)		02	25	
	GE-II (Theory)	Algebra	05	75	100
	GE-II(Practical)		01	25	
		Total	22		400
III	C-V(Theory)	Theory of Real Functions	05	75	100
	C-V(Practical)		01	25	
	C-VI(Theory)	Group Theory-I	05	75	100
	C-VI(Practical)		01	25	
	C-VII(Theory)	Partial Differential Equations	04	75	100
	C-VII(Practical)	andSystem of ODEs	02	25	
	GE-III(Theory)	Real Analysis	05	75	100
	GE-III(Practical)		01	25	
	SECC-I*	SECC-I	04	100	100
		Total	28		500
IV	C-VIII(Theory)	Numerical Methods and	04	75	100
	C-VIII(Practical)	Scientific Computing	02	25	
	C-IX(Theory)	Topology of Metric Spaces	05	75	100
	C-IX(Practical)		01	25	
	C-X(Theory)	Ring Theory	05	75	100
	C-X(Practical)		01	25	
	GE-IV(Theory)	Numerical Methods	05	75	100
	GE-IV(Practical)		01	25	
	SECC-II*	SECC-II	04	100	100
		Total	28		500
V	C-XI(Theory)	Multivariable Calculus	05	75	100
	C-XI(Practical)		01	25	
	C-XII(Theory)	Linear Algebra	05	75	100
	C-XII(Practical)		01	25	
	DSE-I(Theory)	Linear Programming	05	75	100
	DSE-I(Practical)		01	25	

	DSE-II (Theory)	Probability and Statistics	05	75	100
	DSE-II(Practical)		01	25	
		Total	24		400
VI	C-XIII(Theory)	Complex Analysis	05	75	100
	C-XIII(Practical)		01	25	
	C-XIV(Theory)	Group Theory-II	05	75	100
	C-XIV(Practical)		01	25	
	DSE-III(Theory)	Differential Geometry	05	75	100
	DSE-III(Practical)		01	25	
	DSE-IV	Number Theory/Project	06	100	100
		Total	24		400
		Grand Total	148		2600

* SECC papers may be offered by University
   1. Modern Office Management
     2. Leadership and Personality Development
     3. Financial Literacy and Banking
     4. Data Analysis and Computer Application

Value Added Course offered beyond the prescribed syllabus				
Course Code	Course Name	Credits	Total Marks	Contact Hours
23VACSOM-01	Art of Solving Problems in Mathematics	02	100	30 Hours

Brief Overview of Syllabus

Subject Code	Subject Name	L-T-P	Credit	Maximum Marks			
				IA	EA	PA	Total
Paper – 101	Algebra	4-0-0	4	20	80	-	100
Paper - 102	Ordinary Differential Equation	4-0-0	4	20	80	-	100
Paper - 103	Real Analysis	4-0-0	4	20	80	-	100
Paper - 104	Programming in C	4-0-0	4	20	80	-	100
Paper - 105	Practical	0-0-4	4	00	100	-	100
	Total		**20**				**500**
Paper - 201	Complex Analysis	4-0-0	4	20	80		100
Paper – 202	Topology	4-0-0	4	20	80		100
Paper – 203	Numerical Analysis	4-0-0	4	20	80		100
Paper - 204	Programming with C++ - I	4-0-0	4	20	80		100
Paper - 205	Practical	0-0-4	4	00	100		100
Paper –206A	Mathematical Method	4-0-0	4	20	80		100
Paper – 206B	Graph Theory	4-0-0	4	20	80		100
Paper – 206C	Advance Calculus	4-0-0	4	20	80		100
	Total		**24**				**600**
Paper - 301	Fourier Analysis	4-0-0	4	20	80		100
Paper- 302	Functional Analysis	4-0-0	4	20	80		100
Paper - 303	Differential Geometry	4-0-0	4	20	80		100
Paper - 304	Programming with C++ - II	4-0-0	4	20	80		100
Paper - 305	Practical	**0-0-4**	4	00	100		100
Paper – 306 A	Operation Research	4-0-0	4	20	80		100
Paper – 306 B	Elements of Number Theory	4-0-0	4	20	80		100
Paper –306 C	Elements of Computer Programming	4-0-0	4	20	80		100
	Total		**24**				**600**
Paper - 401	Operation Research	4-0-0	4	20	80		100
Paper - 402	Partial Differential Equations	4-0-0	4	20	80		100
Paper - 403	Operator Theory	4-0-0	4	20	80		100
Paper - 404	Number Theory	4-0-0	4	20	80		100
Paper - 405	Practical/Project	0-0-4	4	0	100		100
	Total		**20**				**500**
	Grand Total		**88**				**2200**

Abbreviations Used: IA = Internal Assessment, PA = Practical Assessment, EA = End-Semester Assessment

Value Added Course offered beyond the prescribed syllabus					
Semester	Course Code	Course Name	Credits	Total Marks	Contact Hours
Any Semester	23VACSOM-02	Typesetting in Latex	02	100	30 Hours

BROAD FORMAT OF SYLLABUS OF M.PHIL AND Ph.D PROGRAM
G. M. UNIVERSITY, SAMBALPUR

M.Phil Program

Semester-I

Paper No.	Title of Paper	Maximum Marks	Credits assigned
611	Recent Trends in the Subject	80+20=100	4 Credits
612	Research Methodology-I	80+20=100	4 Credits
613	Research Methodology-II	80+20=100	4 Credits
614	Teaching Assignment	100	4 Credits
	Total	400	16 Credits

Semester-II

Paper No:	Title of Paper	Maximum Marks	Credits assigned
621	Dissertation (Report/ Presentation/ Viva-Voce)	150+25+25=200	8 Credits

Ph.D Program

Semester-I

Paper No.	Title of Paper	Maximum Marks	Credits assigned
711	Recent Trends in the Subject	80+20=100	4 Credits
712	Research Methodology-I	80+20=100	4 Credits
713	Research Methodology-II	80+20=100	4 Credits
714	Dissertation or Review Writing/Presentation/ Viva-Voce	150+25+25=200	8 Credits
	Total	500	20 Credits

MCA
Programme Structure

Year	Semesters	
First Year	Semester I	Semester II
Second Year	Semester III	Semester IV

Part-I: Semester-I

Papers		Duration (Hrs)	Credit
Paper No	Title		
MCA101	Programming and Data Structure	4	4
MCA102	Data Communication and Networks	4	4
MCA103	Operating Systems	4	4
MCA104	Mathematical Foundations of Computer Science	4	4
MCA105	Lab I(Data Structure and Operating System)	6	4
Total			**20**

Part-I: Semester-II

Papers		Duration (Hrs)	Credit
Paper No	Title		
MCA201	Object Oriented Programming using JAVA	4	4
MCA202	Computer Organization and Architecture	4	4
MCA203	Database Management Systems	4	4
MCA204	Formal Language and Automata Theory	4	4
MCA205	Lab II (OOP using Java and DBMS)	6	4
	DSE-I Papers		
MCA206 A	**Data Warehousing and Mining**	4	4
MCA206 B	**Ecommerce**	4	4
MCA206 C	**Internet of Things**	4	4
MCA206D	**Mobile Application Development**	4	4
MCA206E	**Machine Learning**	4	4
Total			**24**

Part-II: Semester-III

Papers		Duration (Hrs)	Credit
Paper No	Title		
MCA301	Software Engineering and OOAD	4	4
MCA302	Web Technology	4	4
MCA303	Design and Analysis of Algorithms	4	4
	DSE-II Papers		
MCA304A	**Data Science**	4	4
MCA304B	**Compiler Construction**	4	4
MCA304C	**Information Security**	4	4
MCA304D	**Digital Image Processing**	4	4
MCA304E	**Soft Computing**	4	4
MCA305	Lab III (Web Technology and Software Engineering)	6	4
IDSE Papers			
MCA306A	**Network and Internet Technologies**	4	4
MCA306B	**Fundamentals of Computer**	4	4
MCA306C	**Python Programming**	4	4
Total			**24**

Part-II: Semester-IV

Papers		Credit
Paper No	Title	
MCA401	Industrial Project Work and VIVA VOCE	20
	MOOCs-1	
	MOOCs-2	6
Total		**20+6***
	Grand Total	**88+6***

Value Added Course offered beyond the prescribed syllabus

Subject	Duration(Hrs)	Credit
Web Designing	40	4

*Non-Divisional Credits

SEMESTER WISE CREDIT DISTRIBUTION					
Semester	**I**	**II**	**III**	**IV**	**TOTAL**
Total Credit	**20**	**24**	**24**	**20+6***	**88+6***

NB:
- The students are encouraged to take two extra MOOCs courses to earn a maximum of 6 Credits.
- Each theory paper consists of 100 marks(Mid Sem 30,End Sem 70).
- Lab Exam will be of 100 marks.

Semester I

Papers		Marks		Total Marks	Credit Hours
Paper No	Title	Mid Term	End Term		
୧୦୧	ପ୍ରାଚୀନ ଓଡ଼ିଆ ସାହିତ୍ୟ	୩୦	୭୦	୧୦୦	୪
୧୦୨	ମଧ୍ୟଯୁଗୀୟ ଓଡ଼ିଆ ସାହିତ୍ୟ	୩୦	୭୦	୧୦୦	୪
୧୦୩	ଆଧୁନିକ ସାହିତ୍ୟ	୩୦	୭୦	୧୦୦	୪
୧୦୪	ସ୍ୱାଧୀନତା ପୂର୍ବବର୍ତ୍ତୀ ଓଡ଼ିଆ ସାହିତ୍ୟ	୩୦	୭୦	୧୦୦	୪
୧୦୫	ସ୍ୱାଧୀନତା ପରବର୍ତ୍ତୀ ଓଡ଼ିଆ ସାହିତ୍ୟ	୩୦	୭୦	୧୦୦	୪
	Total			୫୦୦	୭୦

Semester II

Papers		Marks		Total Marks	Credit Hours
Paper No	Title	Mid Term	End Term		
୨୦୧	ଓଡ଼ିଆ ସାହିତ୍ୟ ଓ ବ୍ୟାକରଣ	୩୦	୭୦	୧୦୦	୪
୨୦୨	ସାହିତ୍ୟ ତତ୍ତ୍ୱ	୩୦	୭୦	୧୦୦	୪
୨୦୩	ଓଡ଼ିଆ ଗଦ୍ୟ ସାହିତ୍ୟ	୩୦	୭୦	୧୦୦	୪
୨୦୪	ଓଡ଼ିଆ ପଦ୍ୟ ସାହିତ୍ୟ	୩୦	୭୦	୧୦୦	୪
୨୦୫	ଓଡ଼ିଆ ନାଟକ ଓ ଏକାଙ୍କିକା	୩୦	୭୦	୧୦୦	୪
୨୦୬	ଓଡ଼ିଆ ଗଳ୍ପ ଓ ଉପନ୍ୟାସ (DSE)	୩୦	୭୦	୧୦୦	୪
	Total			୬୦୦	୨୪

SemesterIII

Papers		Marks		Total Marks	Credit Hours
Paper No	Title	Mid Term	End Term		
୩୦୧	ପାଠ (ଚର୍ବିତ, ଗଳ୍ପ, ଜୀବନ୍ୟାସ,ନାଟକ)	୩୦	୭୦	୧୦୦	୪
୩୦୨	ପାଠ (ପୁରାଣ,କାବ୍ୟ,ଏକାଙ୍କିକା,ପ୍ରବନ୍ଧ, ରମ୍ୟରଚନା)	୩୦	୭୦	୧୦୦	୪
୩୦୩	ପାଶ୍ଚାତ୍ୟ ସାହିତ୍ୟ ସମାଲୋଚନା	୩୦	୭୦	୧୦୦	୪
୩୦୪	ଓଡ଼ିଆ କାବ୍ୟ ସାହିତ୍ୟ	୩୦	୭୦	୧୦୦	୪
୩୦୫	ଓଡ଼ିଆ ଭାଷା ତତ୍ତ୍ୱ	୩୦	୭୦	୧୦୦	୪
୩୦୬	ଓଡ଼ିଆ ସାହିତ୍ୟରେ ଆଧୁନିକ ଧାରା	୩୦	୭୦	୧୦୦	୪
	Total			୬୦୦	୨୪

SemesterIV

Papers		Marks		Total Marks	Credit Hour
Paper No	Title	Mid Term	End Term		
୪୦୧	ସ୍ୱାଧୀନତା ପରବର୍ତ୍ତୀ ଓଡ଼ିଆ କବିତା	୩୦	୭୦	୧୦୦	୪
୪୦୨	ଗଙ୍ଗାଧର ସାହିତ୍ୟ	୩୦	୭୦	୧୦୦	୪
୪୦୩	ଲୋକ ସାହିତ୍ୟ ଓ ଅଭିଲେଖ ସାହିତ୍ୟ	୩୦	୭୦	୧୦୦	୪
୪୦୪	ଗବେଷଣାର ପ୍ରବିଧି	୩୦	୭୦	୧୦୦	୪
୪୦୫	ପ୍ରକଳ୍ପ ପ୍ରସ୍ତୁତି ଓ ମୌଖିକ ପରୀକ୍ଷା	୩୦	୭୦	୧୦୦	୪
	Total			୬୦୦	୨୦
	Grand Total			୨୨୦୦	

ଗଙ୍ଗାଧର ମେହେର ବିଶ୍ୱବିଦ୍ୟାଳୟ,

ସମ୍ବଲପୁର

ପିଏଚ୍. ଡି. (ଓଡ଼ିଆ) ପାଠ୍ୟକ୍ରମ

୨୦୧୮

ଓଡ଼ିଆ ଭାଷା ଓ ସାହିତ୍ୟ ବିଭାଗ

ପିଏଚ୍.ଡି (ଓଡ଼ିଆ) ପାଠ୍ୟକ୍ରମ

ସେମିଷ୍ଟାର-୧

ପତ୍ର ସଂଖ୍ୟା :- ୭୧୧   ଓଡ଼ିଆ ସାହିତ୍ୟରେ ଆଧୁନିକ ଧାରା (Modern Trends)   ପୂର୍ଣ ସଂଖ୍ୟା-୧୦୦ (୮୦+୨୦)

ପ୍ରଥମ ଏକକ : ତୁଳନାତ୍ମକ ସାହିତ୍ୟର ସଂଜ୍ଞା ଓ ସ୍ୱରୂପ, ଉପଯୋଗିତା, ତୁଳନାତ୍ମକ ସାହିତ୍ୟର ଲକ୍ଷ୍ୟ, ତୁଳନାତ୍ମକ ସାହିତ୍ୟର ପରମ୍ପରା ଓ ପରିସର, ଓଡ଼ିଆ ତୁଳନାତ୍ମକ ସାହିତ୍ୟର ଧାରା, ତୁଳନାତ୍ମକ ସାହିତ୍ୟର ଭବିଷ୍ୟତ ।

ଦ୍ୱିତୀୟ ଏକକ : ସମ୍ପାଦନା ଓ ସଂକଳନର ସଂଜ୍ଞା, ସ୍ୱରୂପ, ଆବଶ୍ୟକତା ଓ ଉପଯୋଗିତା । ଅନୁବାଦ ଓ ଅନୁସୃଜନ ର ସଂଜ୍ଞା ଓ ସ୍ୱରୂପ, ପ୍ରକାରଭେଦ, ଓଡ଼ିଆ ସାହିତ୍ୟରେ ଅନୁବାଦର ଧାରା, ଅନୁବାଦର ଉପଯୋଗିତା, ଅନୁବାଦର ଭବିଷ୍ୟତ ।

ତୃତୀୟ ଏକକ : ସମାଲୋଚନାର ସଂଜ୍ଞା ଓ ସ୍ୱରୂପ, ସମାଲୋଚନା ର ପ୍ରକାରଭେଦ, ଓଡ଼ିଆ ସାହିତ୍ୟରେ ସମାଲୋଚନାର ଧାରା, ସମାଲୋଚନାର ଆବଶ୍ୟକତା ଓ ଉପଯୋଗିତା ।

ଚତୁର୍ଥ ଏକକ : ମିଥ୍, ଭୂୟୋକଳ୍ପ, ଚିତ୍ରକଳ୍ପ, ରସବାଦ, ସଂରଚନାବାଦ, ବିଗଠନବାଦ, ଜୁତ୍ତକ ବାସ୍ତବବାଦ (Magic Realism) ସବୁଜ ସମାଲୋଚନା (Eco Criticism) ।

ଗବେଷଣା ପଦ୍ଧତି (Research Methodology)

ପତ୍ର ସଂଖ୍ୟା :- ୭୧୨   ପୂର୍ଣସଂଖ୍ୟା- ୧୦୦ (୮୦+୨୦)

ପ୍ରଥମ ଏକକ : ଗବେଷଣାର ସଂଜ୍ଞା, ସ୍ୱରୂପ, ପରିସର, ଗବେଷଣାର ଲକ୍ଷ୍ୟ, ଗବେଷଣାର ମୂଖ୍ୟ ଅଭିମୁଖ୍ୟ, ଗବେଷଣାରେ ନୈତିକ ବିଧି (Ethics), ଚୌର୍ଯ୍ୟବୃତ୍ତି (Plagiarism) ବାଧା (Pitfall), ଗବେଷଣାର ପ୍ରକାରଭେଦ :-

(i) ଗୁଣାତ୍ମକ ବା ଚାର୍ଲିକ ଗବେଷଣା (Qualitative Research) :ସାହିତ୍ୟିକ ଗବେଷଣା, ଭାଷାତାତ୍ତ୍ୱିକ ଗବେଷଣା, ନନ୍ଦନତାତ୍ତ୍ୱିକ ଗବେଷଣା, ଐତିହାସିକ ଗବେଷଣା, ସମାଜତାତ୍ତ୍ୱିକ ଗବେଷଣା, ସୌନ୍ଦର୍ଯ୍ୟବୋଧିକ ଗବେଷଣା, ତୁଳନାତ୍ମକ ଗବେଷଣା ।

(ii) ପରିମାଣାତ୍ମକ ଗବେଷଣା (Quantitative Research): ପରୀକ୍ଷାମୂଳକ ଗବେଷଣା, କ୍ରିୟାତ୍ମକ ଗବେଷଣା (Action Research) ବିକଳ୍ପମୂଳକ ଗବେଷଣା, ପରିବ୍ୟଞ୍ଜନାତ୍ମକ ଗବେଷଣା ।

ଗବେଷକର ଧର୍ମ ଓ ବୈଶିଷ୍ଟ୍ୟ, ଗବେଷକ ଓ ଦିଗ୍‌ଦର୍ଶକ, ଦିଗ୍‌ଦର୍ଶକର କର୍ତବ୍ୟ ଓ ବୈଶିଷ୍ଟ୍ୟ ।

ଦ୍ୱିତୀୟ ଏକକ : ପ୍ରାକ୍ ଜଳ୍ପନା ବା ସମ୍ଭାବ୍ୟ କାରଣ ନିର୍ଦ୍ଧାରଣ (Hypothesis)

ପ୍ରାକ୍‌ଜଳ୍ପନାର ଢାଞ୍ଚ ଏବଂ ପ୍ରକାର ଭେଦ (Manner and Classification of Hypothesis)

ପ୍ରାକ୍‌ଜଳ୍ପନାର ନାନ୍ଦିକ ବୈଶିଷ୍ଟ୍ୟ (Estimation & Testing of Hypothesis)

ତଥ୍ୟ ପ୍ରୟୋଗର କାର୍ଯ୍ୟଧାରା (Data Processing) : ଉପକ୍ରମ (Introduction) ସମ୍ପାଦନା (Editing) ସାଙ୍କେତ କରଣ(Coding)- ଅକ୍ଷୀୟ ମୂଳକ(Oxial) ମୁକ୍ତ(Open)

ତଥ୍ୟ ବିଶ୍ଳେଷଣା (Data Analysis) : ସାଧାରଣୀକରଣ(Tabulation)

(i) ବୃଦ୍ଧିମୂଳକ ବିଶ୍ଳେଷଣା (Inductive Analysis)

(ii) ସାଧାରଣ ସମ୍ଭାଧାର ମୂଳକ ବିଶ୍ଳେଷଣା (Deductive Analysis)

ଗବେଷଣା ବିଧି ଘୋଷଣା (Components of Research Proposal)

ପ୍ରକଳ୍ପ ସିଂହିଳନ (Project summary) ଶବ୍ଦଗତ ସୂଚୀ (Key Word)

ପ୍ରକଳ୍ପ ପ୍ରସୂତ (Origin of the Proposal) ମୁଖ୍ୟ ଉଦ୍ଦେଶ୍ୟ (Main Objectives)

ଦ୍ୱିତୀୟ ଏକକ : ଗବେଷଣା ସମସ୍ୟା ଚୟନ (Identification of Research Problem)

ପ୍ରସଙ୍ଗ ବିର୍ବାଚନର ମାନଦଣ୍ଡ (Criterion of Research Problem Selection)

ଗବେଷଣା ପ୍ରକ୍ରିୟା (Research Process)

ଗବେଷଣା ମୂଳକ ରୂପାୟନ (Research Design)

ମୂଳକ ରୂପାୟନର ପ୍ରକାରଭେଦ ଏବଂ ବୈଶିଷ୍ଟ୍ୟ (Types & Importance of Research Design)

ଗବେଷଣାର ଭାଷା ଚୟନ (Selection of Language) .

ଗବେଷଣ ଉପକରଣ /ତଥ୍ୟ ସୁବିଧାନ୍ୟ (Instrument / Data Facilities in the Place of Research)

ଗବେଷଣ ପଦ୍ଧତି (Methods of Investigation) ସର୍ବେକ୍ଷଣ ପଦ୍ଧତି (Survey Method) ସର୍ବେକ୍ଷଣ (ବ୍ୟକ୍ତିଗତ ବା ଗୋଷ୍ଠୀଗତ) ଘଟଣ ଅଧ୍ୟୟନ ପଦ୍ଧତି (Case study Method), ସାହିତ୍ୟିକ ତଥ୍ୟ ବିଶ୍ଳେଷଣ ଧର୍ମୀ ପଦ୍ଧତି (Literary Data Analysis Method) . କାରଣଧର୍ମୀ ତୁଳନାତ୍ମକ ପଦ୍ଧତି (Causal - comparative Method), ବିଜ୍ଞାନଧର୍ମୀ ପଦ୍ଧତି (Scientific Method)

ବିଷୟବସ୍ତୁ ବି ବିଶ୍ଳେଷଣାତ୍ମକ ପଦ୍ଧତି (Content Analysis Method), ପରୀକ୍ଷାଧର୍ମୀ ପଦ୍ଧତି (Testing Method)

ଚତୁର୍ଥ ଏକକ : ତଥ୍ୟ ସଂଗ୍ରହ ପଦ୍ଧତି (Methods of Collecting Data) :

(a) ପ୍ରାଥମିକ ବା ମୌଳିକ ତଥ୍ୟ ସଂଗ୍ରହ ପଦ୍ଧତି (Methods of Primary data collection) - ନିରୀକ୍ଷଣ (Observation),

ସାକ୍ଷାତକାର(Interview), ଡାକ ସର୍ବେକ୍ଷଣ (Mail Survey)

(b) ପରୋକ୍ଷ ତଥ୍ୟ ସଂଗ୍ରହ ପଦ୍ଧତି (Methods of secondary data collection)-ପରୋକ୍ଷ ତଥ୍ୟର ବୈଶିଷ୍ଟ୍ୟ (Significance of secondary data) ପରୋକ୍ଷ ତଥ୍ୟର ମୂଲ୍ୟାୟନ (Evaluation of secondary data), ପରୋକ୍ଷ ତଥ୍ୟର ଉତ୍ସ (Sources of secondary data) -(i) ମୌଳିକ ଉତ୍ସ -ସାମୁଦ୍ରିକ, ଡାଏରୀ , ଅଭିଲେଖ, ପାଟାୟାର, ପତ୍ର-ପତ୍ରିକା, ପ୍ରକାଶିତ ପୁସ୍ତକ, ସମ୍ବାଦପତ୍ର, ଗୋଷ୍ଠୀଗତ ରିପୋର୍ଟ, ପରିସଂଖ୍ୟାନ, ନକ୍ସାଦି, ସୂଚକପତ୍ର (Index)

(ii) ଗୌଣ ଉତ୍ସ- ପ୍ରବନ୍ଧ, ସମୀକ୍ଷା, ଟୀକା-ଟିପ୍ପଣୀ, ପାରସ୍ପରୀକ ସାହିତ୍ୟିକ ତଥ୍ୟାନୁସନ୍ଧାନ ଅନୁସନ୍ଧାନ ତାଳିକା : ସ୍କୋପସ(SCOPUS) ଗୁଗୁଲ୍ ସ୍କଲାର୍ (google scholar), ପୋବ୍ମେଡ୍ (PubMed), ୱେବ୍ ସାଇନ୍ସ (Web science), ଭାରତୀୟ ସାୟତେସନ ଇନ୍ଦେକ୍ସ ଏଣ୍ଡ ଆର୍ ଜି (Indian Citation Index and R G) ତଥ୍ୟ ଉପସ୍ଥାପନ ଶୈଳୀ (Styles of referencing) - APA, MLA, Oxford, Harvard, Chicago.

ତଥ୍ୟ ସଂଗ୍ରହ ଉପକରଣ (Tools of collecting data) -ପରୀକ୍ଷା (Test), କ୍ରମାବର୍ତ୍ତମାନ ଅଭିଲେଖନ ପତ୍ର (Cumulative Record Card) ପ୍ରଶ୍ନାବଳୀ (Questionnaire) ମାର୍ଗଦର୍ଶୀ ଅଧ୍ୟୟନ (Pilot-Study) ପ୍ରଶ୍ନମଞ୍ଜରୀ, ବିଧିଗତ କ୍ୟାଟୋଗ୍, ଗୋନଟ୍ରଭାନ ।

ପତ୍ର ସଂଖ୍ୟା ୨୧୩ :

ପ୍ରଥମ ଏକକ : ଗବେଷଣା ନିବନ୍ଧ ପ୍ରସ୍ତୁତି (Preparation of Research Thesis) ଗବେଷଣା ନିବନ୍ଧର ଅଂଶ ଓ ଗଠନ, ଠିକଣା ଶୀର୍ଷକ, ପୃଷ୍ଠ, ସୂଚୀପତ୍ର, ପୃଷ୍ଠାଙ୍କ, ସ୍ୱୀକାରୋକ୍ତି, ଧ୍ୟେୟ ସୂଚନା ମନ୍ତବ୍ୟ, ସଂକ୍ଷେପାବ୍ୟକ୍ତୀ,ଲେଖ ବିବରଣୀ, ଚିତ୍ର, ଆଲୋକଚିତ୍ର, ଲୈଖାପତ୍ର, ଇତ୍ୟାଦି,ପାଦଟୀକା, ସଂଦର୍ଭ ସୂଚୀ, ବିଷୟ ସୂଚୀ, ସାରଣୀ, ମୂଳ ଦସ୍ତାବେଜ, ପରିଶିଷ୍ଟସମୂହ, ସଟୀକ ଗ୍ରନ୍ଥ ସୂଚୀ (Annotated Bibliography)

ଗବେଷଣା ନିବନ୍ଧନ ଲିଖନ (Research Report Writing):

ଭୂମିକା (Introduction) ବିବରଣୀର ପ୍ରକାରଭେଦ (Types of Report) ବିବରଣୀର ବିଷୟବସ୍ତୁ (Contents of a Report) ବିବରଣୀ ନିଆଁପ୍ରସ୍ତୁତିର ସୋପାନ (Steps in Drafting Report)

ଦ୍ୱିତୀୟ ଏକକ : ଉପସ୍ଥାପନ ଏବଂ ଯୋଗାଯୋଗର ଦକ୍ଷତା (Presentation & Communication Skills): ସାରଣୀ ପୃଷ୍ଠ ସୂଚନା ପ୍ରସ୍ତୁତି, ଟେବୁଲସ୍,ଫିଗର୍ସ ଏବଂ ପିକଚର୍ସ ୟୁଜିଙ୍ଗ ଏକ୍ସେଲ୍ (Tables ,Figures and Picture Using Excel) ପ୍ରସ୍ତୁତି, ପାଣ୍ଡୁଲିପିର ଅନଲାଇନ ଉପସ୍ଥାପନ (Electronic Submission of Manuscript), ଯୋଗାଯୋଗ ଦକ୍ଷତା (Communication Skills) ମୌଖିକ, ପ୍ରବନ୍ଧପର୍ଠ ।

ତୃତୀୟ ଏକକ :ବୌଦ୍ଧିକ ସମ୍ପଦ ଅଧିକାର ଏବଂ ସାଇବର ନିୟମ (IPR & Cyber Law) ଏକାଟ୍ ରା ଅଧିକାରାସ (Patents) ଅନୁସ୍ୱର ନିୟମ (Patent Laws), ଗବେଷଣାଲବ୍ଧ ନିଷ୍କର୍ଷକୁ ଏକାଧୁକାର କରିବାର ଧାରଁଧାରା (Process of Patenting a Research Findings), ବୌଦ୍ଧିକ ସମ୍ପଦ (Intellectual Property), ବୌଦ୍ଧିକ ସମ୍ପଦ ଅନୁକାର (Intellectual Property Right - IPR) ସ୍ୱତ୍ୱାଧୁକାର (Copy Right) ସ୍ୱଚିହ୍ନ (Trade marks) ଜି ଆଇ(G .I), ସାଇବର ନିୟମ (Cyber Laws) ଦଣ୍ଡ (Cope)

ଚତୁର୍ଥ ଏକକ : କମ୍ପ୍ୟୁଟର ପାଥମଥାଶିଳତା [Computer Fundamentals]

Introduction to M.S Office Software : MS word (Track Change) MS-access Excel Power Point, Odia DTP, Data base management, Features of statistical data analysis using computer and software, Microsoft Excel Data Analysis,Tool Park- SPSS.

ପତ୍ର ସଂଖ୍ୟା :୨୧୪

Review Work

ଗୋଟିଏ ଗବେଷଣାୟକ ପୁସ୍ତକ ସମୀକ୍ଷା

	୧୫୦
ସମୀକ୍ଷା ନିବନ୍ଧ ପ୍ରସ୍ତୁତି	୨୫
ଉପସ୍ଥାପନ	୨୫
ମୌଖିକ	

ସହାୟକ ଗ୍ରନ୍ଥ ସୂଚୀ :

୧. ଭାରତୀୟ ସାହିତ୍ୟ ତଲ୍ଵ

୨. ସମାଲୋଚନା ସାହିତ୍ୟ

୩. ପାଶ୍ଚାତ୍ୟ ସାହିତ୍ୟ ଓ ସମାଲୋଚନା

୪. ସମାଲୋଚନାର ଦିଗ ଓ ଦିଗନ୍ତ

୫. ତୁଳନାତ୍ମକ ସାହିତ୍ୟ : ଦୃଷ୍ଟି ଓ ଦିଗ

୬. ଐତିହିକ ପାଶ୍ଚାତ୍ୟ ସାହିତ୍ୟ ତଲ୍ଵ

୭. ଅନୁବାଦ ତଲ୍ଵ ଓ ପ୍ରୟୋଗ

୮. ସାହିତ୍ୟର ରୂପତତ୍ତ୍ୱ

୯. ପ୍ରାଚ୍ୟ ଓ ପାଶ୍ଚାତ୍ୟ ସାହିତ୍ୟତତ୍ତ୍ୱ

୧୦. ସାହିତ୍ୟର ରୂପାବଳୀ

୧୧. ସାହିତ୍ୟ ତତ୍ତ୍ୱ : ପ୍ରାଚ୍ୟ ପାଶ୍ଚାତ୍ୟ

୧୨. ଗବେଷଣା ବିଧି ସମ୍ଭାବନା ଓ ଅନୁବାଦ ତଲ୍ଵ

୧୩. ଗବେଷଣା ପ୍ରକରଣ, ସଙ୍ଖ୍ୟାନା ଓ ଅନୁବାଦ ପ୍ରବିଧି

୧୪. Research Methodology

୧୫. Research Methodology: Methods &
    Techniques, 2008

୧୬. Research Methodology

୧୭. Cyber law

୧୮. Perspectives on Plagiarism and Intellectual
    Property in a Post-Modern World

୧୯. Inside Microsoft Office Professional

୨୦. Research Methods in Linguistics

୨୧. How Cputer Work

୨୨. Comuters: Concept & Uses

୨୩. Instrumentation

୨୪. Cyber Law Simplified

୨୫. Statistical Methods

୫. ସମାଲୋଚନା ତତ୍ତ୍ୱ - ସାଧନ ପ୍ରଚାପୁଜ୍ଜ - ପ୍ରଜ୍ଞାନ
  ସଂସ୍ଥା , ଜଟଣି , ଭୁବନେଶ୍ୱର

- ଓଡ଼ିଆ ସାହିତ୍ୟ ଏକାଡେମୀ, ଭୁବନେଶ୍ୱର

- ୬. ଡ଼. ବୃନ୍ଦାବନ୍ଦ ପ୍ରଧାନ, ପ୍ରାଚ୍ୟ ସାହିତ୍ୟ ପୁନ୍ଥାୟ କଟକ

- ଡ଼. ଗୟରଖୁର ସାମନ୍ତରାୟ -ଫ୍ରେଣ୍ଡସ୍ ପବ୍ଲିସର୍ସ, କଟକ

- ୭. ଡ଼. ନୟନା ପ୍ରଧାନ କପଟେଶୀ-ଶକ୍ତି ପବ୍ଲିସର୍ସ, କଟକ

- ହିମାଦ୍ରୀ ବାରାୟଣ ସାମନ୍ତରାୟ -ବିଦ୍ୟାପୁରୀ -କଟକ

- ୮. ଡ଼. ମହେନ୍ଦ୍ରନାଥ ପ୍ରଧାନ-ପଣ୍ଡିତ କୁନ୍ତୁଖୋରୁ-କଟକ

- ଡ଼. ନିରାକୁ ଭୂଷଣ ହରିଚନ୍ଦନ, ବାରବୃତ୍ତ ସମନ୍ତରା-
  ବିଦ୍ୟାପୁରୀ-କଟକ

- ଡ଼. ଅନାଦି ବରାଳ -ସୀୟ-ବିଦ୍ୟାପୁରୀ-କଟକ

- ବୃଦ୍ଧନ୍ତି ପ୍ରବଚାୟକ -କଳକରା -କଟକ

- ଡ଼. ଜ୍ୟୋତ୍ସ୍ନାମୟୀ ପ୍ରଧାନ- ଫ୍ରେଣ୍ଡସ୍ ପବ୍ଲିସର୍ସ, କଟକ

- ଶୁଭେନ୍ଦୁ କୁମାର ବାରାଠୀ

- ପୁଲୋବର ଦୁଷ୍ଟଚନ୍ଦ୍ର ପ୍ରଧାନ

- ଡ଼. ନିର୍ମଳ କୁମାରୀ ରାୟଚ

- ସୁନୟନ ପବ୍ଲିକେସନ, ଭୁବନେଶ୍ୱର

- N. Thanulingam
  Himalaya Publishing House, Delhi

- C R Kothari

- R. Panneerselvam

- Kumar Anup P

- Buranen L and Roy AM

- Cassel Patel

- Rober J. Podisra,Stanford University

- White R

- Sumner M

- Upadhyaya & Upadhyaya

- Sood V

- Snedecor GW & Cochran W G

COURSE STRUCTURE OF UG PHILOSOPHY HONOURS UNDER CBCS				
Semester	Course Code	Course Name	Credit	Full Marks
I	C- 1	General Philosophy	6	100
	C- 2	Logic & Scientific Method	6	100
	GE-1	Symbolic Logic	6	100
	AECC-1	Environmental Studies	4	100
	EV-1 (Ethics and Values)	Issues related to Women	1	25
		Total	**23**	**425**
II	C-3	Systems of Indian Philosophy-I	6	100
	C- 4	Symbolic Logic	6	100
	GE- 2	Indian Philosophy	6	100
	AECC-2	MIL, Communication English/Odia/Hindi)	4	100
	EV-2 (Ethics and Values)	Values and Good Citizenship	1	25
		Total	**23**	**425**
III	C-5	Ethics	6	100
	C-6	History of Greek Philosophy	6	100
	C-7	Systems of Indian Philosophy-II	6	100
	GE-3	History of Modern European Philosophy	6	100
	SEC-1	Communicative English	4	100
	EV-3 (Ethics and Values)	Issues of Drug, Tobacco and Alcohol Addiction	1	25
		Total	**29**	**525**
IV	C-8	Contemporary Indian Philosophy	6	100
	C-9	History of Modern European Philosophy	6	100
	C-10	Philosophy of Language	6	100
	GE-4	Ethics: Theory And Practice	6	100
	SEC-2	**Students will choose a paper from a group of papers offered by university/department.**	4	100
	EV-4 (Ethics and Values)	Ethical Values for students life	1	25
		Total	**29**	**525**

COURSE STRUCTURE OF UG PHILOSOPHY HONOURS UNDER CBCS				
Semester	**Course Code**	**Course Name**	**Credit**	**Full Marks**
V	C-11	Western Classics: Meditations Of Rene Descartes	6	100
	C-12	Indian Text: Isa Upanisad	6	100
	DSE -1	Philosophy of Bhagvad Gita	6	100
	DSE -2	Philosophy of Religion	6	100
	EV-5 (Ethics and Values)	Vulnerable section of society: Understanding their issues	1	25
		Total	**25**	**425**
VI	C -13	Social And Political Philosophy	6	100
	C -14	Applied Ethics	6	100
	DSE-3	Gandhian Studies	6	100
		Analytic Philosophy	6	100
	DSE-4	Recent Western Philosophy	6	100
	DSE-4	Dissertation	6	100
	EV-6 (Ethics and Values)	Environmental and Techno Ethics	1	25
		Total	**25**	**425**
	Grand Total		**154**	**2750**

Value Added and Add On Courses offered beyond the prescribed syllabus					
Semester	**Course Code**	**Course name**	**Credits**	**Total Marks**	**Contact Hours**
Any Semester	VA- I	1. Philosophy of Science 2. Philosophy of Education	4	100	60
Any Semester	AO-I	1. Plato's Republic 2. Brahmasutrabhasya	3	75	45

*ote: * Following SECC papers may be*
Sl.   Offered by the University
1   Critical Thinking
2   Applied Reasoning

DSE-Discipline Specific Elective Papers: (Credit: 06 each) (4 papers to be opted by students of Philosophy Honours i.e 2 papers in Semester V and 2 papers (1 Project paper in Semester VI)

P.G. Courses
Semester-I

S.N.	Course Code	Title of the Course	Credit	Marks
1.	101	INDIAN EPISTEMOLOGY	4	30+70
2.	102	INDIAN METAPHYSICS	4	30+70
3.	103	INDIAN ETHICS	4	30+70
4.	104	LINGUISTIC AND CONCEPTUAL ANALYSIS	4	30+70
5.	105	PHILOSOPHY OF KANT	4	30+70

P.G. Courses
Semester-2

S.N.	Course Code	Title of the Course	Credit	Marks
1.	201	SYMBOLIC LOGIC	4	20+80
2.	202	WESTERN EPISTEMOLOGY	4	20+80
3.	203	WESTERN METAPHYSICS	4	20+80
4.	204	WESTERN ETHICS	4	20+80
5.	205	POST KANTIAN PHILOSOPHY	4	20+80
❖ 6.	206 (A) DSE	PHILOSOPHY OF RELIGION	4	20+80
❖ 7.	206(B) DSE	APPLIED ETHICS	4	20+80
❖ 8.	206(C) DSE	ARGUMENT ANALYSIS	4	20+80
❖ 9.	206(D) DSE	BUDDHIST EPISTEMOLOGY	4	20+80

P.G. Courses
Semester-3

S.N.	Course Code	Title of the Course	Credit	Marks
1.	301	CONTEMPORARY INDIAN PHILOSOPHY	4	20+80
2.	302	PRINCIPAL RELIGIONS	4	20+80
3.	303	ANALYTIC PHILOSOPHY	4	20+80
4.	304	PHILOSOPHICAL ANALYSIS: INDIAN PERSPECTIVES	4	20+80
5.	305	PRACTICAL ETHICS	4	20+80
❖ 6.	306 (A)IDSE	PRACTICAL ETHICS	4	20+80
❖ 7.	306 (B) IDSE	INDIAN ETHICS	4	20+80
❖ 8.	306(C) IDSE	PRINCIPAL RELIGIONS	4	20+80

P.G. Courses
Semester-4

S.N.	Course Code	Title of the Course	Credit	Marks
1.	401	SOCIAL PHILOSOPHY	4	20+80
2.	402	POLITICAL SYSTEMS AND VALUES	4	20+80
3.	403	CLASSICS OF PHILOSOPHY	4	20+80
4.	404	MAJOR TRENDS IN ODISHAN PHILOSOPHY	4	20+80
5.	405	DISSERTATION AND VIVA	4	80+20

COURSES OF STUDIES

For Ph.D. Program in Philosophy

Session- 2023-2024

SCHOOL OF PHILOSOPHY

GANGADHAR MEHER UNIVERSITY

AMRUTA VIHAR, SAMBALPUR, ODISHA

(Thesis + Seminar Presentation of the Thesis + Viva – Voce)

Philosophical Texts

1. Aristotle, *Nichomachean Ethics*, (trans.) C.D.C. Reeve, Indianapolis: Hackett Publishing, 1948
2. Descartes: *Sixth Meditation*
3. Plato: *Theaetetus, Republic*
4. Kant: *Kant's Prolegomena to any Future Metaphysics*
5. David Hume: *An Essay Concerning Human Understanding*, introduction by J. N. Mohanty
6. Kena Upanisad
7. Katha Upanisad
8. Bhagvat Gita
9. Nyaya: Vyapti PanchLakshna,
10. Vedanta Paribhasa
11. Iswarakrishan, Sankhyakarika
12. Dharmakirti with Dharmattara's Tika: *Nyayabindu*
13. Jaccque Derrida, *Speech and Writing, Grammatology*
14. Bertand Russell: *An Enquiry into Meaning and Truth*
15. L. N. Rangarajan, Kautilya, Arthasastra

BSC PHYSICS
A Brief Overview of Syllabus

FIRST SEMESTER			
Course No.	**Name of Course**	**Marks**	**Credit**
GE-I (Theory + Practical)	Mechanics	15+25+60	6
CC-I (Theory + Practical)	Mathematical Physics-I	15+25+60	6
CC-II (Theory + Practical)	Mechanics	15+25+60	6
AECC-1	Environmental Studies	20 + 80	4
EV-1 (Ethics and Values)	Issues related to Women	25	1
SECOND SEMESTER			
GE-II (Theory + Practical)	Electricity, Magnetism and EMT	15+25+60	6
CC-III (Theory + Practical)	Electricity and Magnetism	15+25+60	6
CC-IV (Theory + Practical)	Waves and Optics	15+25+60	6
AECC-2	MIL, Communication English/Odia/Hindi)	20 + 80	4
EV-2 (Ethics and Values)	Values and Good Citizenship	25	1
THIRD SEMESTER			
GE-III (Theory + Practical)	Thermal Physics and Statistical Mechanics	15+25+60	6
CC-V (Theory + Practical)	Mathematical Physics-II	15+25+60	6
CC-VI (Theory + Practical)	Thermal Physics	15+25+60	6
CC- VII (Theory + Practical)	Analog Systems and Applications	20 + 80	4
SEC-1	Communicative English	20 + 80	4
EV-3 (Ethics and Values)	Issues of Drug, Tobacco and Alcohol Addiction	25	1

	FOURTH SEMESTER		
GE-IV (Theory + Practical)	Waves and Optics	15+25+60	6
CC-VIII (Theory + Practical)	Mathematical Physics-III	15+25+60	6
CC-IX (Theory + Practical)	Elements of Modern Physics	15+25+60	6
CC-X (Theory + Practical)	Digital Systems and Applications	15+25+60	6
SECC -2	Skill Enhancement Compulsory Course -2	20 + 80	4
EV-4 (Ethics and Values)	Ethical Values for students life	25	1
	FIFTH SEMESTER		
DSE-I (Theory + Practical)	Classical Dynamics	15+25+60	6
DSE-II (Theory + Practical)	Nuclear and Particle Physics	15+25+60	6
CC-XI (Theory + Practical)	Quantum Mechanics and Applications	15+25+60	6
CC-XII (Theory + Practical)	Solid State Physics	15+25+60	6
EV-5 (Ethics and Values)	Vulnerable section of society: Understanding their issues	25	1

SIXTH SEMESTER			
DSE-III (Theory + Practical)	Nano Materials and Applications	15+25+60	6
DSE-IV	Basic Instrumentation	15+25+60	6
	PROJECT	100	6
CC-XIII (Theory + Practical)	Electro-magnetic Theory	15+25+60	6
CC-XIV (Theory + Practical)	Statistical Mechanics	15+25+60	6
EV-6 (Ethics and Values)	Environmental and Techno Ethics	25	1
		Total Marks=2750	Total Credit=154

RELEVANCE TO THE LOCAL, NATIONAL, REGIONAL AND GLOBAL DEVELOPMENTAL NEEDS

The contents incorporated in all the courses of the syllabus are relevant to **global developmental needs**.

Continuous Assessment	Practical	End semester Assessment
Mid Term - 15	25	60

Employability- ▮ Entrepreneurship - ▮ Skill Development - ▮

PSO TO PLO MAPPING

	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6
PSO1	3	3	2	3	3	3
PSO2	1	3	3	2	3	3
PSO3	3	2	2	2	2	3
PSO4	1	2	3	3	3	2
PSO5	2	3	3	2	3	2
PSO6	1	2	2	3	1	1

A Brief Overview of Syllabus

Course No.	Name of Course	Marks	Credit
FIRST SEMESTER			
PHY-101	Mathematical Methods in Physics	20+10+70	4
PHY-102	Classical Mechanics	20+10+70	4
PHY-103	Quantum Mechanics-I	20+10+70	4
PHY-104	Electronics	20+10+70	4
PHY-105	Electronics Lab	100	6
SECOND SEMESTER			
PHY-201	Classical Electrodynamics	20+10+70	4
PHY-202	Quantum Mechanics-II	20+10+70	4
PHY-203	Solid State Physics	20+10+70	4
PHY-204	Applied Optics	20+10+70	4
PHY-205	Computational Physics Lab	100	6
PHY-206	Open Elective (DSE) (Atomic and Molecular Spectroscopy)	20+10+70	4
THIRD SEMESTER			
PHY-301	Nuclear Physics	20+10+70	4
PHY-302	Particle Physics	20+10+70	4
PHY-303	Special Paper-I (Advanced Condensed Matter Physics)	20+10+70	4
PHY-304	Statistical Mechanics	20+10+70	4
PHY-305	Lab:Optics and Modern Physics Lab	100	6
PHY-306	Open Elective (IDSE)(Nano Science and Nano Technology)	20+10+70	4
FOURTH SEMESTER			
PHY-401	Energy Harvesting and Storage Materials	20+10+70	4
PHY-402	Advanced Quantum Mechanics	20+10+70	4
PHY-403	Special Paper-II (Advanced Condensed Matter Physics)	20+10+70	4
PHY-404	Experimental Techniques in Physics	20+10+70	4
PHY-405	Project/Dissertation	100	6
		Total Marks=2200	Total Credit=96

Continuous Assessment	Mid semester assessment	End semester Assessment
Assignment/Quiz/ Class test - ▇	▇	▇

NB* **Departmental Specific Elective**

    1. Atomic and Molecular Spectroscopy (PHY-206)

NB* **Inter Disciplinary Specific Elective**

    1. Nano Science and Nano Technology (PHY-306)

COURSE STRUCTURE OF Ph.D. PROGRAMME (PHYSICS)

The Ph.D. in Physics comprises one semester of course work with the following course structures. The course work will be assigned in semester-I only. In semester-I, each paper (PH-711A or PH-711B or PH-711C, PH-712, PH-713 and PH- 714) carries 100 marks out of which 20 marks are for internal assessment examination except for the paper PH- 714 i.e. the Teaching Assignment and Assessment, which does not have any internal examination. There will be one internal assessment examinations for each theory paper. There will be no internal examination in Semester-II. The duration of an examination for each theory is 3 hours. The pattern of teaching and examination in Ph.D. classes are displayed in the Table below for 2020-21 batches.

A Brief Overview of PHD Syllabus

FIRST SEMESTER			
Course No.	Name of Course	Marks	Credit
PH-711 A	Experimental Physics-Materials Science	20+80	4
PH-711 B	Computational Methods	20+80	4
PH-711 C	LASER and Photonics	20+80	4
PH-712	Research Methodology-I	20+80	4
PH-713	Research Methodology-II	20+80	4
PH- 714	Teaching Assignment and Assessment	100 (50+50) Seminar-50 Assignment-50	4
PH721	Dissertation	200	8
		Total Marks=600	Total Credit=24

For the research project paper, the student will submit the project write up and defend his/her project through presentation/Viva-Voce as per the University rule.

Semester	Course	Course Name	Credits	Total Marks
I	AEC - I	AEC – I	4	100
	C - I	Understanding Political Theory	6	100
	C - II	Constitutional Government and Democracy in India	6	100
	GE - I	Feminism: Theory and Practice	6	100
			22	
II	AEC - II	AEC – II	4	100
	C - I	Political Theory: Concepts and Debates		
	C -III	Political Process in India	6	100
	GE II	Governance: Issues and Challenges	6	100
			22	
III	C - V	Introduction to Comparative Governments and Politics	6	100
	C - VI	Introduction to Public Administration	6	100
	C - VII	Perspectives on International Relations	6	100
	GE - III	Gandhi and the Contemporary World	6	100
	SEC - I	SEC - I	6	100
IV	C - VIII	Political Processes and Institutions in Comparative Perspective	6	100
	C - IX	Public Policy and Administration in India	6	100
	C -X	Global Politics	6	100
	GE - IV	United Nations and Global Conflicts	6	100

	SEC - II	SEC - II	6	100
			28	
V	CC - XI	Western Political Philosophy	6	100
	CC - XII	Indian Political Thought (Ancient & Medieval)	6	100
	DSE - I	Introduction to Human Rights	6	100
	OR			
	DSE – I. C	Human Rights: Indian Perspective	6	100
	DSE - II	Development Process and Social Movements in Contemporary India	6	100
	OR			
	DSE – II. C	Colonialism and Nationalism in India	6	100
			24	
VI	C - XIII	Contemporary Political Philosophy	6	100
	C - XIV	Modern Indian Political Thought	6	100
	DSE - III	India's Foreign Policy in a Changing World	6	100
	OR			
	DSE – III.C	South Asian: Political System	6	100
	DSE – IV	Women, Power, and Politics	6	100
	OR			
	DSE – IV. C	Gender and Environment	6	100
	OR			
	DSE -IV	Dissertation	6	100
			24	

PG POLITICAL SCIENCE
2023-2024
SYLLABUS STRUCTURE
FIRST SEMESTER

Sl. No.	Paper code	Name of the paper	Credit Points	Remarks
1	PSC – 101	Concepts in Political Theory	4	
2	PSC – 102	Comparative Politics	4	
3	PSC – 103	International Relations: Concepts and Theories	4	
4	PSC – 104	Western Political thought I	4	
5	PSC – 105	Indian Political System: Institutions	4	

SECOND SEMESTER

Sl. No.	Paper code	Name of the paper	Credit Points	Remarks
1	PSC – 201	Debates in Contemporary Political Theory	4	
2	PSC – 202	Western Political Thought – II	4	
3	PSC – 203	Public Administration: Concepts and Theories	4	
4	PSC – 204	Contemporary Global issues & Challenges	4	
5	PSC – 205	Indian Political System: Processes	4	

	DISCIPLINARY SPECIFIC ELECTIVE (Any One) 4 Credits			
1	PSC – 206A	Development Studies		
2	PSC – 206B	Social and Political Movements in India		
3	PSC – 206C	Human Rights: Theory and Dynamics		

THIRD SEMESTER

Sl. No.	Paper code	Name of the paper	Credit Points	Remarks
1	PSC – 301	Government and Politics in Odisha	4	
2	PSC – 302	Political Sociology	4	
3	PSC – 303	Public Administration n India	4	
4	PSC – 304	Indian Political Thought-I	4	
5	PSC – 305	Research Methodology	4	
	INTER DISCIPLINARY SPECIFIC ELECTIVE (Any One) 4 Credits			
1	PSC – 306A	Indian Constitution		
2	PSC – 306B	UN and Global Conflict		
3	PSC – 306C	Nationalism in India		

FOURTH SEMESTER

Sl. No.	Paper code	Name of the paper	Credit Points	Remarks
1	PSC – 401	Public Policy Process in India	4	
2	PSC – 402	Gender Studies	4	
3	PSC – 403	Indian Foreign Policy	4	
4	PSC – 404	Indian Political Thought-II	4	
5	PSC – 405	Project work and Viva	4	
	Total Credit Points		88	

SEMESTER SYSTEM OF Ph.D POLITICAL SCIENCE

Paper – 714
Marks – 150+25+25=200 (8 CH)

REVIEW WORK
(Report Writing + Seminar Presentation of the Report + Viva – Voce)
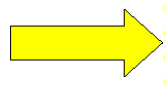
Books Recommended:

Alisan, Jagger, Feminist Politics & Human Nature, New Jeresey: Rowman & Allanheld, 1983

Bryson, V., Feminist Political Theory: An Introduction, London, Macmillan, 1992

Freedman, Jane, Feminism, New Delhi: viva Books, 2002

Heywood, Andrew, Political Ideologies

Eatwell Roger & Wright Anthony, Contemporary Political Ideologies, London, Pinter Publishers 1993

Mahajan Gurpreet, The Multicultural Path: Issues of Diversity & Discrimination in Democracy; Delhi, Sage, 2002

Parekh, Bhikhu, Cultural Diversity & Liberal Democracy in Gurpriet Mahajan(ed.) Democracy, Difference and Social Justice, Delhi, Oxford University Press, 1998

Ray, B.N., Political Theory: Interrogations & Intervention, New Delhi, 2006

Bertenes, Hans, The Idea of the Postmodern: A History, New York, Routledge, 1995

Sandal Michael, Liberalism & its Critiques, Oxford, 1984

Boxi, Upendra & Dhikhu Parekh(ed.) Crisis & Change in Contemporary India, Sage, New Delhi, 1945

Hason, Joya(ed.), Politics & the State in India, Sage, New Delhi, 2000

Kothari Rajni, Politics in India , Orient Longman, New Delhi, 1970

Shah Ghanasyam(ed), Social movement and the State, Sage, New Delhi, 2002

Sapru, R. K., Public Policy: Formulation, Implementation & Evaluation, Sterling Publishers pvt Ltd, New Delhi

Sapru, R. K., Public Policy: Art & Craft of Policy Analysis, PHI Learning pvt Ltd, New Delhi

Anderson, James E. , Public Policy making, New York Praeger, 1975

Dye, Thomas R., Understanding Public Policy, Englewood Cliffs: Prentice Hall

Lasswell, Harold D., A Preview of Policy Sciences, New York America Elsevier, 1971

David M. Malore, C. Rajamohan, Srinath Raghavan(ed.), Oxford Handbook of Indian Foreign Policy Oxford University Press

Pant, V. Harsh, Indian Foreign Policy: An Overview, Oxford University Press

Khanna, V. N., Foregn Policy of India, Vikash Publishing House

Prasad Bimal, The Making of India's Foregn Policy: The Indian National Congress & World Affairs 1885-1947, forwarded by Muchkund Dubey, Vitasta, Let Knowledge Spread

Dutt, V. P., India's Foreign Policy in a Changing World,

Ogden Chris, Indian Foreign Policy, Polity Press

Ganguly Sumit, Indian Foreign Policy, Oxford University Press

Bandopadyaya, J. The making of Indian Foreign Policy, New Delhi

Bhattacharya, D.K. Research methodology

Good & Hatt, Method of Social Research

Young, P.V. Social Survey & Social Research

Bajpai, A.R. Method of Social Survey

Mildren Parten: Survey, Tools & Sampling

CR Kothari: Research Methodology: Methods & techniques, 2008

Gilmore B: Plagiarism: Why it happens, How to prevent it?

Gralla P: How the Internet Works

Kumar Anupa P: Cyber Law

R Panneerselvam: Research Methodology

Shelly GB, Vermaat ME, Cashman TJ: Microsoft® 2007, Introductory Concepts and Techniques.

| Red: Employability | Green: Entrepreneurship | Blue: Skill development |

PSYCHOLOGY

Framework of CBCS Syllabus for PSYCHOLOGY (Honours) from 2023-24

Full Forms of Course Codes Used: CC = Core Course, AECC = Ability Enhancement Compulsory Course, SEC =Skill Enhancement Course, DSE = Discipline Specific Elective (Related to Core Subject), GE = Generic Elective (Not related to Core Subject; 2 different subjects of 2 papers each). **Total Marks:** CC (1400) + AECC (200) + SEC (200) +DSE (400) + GE (400) = 2600

Semester	CC 14 papers 100 X 14 = 1400; Credits=14x6=84	AECC 2 Papers 100 X 2 = 200 Credits= 4x2=8	SEC 2 Papers 100 X 2 = 200 Credits=4 x2=8	DSE 4 Papers 100 X 4 = 400 4x6=24 credits	GE 4 Papers 100 X 4 = 400 4x6=24 credits
I	CC-I: Introductory Psychology CC-II: Basic Developmental Processes	AECC-I: MIL Communication (Odiya/English)			**GE Paper-I:**Introductory Psychology Or Environmental Psychology Or Educational Psychology
II	CC-III: Basic Psychological Processes CC – IV: Processes of Human Empowerment	AECC-II: Environmental Science			**GE Paper-II:** Basic DevelopmentalProcesses Or Health Psychology Or Couselling Psychology
III	CC – V: Statistics CC – VI: Social Psychology CC – VII: Environmental Psychology		SEC-I: Communicative English		**GE Paper-III:**Basic Psychological Processes Or Leadership Psychology Or Rehabilitation Psychology Or Positive Psychology
IV	CC – VIII: Psychopathology CC – IX: Educational Psychology CC – X: Psychological Assessment		SEC-II: Personality & Life skill Development		**GE Paper-IV:**Processes of Human Empowerment Or Social Psychology Or Psychotherapy Or Research Methodology
V	CC – XI: Organizational Behavior CC – XII: Health Psychology			DSE-I: Psychological Research and Measurement DSE-II: Ethics, Psychology and Social Issues	Cyber Psychology Sports Psychology Psychology of Crime & Violence Abnormal Psychology-I
VI	CC – XIII: Counseling Psychology CC – XIV: Positive Psychology			DSE-III: Psychology., of the Disability DSE-IV: Project & Field work/ Psychology of Crime	Cognitive Psychology Abnormal Psychology-II

Red colour within the uploaded soft copy of the syllabus indicates Employability.

Green colour within the uploaded soft copy of the syllabus indicates Entrepreneurship.

Blue colour within the uploaded soft copy of the syllabus indicates Skill Development.

SESSION:2023-24
CONTENTS
FIRST SEMESTER

PAPERCODE	NATURE OF PAPER	TITLE OF PAPER	Page No.
PSY 101	THEORY	GENERAL PSYCHOLOGY-I	06
PSY 102	THEORY	BASIC PHYSIOLOGICAL PSYCHOLOGY	07
PSY 103	THEORY	SOCIAL PSYCHOLOGY	08
PSY 104	THEORY	INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY	09
PSY 105	PRACTICAL		10

SECOND SEMESTER

PAPER CODE	NATURE OF PAPER	TITLE OF PAPER	Page No.
PSY 201	THEORY	GENERAL PSYCHOLOGY- II	11
PSY 202	THEORY	STATISTICS	12
PSY 203	THEORY	LIFE SPAN HUMAN DEVELOPMENT	13
PSY 204	THEORY	HEALTH PSYCHOLOGY	14
PSY 205	PRACTICAL		15
PSY 206 (A)	THEORY	PSYCHOLOGY OF HAPPINESS	16
PSY 206(B)	THEORY	CHILD PSYCHOLOGY	17
PSY 206(C)	THEORY	ABNORMAL PSYCHOLOGY	18
PSY 206(D)	THEORY	ENVIRONMENTAL PSYCHOLOGY	19
PSY 206(E)	THEORY	SPORTS PSYCHOLOGY	20
PSY 206(F)	THEORY	PSYCHO PATHOLOGY	21

THIRD SEMESTER

PAPERCODE	NATURE OF PAPER	TITLE OF PAPER	Page No.
PSY 301	THEORY	RESEARCH METHODOLOGY	22
PSY 302	THEORY	POSITIVE PSYCHOLOGY	23
PSY 303	THEORY	PSYCHOLOGY OF CRIME AND VIOLENCE	24
PSY 304	THEORY	COGNITIVE PSYCHOLOGY	25
PSY 305	PRACTICAL		26
PSY 306 (A)	THEORY	FUNDAMENTALS OF PSYCHOLOGY	27
PSY 306 (B)	THEORY	EDUCATIONAL PSYCHOLOGY	28
PSY 306 (C)	THEORY	SOCIAL PSYCHOLOGY	29
PSY 306 (D)	THEORY	CHILD PSYCHOLOGY	30
PSY 306 (E)	THEORY	PROCESSES OF HUMAN EMPOWERMENT	31
PSY 306 (F)	THEORY	PSYCHOMETRICS	32

FOURTH SEMESTER

PAPERCODE	NATURE OF PAPER	TITLE OF PAPER	Page No.
PSY 401	THEORY	COUNSELLING PSYCHOLOGY	33
PSY 402	THEORY	GERIATRIC PSYCHOLOGY	34
PSY 403	THEORY	INTERNSHIP/ WORK EXPERIENCE	35
PSY 404	THEORY	CLINICAL ASSESSMENTAND THERAPY	36
PSY 405	PRACTICAL	PROJECT WORK	37

COURSES OF STUDIES
SCHOOL OF PSYCHOLOGY

FOR PH.D. DEGREE SYSTEM
IN PSYCHOLOGY

2023-2024

GANGADHAR MEHER UNIVERSITY
AMRUTA VIHAR, SAMBALPUR-04,ODISHA

Reference:

1. Siegel, S. (1956). *Non- Parametric Statistics for Behavioral Sciences*, New York: McGraw Hill.

2. Broota, K.D. (1992). *Experimental Design in Behaviourial Research*. ND: New Age International Pub.

3. Weinberg, D. (2002). *Qualitative Research Methods*, Blackwell Publishers.

4. Singh, A. K., (2017). *Test Measurements and Research Methods in Behavioral Sciences*. 5th Edition, Bharati Bhawan Publishers & Distributors.

5. Smith, J. A. (2008). *Qualitative Psychology: Practical Guide to Research Methods*. London.

6. Howell, D. C. (2002*). Statistical methods for Psychology,* 5th Edition, Duxbury, California: Thomson Learning.

7. Bridget, S. & Cathy, L. (Eds.) (2008). *Research Methods in the Social Sciences.* New Delhi: Vistaar Publication.

8. Shaughnessy, J.J., Zechmeister, E.B., &Zechmeister, J.S. (2011*). Research Methods in Psychology*. 9th Edition. McGraw-Hill Education/Asia.

9. Best, J.W., Jha, A.K., & Kahn, J.V. (2007*).Research in Education*. 10th Edition Pearson.

10. Breakwell, G.M., Smith, J.M., & Wright, D.B. *Research Methods in Psychology*. 4th Edition. SAGE.

11. Burke, P. J. (2006), *Contemporary Social Psychological Theories*. Stanford Social Sciences

12. Delamater, J. (2003) *Handbook of Social Psychology.* New York: Kluswer Academic.

The internal assessment and evaluation may be done through a continuous process having assignments, class test, review works, writing of term papers, quiz or examination.

The end term examination will be based on written examination for theory paper and the question will be set following Bloom's taxonomy which will cover the entire syllabus of the course. For the research project paper, the student will submit the project write up and defend his/her project through presentation/Viva-Voce as per the University rule.

COURSE STRUCTURE FOR +3 B.A. SANSKRIT (HONS. -CC, DSE & GENERIC ELECTIVE)

for 1st Year					
1st Year (08 Papers: 800 Marks)					
Sl. No.	Semester – I	Marks-Credits	Sl. No.	Semester-II	Marks-Credits
1	Core Course (SKT.)-1	(100 -6)	5	Core Course (SKT.)-3	(100-6)
2	Core Course (SKT.)-2	(100 -6)	6	Core Course (SKT.)-4	(100-6)
3	AECC-1Env. Studies	(100 -4)	7	AECC-2 M.I.L. (A.ENG/ ODIA/ SANS/ HINDI)	(100-4)
4	Generic Elective- 1 (If SKT.)	(100-6)	8	Generic Elective- 2 (If SKT.)	(100-6)
	(6+6+4+6 = 22 Credits)	**400 Marks**		(6+6+4+6 = 22 Credits)	**400 Marks**
2nd Year (10 Papers: 1000 Marks)					
Sl. No.	Semester – III	Marks-Credits	Sl. No.	Semester-IV	Marks-Credits
9	Core Course (SKT.)-5	(100 -6)	14	Core Course (SKT.)-8	(100-6)
10	Core Course (SKT.)-6	(100 -6)	15	Core Course (SKT.)-9	(100-6)
11	Core Course (SKT.)-7	(100 -6)	16	Core Course (SKT.)-10	(100-6)
12	SEC-1 Eng. Communicative	(100-4)	17	SEC-2 Office Management	(100-4)
13	Generic Elective- 3 (If SKT.)	(100-6)	18	Generic Elective- 4 (If SKT.)	(100-6)
	(6+6+6+6+4+6 = 28 Credits)	**500 Marks**		(6+6+6+6+4+6 = 28 Credits)	**500 Marks**
3rd Year (8 Papers: 800 Marks)					
Sl. No.	Semester – V	Marks-Credits	Sl. No.	Semester-VI	Marks-Credits
19	Core Course (SKT.)-11	(100 -6)	23	Core Course (SKT.)-13	(100-6)
20	Core Course (SKT.)-12	(100 -6)	24	Core Course (SKT.)-14	(100-6)
21	DSE (SKT) – 1	(100 -6)	25	DSE (SKT) – 3	(100-6)

22	DSE (SKT) – 2	(100-6)	26	DSE (SKT) – 4 (Project)	(100-6)
	(6+6+6+6 = 24 Credits)	**400 Marks**		(6+6+6+6 = 24 Credits)	**400 Marks**

Grand   Total: 26 Papers
Grand Total Credits:148(22+22+28+28+24+24)
Grand Total Marks: 2600 (400+400+500+500+400+400)
CC= Core Course-1400
DSE= Discipline Specific Elective-400
GE= Generic Elective- 400
SEC= Skill Enhancement Course- 200
AECC= Ability Enhancement Compulsory Course- 200

ABBREVIATION: 1. CC= Core Course, 2. **DSE**= Discipline Specific Elective, 3. **GE**= Generic Elective, 4.
SEC= Skill Enhancement Course, 5. **AECC**= Ability Enhancement Compulsory Course

NAME OF THE PAPERS AND ABBREVIATIONS AT A GLANCE
1st YEAR

SEMESTER-I
1. CC- 1 MORAL TEACHINGS AND BASICS OF SANSKRIT   -
[MTBS]
2. CC-2 DRAMA-I & HISTORY OF SANSKRIT LITERATURE -I   -[D-1& HSL-1]
3. AECC-1 ENVIORNMENTAL SCIENCE   -[ENVSC]
4. GE-1 KHANDAKAVYA & DARSANAKAVYA   -[KK & DK]

SEMESTER-II
5. CC-3 DRAMA -II & DRAMATURGY   -[D-2 & DT]
6. CC-4 AN INTRODUCTION TO THE TECHNIQUE
OF PANINIAN GRAMMAR& PROSODY   -[TPGM]
7. AECC-2 M.I.L.
8. GE – 2 MORAL TEACHINGS AND BASICS OF SANSKRIT   -[MTBS]

2nd YEAR
SEMESTER-III
9. CC-5 POETRY & HISTORY OF SANSKRIT LITERATURE- II   -[PT & HSL-2]
10. CC-6 META-RULES OF PANINIAN GRAMMAR, POETICS AND FIGURES OF SPEECH   -[PG-2 &
SD]
11. CC-7 CASES AND CASE ENDINGS IN PANINIAN GRAMMAR & TRANSLATION- I   -[PG-3 &
TR-1]
12. SEC-1 COMMUNICATIVE ENGLISH   -[COMLIS]
13. GE-3 TECHNICAL LITERATURE IN SANSKRIT   -[TELISA]

SEMESTER-IV
14. CC-8 UPANISAD, RAMAYANA & BHAGAVADGITA   -[UP, RM & BG]
15. CC-9 CASE AND CASE ENDINGS OF PANINIAN GRAMMAR, TRANSLATION- II & LEXICON -[PG-4,
TR-2 & LX]
16. CC-10 ORNATE PROSE IN CLASSICAL SANSKRIT   -[OPRCS]
17. SEC-2 MODERN OFFICE MANAGEMENT   -[MOFM]
18. GE-4 ETHICAL LITERATURE IN SANSKRIT   -[ETLS]

3rd YEAR

DETAILS OF CORE, GE & DSE COURSES
STRUCTURE OF CORE, GE , DSE & M .I.L. COURSES

1st YEAR

SEMESTER-I

CC- 1 MORAL TEACHINGS AND BASICS OF SANSKRIT [Term end: 80 +

The objective of this course is to instructs the students moral principles by means of Moral stories of the Hitopadesa. The Yaksaprasnah of Mahabharat is a text that teaches the true duties and the absolute reality of an individual's life.

1. *Hitopadesa*	32
2. *Yaksaprasna of Mahabharata (Aranyakaparva, ch.313)*	32
3. *Sabdarupa &Dhaturupa*	16

CC-2 DRAMA-I & HISTORY OF SANSKRIT LITERATURE -I [Term end : 80 + Midterm20= 100 marks]

1. *Abhijnanasakuntalam* (Act I-IV)	40
2. *History of Sanskrit Literature*-I	40

(*Ramayana*, *Mahabharata*, General out lines of *Puranas*, *Mahakavya* & Sanskrit Drama)

SEMESTER-II

CC-3 DRAMA -II & DRAMATURGY [Term end: 80 + Midterm 20= 100 marks]

1.*Abhijnanasakuntalam* (Act V-VII)	40
2. *Dramaturgy*	40

CC-4 AN INTRODUCTION TO THE TECHNIQUE OF PANINIAN GRAMMAR &

SANSKRIT P.G. COURSE STRUCTURE AT A GLANCE

	FIRST SEMESTER		
Courses No.	**Name of Courses**	Marks	**Credit**
SAN-101	*Vaidikasāhityam- 1 (Veda, Upaniṣad & Śunaḥśepākhyānam)*	**10+20+70**	4
SAN-102	*Saṁskṛta-vyākaraṇam - 1 (Siddhānta-Kaumudī)*	**10+20+70**	4
SAN-103	Saṁskṛta-rūpakam *(Ratnāvalī & Uttararāmcaritam)*	**10+20+70**	4
SAN-104	*Bhāratīya-darśanam – 1 (Sāṁkhyakārikā & Vedāntasāraḥ)*	**10+20+70**	4
SAN-105	*Vaidika-saṁskṛtasāhityayoritihāsaḥ*	**10+20+70**	4
	SECOND SEMESTER		
SAN-201	*Bhāratīya-darśanam - 2 (Tarksaṁgrahaḥ & Arthasaṁgrahaḥ)*	**10+20+70**	4
SAN-202	*Saṁskṛta-vyākaraṇam – 2 (SiddhāntaKaumudī, Mahābhāṣyam & Pāṇinīyasikṣā)*	**10+20+70**	4
SAN-203	*Alaṅkāraśāstram- 1 (Dhvanyāloka, Sāhityadarpaṇaḥ & Kāvyaprakāśaḥ)*	**10+20+70**	4
SAN-204	*Dharmaśāstram Arthaśāstrañca (Manusmṛtih, & Arthaśāstram)*	**10+20+70**	4
SAN-205	*Saṁskṛtakāvyasāhityam-1 (Naiṣadhīyacaritam & Kādambarī)*	**10+20+70**	4
	SECOND SEMESTER (DSE PAPER)		
SAN-206 (A)	*Gītikāvyam Prakaraṇañca (Meghadūtam & Mṛcchakaṭika*	**10+20+70**	4
SAN-206 (B)	*Gadyasāhityam (Daśakumāracaritam & Harṣacaritam)*	**10+20+70**	4
SAN-206 (C)	*Bhāratīyadarśanam (Yogadarśanam & Sarvadarśanasamgrahaḥ)*	**10+20+70**	4
	THIRD SEMESTER		
SAN-301	*Vaidikasāhityam – 2 (Yajurvedaḥ, Atharvavedaḥ*	**10+20+70**	4

	Niruktam & Ṛgprātiśākhyam)		
SAN-302	*Bhāṣāvijñānam*	**10+20+70**	4
SAN-303	*Research Methodology*	**10+20+70**	4
SAN-304 (A)	*Vaidikasāhityam– 3* *Ṛg-veda-bhāṣybhumikā & Niruktam*	**10+20+70**	4
SAN-304 (B)	*Nātakasāhityam (Venīsaṁhāram & Mudrārākṣasam)*	**10+20+70**	4
SAN-304 (C)	*Saṁskṛta-vyākaraṇam -3 (Siddhānta-Kaumudī &* *Saṁskṛta-vyākaraṇa-śāstrasye-tihāsaḥ*	**10+20+70**	4
SAN-305 (A)	*Vaidikasāhityam - 4 (Śatapathabrāhmaṇam,* *Aitareya-raṇyakm, Taittirīyārṇyaka. & Bṛhaddevatā)*	**10+20+70**	4
SAN-305 (B)	*Alaṅkāraśāstram- 2* *(Sāhityadarpaṇaḥ & Nātyaśāstram)*	**10+20+70**	4
SAN-305 (C)	*Saṁskṛta-vyākaraṇam - 4* *(Siddhānta-Kaumudī & Vākyapadīyam)*	**10+20+70**	4
THIRD SEMESTER IDSE PAPER			
SAN-306 (A)	*Nītiśatakam and Chanakyanitidarpanah*	**10+20+70**	4
SAN-306 (B)	*Self Management in the Gita*	**10+20+70**	4
SAN-306 (C)	*Indian Philosophy and Literature*	**10+20+70**	4
FOURTH SEMESTER			
SAN-401	*Prācīnabhāratasya Abhilekhaḥ Sanskṛtiśca*	**10+20+70**	4
SAN-402	*Purāṇam Dharmaśāstrañca*	**10+20+70**	4
SAN-403 (A)	*Vaidikasāhityam-5 (Ṛgvedaḥ, Śuklayajurvedaḥ,* *Atharvavedaḥ &, Taittarīyopaniṣad)*	**10+20+70**	4
SAN-403 (B)	*Saṁskṛtakāvyasāhityam-2* *(Buddhacaritam & Nalacampūḥ)*	**10+20+70**	4
SAN-403 (C)	*Saṁskṛta-vyākaraṇam -5* *(Kāśikā & Vaiyākaraṇabhūṣaṇsāraḥ)*	**10+20+70**	4
SAN-404 (A)	*Vaidikasāhityam-5* *(Ṛgprātiśākhyam & SiddhāntaKaumudī)*	**10+20+70**	4
SAN-404	*Alaṅkāraśāstram- 2* *(Kāvyaprakāśaḥ, Vakroktijivitam & Dasarūpakam)*	**10+20+70**	4

(B)			
SAN-404 (C)	*Saṁskṛta-vyākaraṇam - 6 (Siddhānta-Kaumudī, & Paramalaghumanjuṣā)*	**10+20+70**	4
SAN-405	Dissertation ⬅	**10+20+70**	4
		TOTAL = MARKS 2200 CREDIT - 88	

Continuous Assessment	Mid semester assessment	End semester Assessment
Assignment/Quiz/Class test- 10	20	70

N.B.:-

1. M.A. Examination in Sanskrit shall comprise Four Semester Examinations. Each Semester shall consist of **five papers** carrying **70 marks** for Term End Examination and **30 marks** for Mid-Term Examination. The Question will be set in Sanskrit and the answer will be written in **Sanskrit or English**.
2. There are two elective groups namely :
❖ Discipline Specific Elective (DSE) in Sem. II.
❖ Inter Discipline Specific Elective (IDSE) in Sem. III.
   (The students of other department opting IDSE paper can write the answer in **Sanskrit** or **English** or **Hindi** or **Odia**.)
3. In Sem-III, out of 5 papers, first 3 papers are common for all and the last 2 papers i.e. SAN-304 & SAN-305 are of **Special Papers**. Students can opt either Group-A or Group-B or Group-C.
4. In Sem-IV, out of 5 papers, first 2 papers are common for all and the 3rd and 4th papers i.e. 403 & 404 are of **Special Paper**. Students can opt either Group-A or Group-B or Group-C. The last paper i.e. 405 is of Dissertation and it is common for all.
5. There are five Lecture hours of teaching per week for each paper including remedial class.
6. The duration of examination for each paper shall be of **Three hours** except Course No. 405 of IV Semester.

Ph.D Course= 2023-24

SANSKRIT

Semester- I (प्रथमषाण्मासिकम्)

SAN-711 = संस्कृतसाहित्यस्य सर्वेक्षणम्

१. **Course Code- SAN- 711**

२. **Course Title- संस्कृतसाहित्यस्य सर्वेक्षणम्**

३. **Credit- 4**

४. **Full Marks- 100 (MID Term Exam. -30 Marks + END Term Exam. -70 Marks)**

५. **Course Objectives** .

The students will be able to know completely the works of Sanskrit Literature and they will get an idea to do research work in their desired area.

६. **Course Learning Outcomes**

After studying this paper, the students will be able to improve their research activities. Also they will be able to choose their suitable research topics.

७. **Course Divisions**

UNIT=1 वैदिकसाहित्यस्य सर्वेक्षणम्   (अङ्काः १७.५)

- ❖ संहिताग्रन्थानां सर्वेक्षणम्
- ❖ ब्राह्मण-आरण्यक-उपनिषदां सर्वेक्षणम्
- ❖ वेदाङ्गानां सर्वेक्षणम्

UNIT=2   काव्यालङ्कारशास्त्राणां सर्वेक्षणम्   (अङ्काः १७.५)

- ❖ काव्यनाटकादीनां सर्वेक्षणम्
- ❖ अलङ्कारशास्त्राणां सर्वेक्षणम्

UNIT=3 व्याकरणसाहित्यस्य सर्वेक्षणम्   (अङ्काः १७.५)

- ❖ त्रिमुनिव्याकरणस्य सर्वेक्षणम्
- ❖ अष्टाध्यायीप्रक्रियाग्रन्थानां सर्वेक्षणम्
- ❖ अष्टाध्यायीवृत्तिग्रन्थानां सर्वेक्षणम्
- ❖ व्याकरणदर्शनग्रन्थानां सर्वेक्षणम्

9. Shivaganesha Murthy, R.S., Introduction to Manuscriptology, Sharada Publishing House, Delhi, 1996
10. Savory, T.H., The Art of Translation
11. Sravanlal, P., Research Methodology, Kitab Mahal, Allahbad, 1987
The Art of Translation – a Symposium, Published by Ministry of Scientific Research & Cultural Affairs, Govt. Of India, New Delhi, 1962

SAN- 714 = पाठ्यचक्र –उपस्थापनम् ,पाठ्यप्रणाली च

(SEMINAR PRESENTATION AND LESSON PLAN)

1. **Course Code- SAN-714**

2. **Course Title-** पाठ्यचक्र-उपस्थापनम् , पाठ्यप्रणाली च

3. **Credit- 4**

4. **Full Marks- 100**

5. **Course Divisions**

   (क) पाठ्यचक्रद्वयम्- ५०

   (ख) पाठनप्रणाली- ५०

जयतु भारतम् ।
जयतु संस्कृतम् ।।

8

SOCIOLOGY UNDER GRADUATE SYLLABUS FOR HONOURS

SL.No	Semester	Number	Title of the Course	Marks	Credit
1		DSC.H.SOC.1	Introduction toSociology-1	80+20	6
2		DSC.H.SOC.2	Introduction toSociology-2	80+20	6
3		GE.H.SOC.1	Introduction toSociology-1	80+20	6
4	1st	AECC.H.SOC.1		80+20	4
5		DSC.H.SOC.3	Indian Society	80+20	6
6		DSC.H.SOC.4	Sociology of Environment	80+20	6
7		GE.H.SOC.2	Indian Society	80+20	6
8	2nd	AECC.H.SOC.2		80+20	4
9		DSC.H.SOC.5	Classical Sociological Thinkers	80+20	6
10		DSC.H.SOC.6	Social Change & Development	80+20	6
11		DSC.H.SOC.7	Sociology of Gender	80+20	6
12	3rd	GE.H.SOC.3	Social Change and Development	80+20	6
13		SECSOC.1	Political Sociology	80+20	4
14		DSC.H.SOC.8	Rural Sociology	80+20	6
15		DSC.H.SOC.9	Globalisation and Society	80+20	6
16		DSC.H.SOC.10	Marriage, Family and Kinship	80+20	6
17		GE.H.SOC.4	Rural Sociology	80+20	6
18	4th	SECSOC.2	Industrial Sociology	80+20	4
19		DSC.H.SOC.11	Research Methodology	80+20	6
20		DSC.H.SOC.12	Social Movements in India	80+20	6
21	5th	DSE.H.SOC.1	Sociology of Health	80+20	6
22		DSE.H.SOC.2	Sociology of Education	80+20	6
23		DSE.H.SOC.13	Population and Society	80+20	6
24		DSE.H.SOC.14	Social Disorganization and Deviance	80+20	6

25	6th	DSE.H.SOC.3	Urban Sociology	80+20	6
26		DSE.H.SOC.4	Field Work& Dissertation /Tribes of India	80+20	6
	TOTAL			2600	0

POST GRADUATE PROGRAMME
in
SOCIOLOGY

Post-Graduate programme comprising two years will be divided into 4 (four) semesters, each of six months duration.

Year	Semesters	
First Year	Semester-I	Semester-II
Second Year	Semester-III	Semester-IV

The detail of title of papers, credit hours, division of marks etc. of all the papers are given below.

Part-I: Semester-I

Papers		Marks		Total Marks	Duration (hrs)	Credit Hours
Paper No.	Title	Mid-Term	End-Term			
101	Introduction to Sociology	20	80	100	3	4
102	Classical Sociological Tradition	20	80	100	3	4
103	Methods of Social Research	20	80	100	3	4
104	Indian Society	20	80	100	3	4
105	Sociology of Kinship	20	80	100	3	4
	Total			500		20

Part-I: Semester-II

Papers		Marks		Total Marks	Duration (hrs)	Credit Hours
Paper No.	Title	Mid-Term	End-Term			
201	Social Stratification	20	80	100	3	4
202	Quantitative Research Techniques in Sociology	20	80	100	3	4
203	Science Technology and Society	20	80	100	3	4
204	Social Change in India	20	80	100	3	4
205	Modern Sociological Theory	20	80	100	3	4
DSE Papers*						
206A	Sociology of Environment	20	80	100	3	4
206 B	Sociology of Religion	20	80	100	3	4
206C	Sociology of Education	20	80	100	3	4
206D	Sociology of Health	20	80	100	3	4
	Total			600		24

*Discipline Specific Elective (DSE) paper. Any one paper can be opted by students of this department.

Minimum student strength to run the course in each elective paper should be 8 (Eight).

Part-II: Semester-III

Papers		Marks		Total Marks	Duration (hrs)	Credit Hours
Paper No.	Title	Mid-Term	End-Term			
301	Sociology of Development	20	80	100	3	4
302	Advanced Sociological Theories	20	80	100	3	4

Paper No.	Title	Mid-Term	End-Term	Total Marks	Duration (hrs)	Credit Hours
303	Social Demography	20	80	100	3	4
304	Political Sociology	20	80	100	3	4
305	Gender and Society	20	80	100	3	4
IDSE Papers**						
306A	Sociology of Development	20	80	100	3	4
306B	Gender and Society	20	80	100	3	4
306C	Social Change in India	20	80	100	3	4
Total				**600**		**24**

** Inter Discipline Specific Elective (IDSE) paper. Any one paper can be opted by students of other Departments.

Part-II: Semester-IV

Papers		Marks		Total Marks	Duration (hrs)	Credit Hours
Paper No.	**Title**	**Mid-Term**	**End-Term**			
401	Theoretical Perspectives in Indian Sociology	20	80	100	3	4
402	Urban Sociology	20	80	100	3	4
403	Agrarian Social Structure and Change	20	80	100	3	4
404	Social Capital	20	80	100	3	4
405	**Fieldwork, Dissertation and Viva-Voce**		50+50	100	3	4
Total				**500**		**20**
22 Papers	**Grand Total**			**2200**		**88**

NB:
1. **There will be two elective groups namely,**
   - Discipline Specific Elective in Semester II
   - Interdisciplinary Elective in Semester III
     A Student has to select one of the DSE paper in Semester II and one of the papers in Semester III as offered by the respective Departments at the beginning of Semester II and Semester III respectively.
2. Each paper will be of 100 marks, out of which 80 marks shall be allocated for Semester Examination and 20 marks for Internal Assessment (Mid-Term Examination)
3. There will be 4 (Four) lecture hours of teaching per week for each paper.
4. Duration of examination of each paper shall be three hours.
5. Pass Percentage:
   - The minimum marks required to pass any paper shall be 40 percent in each paper and 40 percent in aggregate of a Semester.
   - No student will be allowed to avail more than 3 (three) chances to pass in any paper inclusive of first attempt.

STATISTICS

Semester	CORE COURSE (14)		Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course(SEC)	Elective: Discipline Specific DSE (4)	Elective: Generic (GE) (4)
I	CC I	Descriptive Statistics	English Communication/ Odia/ Hindi			GE-I Statistical Methods
	CCII	Algebra				
II	CCIII	Probability and Probability Distributions	Environmental Studies			GE-II Introductory Probability
	CCIV	Calculus				
III	CCV	Sampling Distributions		SEC -I		GE-III Basics of Statistical Inference
	CCVI	Survey Sampling & Indian Official Statistics				
	CCVII	Mathematical Analysis				
IV	CCV III	Statistical Inference		SEC –II		GE- IV Applied Statistics
	CCIX	Linear Model				
	CCX	Statistical Quality Control				
V	CCXI	Stochastic Process & Queuing Theory			DSE-I Operations Research	
	CCX II	Statistical Computing Using C & R Programming			DSE-II Time Series Analysis	
VI	CCX III	Design Of Experiments			DSE-III Demography And Vital Statistics	
	CC XIV	Multivariate Analysis And Non Parametric Methods			DSE-IV Project Work / Econometrics	

STATISTICS-Honours

Core course – 14 papers, Discipline Specific Elective – 4 papers , Skill Enhancement Course-1(SEC-1)paper (out of the 2 papers)
 Generic Elective for Non Statistics students – 4 papers. Incase University offers 2 subjects as GE, thenpapers 1 and 2 will be the GE paper.

Marks per paper - Midterm: 15 marks, End term: 60 marks, Practical:25 Total – 100 marks
Credit perpaper – 6 , Teaching hours per paper – 50 hours + 10 hours tutorial

SEMESTER SYSTEM OF P. G. STATISTICS

Paper Code	Paper Title	Marks	Credits Hours
SEMESTER- I			
ST-101	Mathematical Analysis and Linear Algebra	20+80	4
ST-102	Statistical Methods	20+80	4
ST-103	Probability Theory –I	20+80	4
ST-104	Statistical Inference-I	20+80	4
ST-105	Statistical Computing-I using SPSS	100	4
	Total	**500**	**20**
SEMESTER- II			
ST-201	Probability Theory –II	20+80	4
ST-202	Statistical Inference-II	20+80	4
ST-203	Survey Sampling Methods	20+80	4
ST-204	Operations Research	20+80	4
ST-205	Statistical Computing–II: C Programming	100	4
ST-206	Elective (DSE): Demography & Vital Statistics	20+80	4
	Total	**600**	**24**
SEMESTER- III			
ST-301	Multivariate Analysis	20+80	4
ST-302	Design and Analysis of Experiments	20+80	4
ST-303	Stochastic Processes	20+80	4
ST-304	Non-Parametric Methods	20+80	
ST-305	Statistical Computing-III: R Programming	100	4
ST-306	Elective (IDSE): Statistical Methodology	20+80	4
	Total	**600**	**24**
SEMESTER- IV			
ST-401	Linear Model and Regression Analysis	20+80	4
ST-402	Any **one** paper out of the following papers: 1. Econometrics 2. Advanced Survey Sampling Methods 3. Advanced Design and Analysis of Experiments 4. Advanced Operations Research	20+80	4
ST-403	Any **one** paper out of the following papers: 1. Time Series Analysis and Statistical Quality Control 2. Reliability Theory	20+80	4
ST-404	Any one paper out of the following papers: 1. Official Statistics 2. Actuarial Statistics 3. Quantitative Epidemiology 4. Survival Analysis& Clinical Trials 5. Big Data Analytic Techniques	20+80	4
ST-405	Project Work and Seminar Presentation	100	4
	Total	**500**	**10**
	Grand Total	**2200**	**88**

Paper – 714
Marks –150 + 25+25 (8 CH)
DISSERTATION
(Thesis + Seminar Presentation of the Thesis + Viva –Voce)

The students will start their dissertation project in consultation with their supervisors for the beginning of the semester-I, but the thesis will be submitted by 15th December i.e. towards the end of the semester –II . The M.Phil scholar shall submit three copies and soft copy of the final dissertation (One copy to be obtained by the department) by 15th of December of the relevant year. The dissertation shall be examined by the examiners, one External and one Internal. The supervisor shall be the Internal Examiner. The evaluation of dissertation shall be followed by viva-voce.

Semester	Course	Course Name	Credit	Total marks
Course Structure of U.G. Zoology Honours				
Semester-I	AECC I	AECC I	4	100
	Core I (Theory)	Non-chordates I: Protista to Pseudocoelomates	4	75
	Core I (Practical)	Non-chordates I: Protista to Pseudocoelomates	2	25
	Core II (Theory)	Principles of Ecology	4	75
	Core II (Practical)	Principles of Ecology	2	25
	GE 1 (Theory)	GE 1 (Theory)	4	75
	GE I (Practical)	GE I (Practical)	2	25
Semester-II	AECC 2	AECC 2	4	100
	Core III (Theory)	Non chordates II: Coelomates	4	75
	Core III (Practical)	Non chordates II: Coelomates	2	25
	Core IV (Theory)	Cell biology	4	75
	Core IV (Practical)	Cell biology	2	25
	GE II (Theory)	GE II (Theory)	4	75
	GE II (Practical)	GE II (Practical)	2	25
Semester- III	Core V (Theory)	Diversity of Chordates	4	75
	Core V (Practical)	Diversity of Chordates	2	25
	Core VI (Theory)	Physiology: Controlling and Coordinating systems	4	75
	Core VI (Practical)	Physiology: Controlling and Coordinating systems	2	25
	Core VII (Theory)	Fundamentals of Biochemistry	4	75
	Core VII (Practical)	Fundamentals of Biochemistry	2	25
	SEC 1	SEC 1	4	100
	GE III (Theory)	GE III (Theory)	4	75
	GE III (Practical)	GE III (Practical)	2	25
Semester- IV	Core VIII (Theory)	Comparative anatomy of Vertebrates	4	75
	Core VIII(Practical)	Comparative anatomy of Vertebrates	2	25
	Core IX (Theory)	Physiology: Life Sustaining Systems	4	75
	Core IX (Practical)	Physiology: Life Sustaining Systems	2	25
	Core X (Theory)	Biochemistry of Metabolic Processes	4	75
	Core X (Practical)	Biochemistry of Metabolic Processes	2	25
	SEC 2	SEC 2	4	100
	GE IV (Theory)	GE IV (Theory)	4	75
	GE IV (Practical)	GE IV (Practical)	2	25

	Core XI (Theory)	Molecular Biology	4	75
	Core XI (Practical)	Molecular Biology	2	25
	Core XII (Theory)	Principles of Genetics	4	75
	Core XII (Practical)	Principles of Genetics	2	25
Semester-V	DSE I (Theory)	DSE 1	4	75
	DSE I (Practical)	DSE 1	2	25
	DSE II (Theory)	DSE II	4	75
	DSE II (Practical)	DSE II	2	25
	Core XIII (Theory)	Developmental Biology	4	75
	Core XIII (Practical)	Developmental Biology	2	25
	Core XIV (Theory)	Evolutionary Biology	4	75
	Core XIV(Practical)	Evolutionary Biology	2	25
Semester- VI	DSE III (Theory)	DSE III	4	75
	DSE III (Practical)	DSE III	2	25
	DSE IV (Theory with Practical /Project)	Project/ Economic Zoology	6	100
Total			**148**	**2600**

ZOOLOGY

HONOURS PAPERS:

Core course – 14 papers

Discipline Specific Elective – 4 papers (Out of 9 suggested papers)

Generic Elective for Non Zoology students – 4 papers. Incase University offers 2 subjects as GE, then papers 1 and 2 will be the GE paper.

Marks per paper - Midterm: 15 marks, End term: 60 marks (Theory) + 25 marks (Practical), Total – 100 marks

Credit per paper – 6

Teaching hours per paper – 40 hours (theory) + 10 hours (practical)

P. G. COURSE STRUCTURE OF THE DEPARTMENT OF ZOOLOGY AT A GLANCE

FIRST SEMESTER

Paper No.	Name of the Papers	Credit
ZOO – 101	Nonchordata	4
ZOO – 102	Molecular Cell Biology	4
ZOO – 103	Environmental Biology	4
ZOO – 104	Evolutionary Biology	4
ZOO – 105	Practical	4

SECOND SEMESTER

Paper No.	Name of the Papers	Credit
ZOO – 201	Chordata	4
ZOO – 202	Microbiology & Ethology	4
ZOO – 203	Developmental Biology	4
ZOO – 204	Cytogenetics	4
ZOO – 205	Practical	4
DSE PAPERS		
ZOO – 206A	Physiological Ecology	4
ZOO- 206B	Applied Zoology	4
ZOO- 206C	Medical diagnostics	4

THIRD SEMESTER

Paper No.	Name of the Papers	Credit
ZOO – 301	Physiology – Life sustaining system	4
ZOO – 302	Physiology – Controlling & coordinating system	4
ZOO – 303	Biomolecules & Enzymology	4
ZOO – 304	Biochemistry of metabolic processes	4
ZOO – 305	Practical	4
IDSE Papers		4
ZOO – 306A	General Zoology	4
ZOO– 306B	Animal behaviour & applied Zoology	4
ZOO– 306C	Medical diagnostics	

FOURTH SEMESTER

Paper No.	Name of the Papers	Credit
ZOO – 401	Molecular Biology & Immunology	4
ZOO – 402	Biotechnology	4
ZOO – 403	Biophysics, Biophysical Chemistry, Instrumentation	4
ZOO – 404	Biostatistics	4
ZOO – 405	Practical & Dissertation	4