

J.D WOMEN'S COLLEGE PATNA

BOTANY DEPARTMENT

Course Outcomes – Program Outcomes (CO & PO) Mapping

Program Outcomes (PO): M.Sc. Botany

M.Sc. Botany is a two-year postgraduate programme to impart advanced knowledge on modern biology. Other than providing students with indispensable knowledge, the programme curriculum fosters problem-solving and critical thinking skills that prepare students to take on any challenges.

Under this programme the students gain insights into the key research areas of Botany. The programme encompasses a balance of both theoretical and practical sessions which enables the students to apply their learning and develop end results.

The programme focuses on career-oriented subjects like Microbial Biotechnology, Plant tissue culture, Enzyme Technology and Genetics, Plant breeding and Crop improvement etc.

Programme Specific Outcome

- **PSO1.** Students completing the course will be able to understand different aspects of botany such as Phycology, Mycology, Microbiology, Bryophytes and pteridophytes.
- **PSO2** The student completing the course will understand the diversity and phylogeny of the gymnosperm, taxonomy of angiosperms and concepts and processes in plant anatomy, developmental biology.
- **PSO3.** After successful completion of the course, a student is able to understand different fields of Botany like systematics, evolution, ecology, physiology, biochemistry, plant interactions with microbes and insects, anatomy, morphology, reproduction, genetics and molecular biology of various life-forms. They have an edge over other students as they will be trained in skill enhancement courses like Biofertilizer technology.
- **PSO4.** The student completing the course is able to classify various life forms of plants, design and execute experiments related to basic studies on environment ecology, physiology, biochemistry, plant interactions with microbes and insects, morphology, anatomy, reproduction, genetics, microbiology, molecular biology, recombinant DNA technology etc.
- **PSO5** The student completing the course is capable of executing short-term research projects/dissertations using tools and techniques in any of the basic specializations of Botany under supervision.

Course Outcome

Semester: I

Sl. No.	<u>Paper /Course</u>	<u>Title</u>	<u>Course outcome</u>
1.	MBOTCC-I	Phycology, Mycology and Bryology	On successful completion of this course, students will be able to know about the- CO1: Thallus organisation of algae, fungi and bryophytes, and their salient features. CO2: Different kinds of algal, fungal, lichen and bryophyte diversity and their economic implication. The course has importance in the areas of academics and research.
2.	MBOTCC-2	Microbiology and Plant Pathology	Students will learn- CO1: Methods in microbiology, develop theoretical and technical skills of basic microbiology (sterilize, isolate, culture, preserve microbes), the structure of bacteria and viruses. CO2: The diversity of micro-organisms, their classification, structure and growth. CO3: Applied aspects of microbial diversity in various fields e.g.: pharmaceuticals, agriculture etc. CO4: Ways and means of combating plant diseases so as to minimize economic loss. The course has importance in the areas of academics, research, and employability.
3.	MBOTCC-3	Pteridophyte, Gymnosperms and Palaeobotany	Students will get in-depth knowledge of- CO1: The plant diversity (esp. In pteridophytes, and gymnosperms) and understanding the evolutionary trends through the study of palaeobotany. CO2: The evolutionary diversification of early land plants and morphological and reproductive innovations in pteridophytes and gymnosperms. The course has importance in the areas of academics and research.
4.	MBOTCC-4	Practical	Students will learn and perform practical on- CO1: Use of sterilization instruments, media preparation. CO2: Isolation and study of microorganisms. CO3: Study of common fungal diseases, vegetative habits, anatomy and reproductive morphology of common pteridophytes and gymnosperms. The course has importance in the areas of academics, research, and employability.

Semester: II

Sl. No.	<u>Paper /Course</u>	<u>Title</u>	<u>Course outcome</u>
5.	MBOTCC-5	Biofertilizer Technology	On successful completion of this course, students will be able to know about the- CO1: Biofertilizers and their use. CO2: Isolation, identification, purification, mass production of microorganisms used in biofertilizers, and also on quality control of commercial biofertilizers. CO3: Biofertilizers' applied aspects for the enhancement of soil fertility and crop productivity and ideal way for sustainable development. The course has importance in the areas of academics, research, and employability.
6.	MBOTCC-6	Taxonomy, Anatomy & Embryology	Students will get in-depth knowledge of- CO1: Classifications and interaction between taxonomy, anatomy & embryology. CO2: Different methods of naming plants, different principles of nomenclature etc. CO3: Phylogeny and phylogenetic systematic, methods used in molecular systematic studies. CO4: Embryology, and its role in taxonomy.
7.	MBOTCC-7	Physiology & Biochemistry	Students will learn- CO1: The mechanism of osmotic relations, metabolism, growth and morphogenesis. CO2: Energy transduction mechanism and biochemical energetics in plants. CO3: Enzymes, their structure, role and properties. The course has importance in the areas of academics and research.
8.	MBOTCC-8	Plant tissue culture, Ethnobotany, Biodiversity and Biometry	After completing the course, students will get to know about- CO1: Ways of conservation and propagation of economically important and endangered plants. CO2: Biodiversity, their types, patterns, loss, conservation and its importance. CO3: Biometric tools like measurement of variability and test of significance of data etc. CO4: Cell and tissue culture, ethnopharmacology, and ethnoecology. The course has importance in the areas of academics, employability and research.

9.	MBOTCC-9	Practical	Students will get practical knowledge on- CO1. Preparation of culture media, explant culture and callus initiation. CO2: Family description of some locally available plants and their taxonomic classification. CO3: Physiological studies like determination of water potential, estimation of protein, paper chromatography etc. CO4: Staining and study of xylem, phloem and pollen etc. The course has importance in the areas of academics, research, and employability.
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Semester III

Sl. No.	<u>Paper /Course</u>	<u>Title</u>	<u>Course outcome</u>
10.	MBOTCC-10	Cell biology & Cytogenetics	Students will learn- CO1: Cell theory, ultrastructure and chemical composition of the cell. CO2: Cell cycle, apoptosis, and its control mechanism. CO3: Concepts of Mendelian genetics, sex determination and extranuclear inheritance. CO4: Basics of microscopy and micro-densitometry. The course has importance in the areas of academics, research, and employability.
11.	MBOTCC-11	Molecular Biology	On successful completion of the course, students will learn- CO1: The structure and function of the protein and nucleic acid, DNA organization and its packaging. CO2: Principle mechanisms of genome replication, maintenance, function and regulation of expression. The course has importance in the areas of academics, research, and employability.
12.	MBOTCC-12	Recombinant DNA technology	Students will learn- CO1: Manipulating DNA molecules to produce genetic combinations which are of value to science, medicine & various industries. CO2: rDNA technology, cloning vectors, passenger DNA, methods of DNA transfer, DNA fingerprinting, IPR etc. The course has importance in the areas of academics, research, and employability.
13.	MBOTCC-13	Plant ecology and environmental biology	Students will have knowledge about- CO1: Organism and population concept, interactions among populations. CO2: Community structure and community dynamics. CO3: Concept of ecosystem, ecosystem energetic, environmental pollution. CO4: Importance of environmental awareness.

			The course has importance in the areas of academics, research, and employability
14.	MBOTCC-14	Practical	Students will gain practical knowledge on- CO1: Modern instruments used in botany, cytological techniques. CO2: Karyotype analysis. CO3: Basic recombinant DNA technology, DNA amplification. CO4: Electrophoresis, spectroscopy, centrifugation, isolation of microorganisms etc. CO5: Ecological adaptations. The course has importance in the areas of academics, research, and employability.

Semester: IV

Sl. No.	<u>Paper /Course</u>	<u>Title</u>	<u>Course outcome</u>
15	MBOTEC-1	Cytogenetics and Crop improvement	Students will gain advanced knowledge on- CO1: Haploidy, aneuploidy, polyploidy, chromosome banding pattern. CO2: Mutations, transposons, epigenetics, epigenomics, human genetic diseases. CO3: Traditional and modern methods of crop improvement and plant breeding. The course has importance in the areas of academics, research, and employability.
16	MBOTEC-1	Applied Microbiology and Plant Pathology	Students will have in depth knowledge of- CO1: Industrial application of microbial diversity, study of causal organism of plant pathogens and their control. CO2: Fermentation technology, plant pathology etc. CO3: Solid waste treatment, composting and land filling. CO4: Wastewater treatment, bioremediation, biogas production. The course has importance in the areas of academics, research, and employability.
17	MBOTEC-2	Project Dissertation	Students should be able to learn how to select and defend a topic of their research, how to effectively plan, execute, evaluate and discuss their experiments. The students are exposed to cutting-edge technologies to achieve a solution and learn to process scientific data using biostatistics. Students should be able to demonstrate considerable improvement in the following areas –

			- In-depth knowledge of the chosen area of research. - Capability to critically and systematically integrate knowledge to identify the issues that must be addressed within the framework of the specific thesis. - Competence in research design and planning. - Capability to create, analyse and critically evaluate different technical solutions. - Ability to conduct research independently. - Ability to perform analytical techniques/experimental methods. - Project management skills. - Report writing skills. - Problem-solving skills. - Communication and interpersonal skills. The course has importance in the areas of academic, research and employability.
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Se m	Subject	PO CO	PO1	PO2	PO3	PO4	PO5
I	Phycology, Mycology & Bryology	CO1	X				
		CO2	X				
	Microbiology & Plant Pathology	CO1	X				
		CO2					X
		CO3				X	
		CO4					X
	Pteridophyta, Gymnosperm & Paleobotany	CO1	X	X			
		CO2					X
	Practical 1	CO1				X	
		CO2	X				
		CO3				X	
		CO4					X
II	Biofertilizer Technology	CO1			X		
		CO2				X	
		CO3					X
	Taxonomy, Anatomy & Embryology	CO1		X			
		CO2		X			
		CO3				X	
		CO4					X
	Physiology & Biochemistry	CO1			X		
		CO2			X		

		C03				X	
		C04					X
	Plant Tissue Culture, Ethnobotany, Biodiversity & Biometry	C01				X	
		C02				X	
		C03					X
		C04					X
	Practical 2	C01					X
		C02		X			
		C03				X	
		C04					X
III	Cell Biology & Cytogenetics	C01				X	
		C02				X	
		C03				X	
		C04					X
	Molecular Biology	C01			X		
		C02				X	
	Recombinant DNA Technology	C01			X		
		C02				X	
	Plant Ecology & Environmental Science	C01			X		
		C02				X	
		C03			X		
		C04				X	
	Practical 3	C01				X	
		C02			X		
		C03				X	
		C04				X	
		C05				X	
IV	Cytogenetics & Crop Improvement	C01			X		
		C02				X	
		C03					X
	Applied Microbiology & Plant Pathology	C01	X				
		C02			X		
		C03					X
		C04				X	X
	Project Dissertation	C01				X	X

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BOTANY DEPARTMENT

Course Outcomes – Program Outcomes (CO & PO) Mapping

Program Outcomes (PO): B.Sc. (H) Botany

PO1: Understanding of plant classification systematics, evolution, ecology, developmental biology, physiology, biochemistry, plant interactions with microbes and insects, morphology, anatomy, reproduction, genetics and molecular biology of various life-forms.

PO2: Understanding of various analytical techniques of plant sciences, use of plants as industrial resources or as human livelihood support systems and is well versed with the use of transgenic technologies for basic and applied research in plants.

PO3: Understanding of various life forms of plants, morphology, anatomy, reproduction, genetics, microbiology, molecular biology, recombinant DNA technology, transgenic technology, plant physiological processes and biochemical pathways to improve plant health and productivity

PO4: Understanding of plant genetics, cytogenetics, and breeding techniques, enabling them to develop improved plant varieties through traditional and modern breeding methods, including genetic engineering and biotechnology

PO5: Understanding of plant-environment interactions and apply ecological principles to conservation efforts, ecosystem management, and sustainable practices. They will understand the impact of environmental changes on plant health and diversity

PO6: Understanding of practical skills in plant management and ability to communicate botanical concepts and research findings effectively to diverse audiences, including stakeholders, policy makers and the public.

Course Outcomes (CO): B.Sc (H) Botany

Year	Course	CO	Statement
I	Cryptogams	CO1	Students would have understanding of the diversity and taxonomy of cryptogram.
		CO2	Students would have understanding of the reproductive strategies and life cycles of cryptogamic groups, recognizing the significance of alternation of generations.
		CO3	Ecological and economic importance.

	Microbiology and Plant Pathology	CO1	Understand the world of microbes, fungi, lichens and pathogens of plants.
		CO2	Understand the application of microbiology in various fields of economic and ecological
		CO3	Understand the importance of bacteria, virus and managing plant diseases in a sustainable manner, promoting environmental health and food security.

II	Gymnosperm, Angiosperm Taxonomy	CO1	Comprehensive Knowledge of Gymnosperms
		CO2	Students will recognize the ecological importance of gymnosperms in ecosystems and their economic value in forestry, horticulture, and other industries.
		CO3	knowledge of classification, diversity of angiosperms and develop expertise in recognizing and interpreting the structural and functional significance of floral morphology.
		CO4	Field and Herbarium Experience
	Anatomy, Embryology, and Applied Botany	CO1	understanding of the structural organization of plants at the tissue and cellular levels, including the functions and characteristics of different tissue types.

		CO2	knowledge of plant embryology, including the stages of embryo formation, seed development, and factors influencing reproductive success in plants.
		CO3	Students will be able to identify economically important plants and their applications in food production, medicine, and industry, as well as strategies for plant resource management.
III	Plant Physiology and Biochemistry	CO1	Understand the key physiological processes such as photosynthesis, transpiration, respiration, and nutrient uptake in plants.
		CO2	knowledge of major biochemical pathways in plants, including the metabolism of carbohydrates, proteins, lipids, and nucleic acids.
		CO3	knowledge of plant physiology and biochemistry to improve agricultural practices
	Cytogenetics, Molecular Biology and Plant Breeding	CO1	understanding of chromosome structure, behavior during cell division, and the genetic implications of

			chromosomal mutations and abnormalities.
		CO2	knowledge of molecular genetic processes such as DNA replication, gene expression, and regulation, and be able to apply molecular biology techniques in genetic research.
		CO3	knowledge of cytogenetics and molecular biology in practical plant breeding programs to enhance crop yields, disease resistance, and environmental adaptability.
	Environmental Biology	CO1	understanding of ecosystem dynamics, including the roles of different organisms and environmental factors in shaping ecological communities.
		CO2	identify and assess biodiversity within ecosystems and understand the importance of conserving biological diversity and protecting endangered species.
		CO3	impact of human activities on the environment and be able to suggest sustainable practices and policies to mitigate negative effects.

COPPO Mapping: B.Sc. (H) Botany

year	course	PO CO	PO1	PO2	PO3	PO4	PO5	PO6
I	Cryptogams	CO1	x					
		CO2			x			
		CO3					x	x
	Microbiology & plant pathology	CO1	x		x			
		CO2						x
		CO3					x	
II	Gymnosperm & Angiosperm taxonomy	CO1			x			
		CO2					x	
		CO3	x	x				
		CO4						x
	Anatomy, embryology & applied botany	CO1			x			
		CO2			x			
		CO3		x				x
III	Plant physiology & biochemistry	CO1	x					
		CO2			x			
		CO3						x
	Cytogenetics, molecular biology & plant breeding	CO1	x			x		
		CO2			x	x		
		CO3						x

	Environmental biology	CO1					x	
		CO2	x				x	
		CO3					x	x

Course Outcome

B. A. Old Course

B.A. Part - I Hons.

Paper – I – History of India from the earliest time to 1206 A.D.

C.O. - After completing this course, the students will be able to: -

- **Discuss various kind of sources that historians utilize to write history of the period specified in syllabus.**
- **Analyze the process and the stages of development of various types of monarchy, republication and centralized states. They will learn about the formation of large empires.**
- **Delineate the changes in all aspects of administration, culture, literature, trade & commerce, religion, science and technology.**
- **Analyze the history of South Indian states and their cultural contribution.**
- **Learn about the advent of Arabs & Turks in India.**

Paper – II – History of Great Britain (1603 – 1939)

- **On completion of this course the students will be able to identify the stages of monarchy in Great Britain.**
- **Assess the Civil war, Industrial Revolution and Reform Acts, tracing the long-term effects of these**
- **Examine the role of Prime Minister in the growth of democracy in England.**
- **Discuss the role of England in First World War and rise of Labour party.**

B.A. Part – II Hons.

Paper – III – History of India from 1206 – 1757.

- On completing this course, the students will be able to identify the major political developments in the History of India (1206 – 1757).
- They will learn to outline the changes and continuities in the field of culture, with reference to art, architecture, religion and literature.
- Will be able to analyze the history of Mughals.
- Students will learn about the rise of Marathas.

Paper – IV – History of Modern Europe (1788 – 1945).

After completing this course: -

- Students will be able to analyze the historical development in Europe.
- They will learn about democratic and socialist foundation of Modern Europe.
- They will be able to situate historical developments of socialist upsurge and the economic forces of the wars.
- They will learn to analyze the ideological shifts and rise of Fascism and Nazism.

B.A. Part – III Hons.

Paper – V – History of India (1757 – 1857)

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

- **Outline key developments of the 18th century in the Indian subcontinent.**
- **Explain the establishment of company rule and important features of the early colonial regime.**
- **Analyze the evolving colonial institutions and their impact.**
- **Identify the impact of colonial rule on economy.**
- **Assess the issues of landlords, struggling peasants, tribals and artisans during the Company Raj.**

Paper – VI – History of India – 1858 – 1947.

On completion of course the student will be able to: -

- **Outline the social and economic facets of colonial India and influences on the National Movement.**
- **Identify the different regional, religious, linguistic and gender identities developed in the late 19th and early 20th centuries.**
- **Analyze the different Acts passed from time to time.**

Paper – VII – History of China and Japan (mid-19th century – mid 20th century).

On completing the course students will learn: -

- **About the nature and structure of the traditional Chinese society and how to transform the Chinese society from traditional to modern cultures.**
- **About the leaders like Dr. Sun Yat Sen, Chiang Kai Shek etc. Japan**
- **Analyze the course of history of Japan, major political developments and its relations with other countries.**

- **Critically analyze the Japanese Imperialism and its role in the two World Wars.**

Paper – VIII – History of USA (1776 – 1945).

After completing the course, the student will learn.

- **Basic narrative of American History.: Political, Economic, Social and Cultural including knowledge of unity and diversity in America.**
- **An understanding of America's evolving relationship with the world.**
- **Analyze the journey of America becoming a world power.**
- **Understand the courses and effects of inequalities rooted in America's social, economic and political structure and of efforts to eradicate those structural inequalities.**

Program Outcome

B.A. History

Program Outcomes (POs)

The students who complete three years of full-time study of an undergraduate programme of study in History will be awarded a Bachelor's degree. Some of the desirable learning outcomes which a student should be able to demonstrate on completion of Bachelor's Degree will include the following: -

PO1. The students acquire knowledge in the field of social sciences, literature and humanities which make them sensitive and sensible enough.

PO2. The B.A. graduate will be acquainted with the social, economical, historical, geographical, political, ideological and philosophical tradition and thinking in India.

PO3. The program also empowers the graduate to appear for various competitive examination or choose the post graduate program of their choice.

PO4. The B.A. program enables the students to acquire knowledge with human value, framing the base to deal with various problems in life with courage and humanity. It throws light on world history.

PO5. The students will be ignited enough to think and act over for the solution of various issues prevailed in the human life to make this world better than ever.

PO6. Program provides the base to be responsible citizens after knowing the events of India and the world.

Program Specific Outcome (PSOs)

PSO 1. Understand background of our religion, customs, institutions, administration and so on.

PSO 2. Understand the present existing social, political, religious and economic conditions of the people.

CO & PO Mapping of B.A. (History Hons.)

		PO-1	PO-2	PO-3	PO-4	PO-5	PO-6
B. A. Part I	CO – 1	X					
	CO – 2				X		
B. A. Part II	CO – 3	X	X				
	CO – 4					X	
B. A. Part III	CO – 5		X	X			
	CO – 6		X	X			
	CO – 7				X		X
	CO – 8						X

BA MUSIC

Program Outcome

Program Outcomes (POs) :-

The students who complete three years of full-time study of an undergraduate programme of study in Music will be awarded a Bachelor's degree. Some of the desirable learning outcomes which a student should be able to demonstrate on completion of Bachelor's Degree will include the following: -

PO1. Identify domain specific concepts and techniques.

PO2. Demonstrate the ability to conceptualize and deliver music productions.

PO3. Develop networks and collaborate with the industry across various genres of fine arts.

PO4. Employ environmental sensibilities through the best use of the art itself.

PO5. Demonstrate creative improvisation within the framework of Hindustani Classical Music.

PO6. Apply music specific content skills, including effective performance ability, analytical skills and teamwork skills to develop career and research.

Program Specific Outcome (PSOs) :-

PSO 1. Imparts knowledge about the basic principles of music

PSO 2. Imparts skill based education and grooming for Stage performance.

PSO 3. Ensures employability after graduation.

PSO 4. Encourages Team work spirit and Introduces social significance of the music

CO & PO Mapping of B.A. (Music Hons.)

		PO-1	PO-2	PO-3	PO-4	PO-5	PO-6
B. A. Part I	CO – 1	X					
	CO – 2				X		
B. A. Part II	CO – 3	X	X				
	CO – 4					X	

B. A. Part III	CO – 5		X	X			
	CO – 6		X	X			
	CO – 7				X		X
	CO – 8						X

M.A. MUSIC

COURSE OUTCOME

Semester - 1

Paper – 1 General and Applied Music -I (Theory)

- Enhances knowledge about prescribed ragas and talas of Indian classical music and develops ability to write notation.
- Enhances knowledge about historical development of Raga of Indian classical music.
- Enhances knowledge about various education systems and Gharanas in Indian classical music.
- Enhances knowledge about classification of various musical Instruments of Indian Music.

Paper – 2 History of Indian Music (Vedic Period to 13th Century) - 1 (Theory)

- Spreads awareness about different aspects of music as described in Ancient treatise of India.
- Enhances knowledge about the various aspects of music described in Mahakavyakal and medieval period.
- Enhances knowledge about historical development of swaras.
- Enhances knowledge about various aspects of music as described in treatise of medieval period.

SEMESTER - 2

Paper – 1 General and Applied Music -I (Theory)

- Enhances knowledge about prescribed ragas and talas of Indian classical music and develops ability to write notation.
- Enhances knowledge about classification of various Ragas of Indian Music.
- Enhances knowledge about interdisciplinary areas of Music .
- Enhances knowledge about classification of various musical Instruments of Indian Music.

Paper – 2 History of Indian Music (Vedic Period to 13th Century) -2 (Theory)

- Spreads awareness about different aspects of music as described in Vedic treatise of India.
- Enhances knowledge about the various concepts of music as described in Ancient and Medieval period.
- Enhances knowledge about Shruti –Swaras relationship as described in historical Musical treatise.
- Enhances knowledge about various aspects of music as described in treatise of medieval period.

Paper – 3 Viva-Voice & Comparative Study of Ragas (Practical)

- Increases confidence to perform as a mature and sensible artist.
- Ability to differentiate the various ragas and enhances the skills to make notation and improvise ragas with their creativity
- Enhances knowledge and ability to demonstrate prescribed talas on hands.
- Develops ability to make notation.
- Develops the teaching abilities in students and make them self dependent in various areas i.e. performing , improvisation

Paper – 4 STAGE PERFORMANCE (Practical)

- Enhances knowledge of prescribed Ragangs and imparts Creativity and Systematic improvisation ability in students.
- Develops ability to perform Various classical vocal forms
- Develops ability to perform semi classical vocal forms.
- Enhances ability to perform Tarana.

Paper – 5 Basic Ragas (Practical)

- Develops the teaching abilities in students and make them self dependent in various areas
- i.e. performing , improvisation ,
- Develops ability to compose bandish .
- Develops ability to make notation.
- Enhances knowledge and ability to demonstrate prescribed talas on hands.

SEMESTER – 3

Paper – 1 Applied Music Theory and Musical Compositions-I (Theory)

- Enhances knowledge about prescribed ragas and talas of Indian classical music and develops ability to write notation.
- Enhances knowledge about classification of various Ragas of Indian Music.
- Enhances knowledge about interdisciplinary areas of Music.
- Enhances knowledge about classification of various musical Instruments of Indian Music

SEMESTER – 4

Paper: Music Vocal

After completing this course, the learner will be able to:

- The students will be able to explain new ragas and Talas
- The students will be able to expound the terminologies of Indian classical music.
- The students will be able to describe ancient history and contribution of renowned Musicians of Hindustani music.
- The students will be able to exhibit ragas prescribed in the syllabus.
- The students will be able to perform the taals and their layakaries with reciting bols on hand.
- The students will be able to perform one Geet.
- The students will be able to perform Dhrupad and Tarana.

Programme outcomes (PO) of M.A. Music Vocal

1. Constructs strong foundation and in-depth knowledge of Classical Music.
2. Introduced aesthetics and social significance of the Music.
3. Imparts knowledge of folk traditions.
4. Ability to be pursue for advance research in Music.
5. Ensures the employability after post graduations.
5. Ensures the employability after post graduations

CO & PO Mapping of M.A. (Music Hons.)

		PO-1	PO-2	PO-3	PO-4	PO-5	PO-6
M. A. Sem. I	CO – 1		X				
	CO – 2	X					
	CO – 3		X			X	
	CO – 4		X				
M. A. Sem. II	CO – 5		X				
	CO – 6	X					
	CO – 7		X			X	
	CO – 8		X				
M. A. Sem III	CO – 10			X		X	
	CO – 11		X				
	CO – 12				X		
	CO – 13	X					
	CO – 14			X			
M. A. Sem IV	CO – 15					X	X
	CO – 16						X

Course Outcomes (CO) and Programme Outcomes (PO)
Mapping and Attainment
B.A. Philosophy Honours (Three years Degree Course)

After completion of this programme the students will be able to:

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PO 1-Fundamental Concept-Understand the Concept of humanities and develop the idea of creating frame work of epistemology, metaphysics, logic and ethics.

PO2-Critical and analytical Thinking -Students Will be able to critically analyse and synthesize the hypothesis, principles, methods given by thinkers.

PO3- Ethics -Recognize various value systems around them and aware with norms of humanitarian practice.

PO4-Logical Thinking: -Develop sound reasoning and argumentation able to think logically.

PO5-Student will able to understand social realities and problem, assess and relate the views of others.

PO6- Civic Awareness-Demonstrate empathetic social concern and equity based national development and ability to act with informed awareness towards civic life around them.

Programme Specific Outcomes (PSO'S)

A graduate in Philosophy specifically efficient in

PSO1- Apply analytical, critical thinking and reasoning before comes to conclusion.

PSO2-Develop the core values, Social responsibilities and teamwork.

PSO3-Develop life management skill through yoga and meditations.

PSO4-Develop Logical reasoning which help them in competitive exams and other issues of practical life.

PSO5-Able to make a career in administrative, legal and other fields.

PSO6 -Develop Civic Values towards gender, environment, humanity and social political issues.

Course outcome (CO)B. A Hons. Philosophy

After completion of the course, the student will able to:

B. A	Code	Course	CO	Statements
Part I	Paper1	Indian Philosophy	CO1	Students will understand significance of Indian Intellectual tradition through Basic concept of Vedas, Upanishads, Indian Idealism, Materialism and Ethics
			CO2	Develop a perspective on the foundation of the Indian Philosophical ideas
			CO3	Understand the Concept of the Development of the Indian Philosophical School
			CO4	Develop a perspective on the different Indian methods to analyse the various problem of philosophy
Part II	Peper2	Epistemology and Metaphysics	CO1	Students will able to apply logical concepts to philosophical problems of epistemology and metaphysics.
			CO2	They recognize the characteristics of knowledge, such as limits and nature of knowledge, know-er and known.
			CO3	Students squinted to ultimate reality, its nature and numbers.
			CO4	Construct argument for and against of philosophical problems, issues and views.

BA Part II	Paper3	Ethics	CO1	Students will able to analyse and critically evaluate various ethical theories and their applications.
			CO2	They understand and interpret issues concerning human conduct with a moral rational approach.
			CO3	Achieve philosophical clarity in given situation of different moral issues.
			CO4	Develop a better orientation towards Indian Ethical Heritage and they applying traditional moral wisdom in present context.
	Paper4	History of Modern Western Philosophy	CO1	The study of the following course outline will help the students to develop the understanding about the Nature and Dimension of thought process in west.
			CO2	Understand the Concept of the Development of western Epistemological and Metaphysical thoughts.
			CO3	Students will also able to compare the issues of philosophy related to East and West.
			CO 4	Students will understand how philosophers were evaluated the theories of their predecessors.

	Paper 5	Philosophy of Religion	CO1	Develop view to think philosophically about religion.
			CO2	They will be able to move away from irrational blind faith and dogmas.
			CO3	Develop the attitude of religious tolerance which is conducive for multi religious society.
			CO4	Students well understand the different religious tradition and their implications.
	Paper 6	Social and Political Philosophy	CO1	Students able to understand the basic concept and philosophical background of Society and Politics.
			CO2	They able to explain family caste and class, justice, liberty, equality, freedom in modern context
			CO3	Learn the notion of coexistence in society with multi-cultural setup.
			CO4	
	Paper 7	Logic and Analysis	CO1	Enhance logical reasoning and problem-solving ability.
			CO2	Apply principles of symbolization, truth table methods.
			CO3	They apply the method of proving validity and invalidity.
			CO4	Develop analytical, critical and reflective thinking.
	Paper 8	Concept of Indian Philosophy	CO1	Students understand the richness of Indian philosophical concepts.
			CO2	Students will acquaint to deep knowledge of epistemological and metaphysical of Indian philosophical systems.
			CO3	To develop scientific and rational inquiry for the concepts like soul absolute, God, Causation, dharma.
			CO4	Students will appreciate the concepts of various schools of Indian philosophy.

CO PO Mapping: B.A. (Hons)Philosophy

Part 1	CO\PO	PO1	PO2	PO3	PO4	PO5	PO6
Course1	CO1	X		X			
	CO2	X					
	CO3	X					
	CO4	X	X				
Course 2	CO1	X	X				
	CO2	X					
	CO3		X				
	CO4	X	X				
Course3	CO1	X	X				
	CO2		X	X			
	CO3			X			
	CO4			X			
Course 4	CO1		X				
	CO2	X					
	CO3		X				
	CO4		X		X		
Course5	CO1	X					
	CO2	X	X				
	CO3		X				
	CO4			X			
Course6	CO1					X	
	CO2					X	
	CO3						X
	CO4					X	X
Course 7	CO1	X	X				
	CO2	X	X				
	CO3		X		X		
	CO4		X		X		
Course 8	CO1		X				
	CO2	X	X				
	CO3	X	X				
	CO4			X			



JD WOMEN'S COLLEGE

Patliputra University

M.A. SOCIOLOGY

Course Outcomes – Program Outcomes (COPO) Mapping

Program Outcomes (PO)

PO-01- This course is designed so that the students attain basic as well as advanced theoretical knowledge of sociology

PO-02- It helps the students to develop philosophical, logical, rational and critical thinking in their understanding of multifarious aspects of society.

PO-03- The students are also able to examine and evaluate the changing trends in rural power structure

PO-04- the students learn to apply different kinds of research design and tools, techniques in accordance with the need of the research.

PO-05- They also get informed about the important issues related to population. The students get sensitized about gender issues, the grave issue of gender inequality and violence against women and social construction of gender in society. They will get to know about the issue of marginalisation. The students will get acquainted with the different forms and theories of deviance and also try to find their solution.

PO-06- the students will get aware about changing social relations due to urbanisation and the changing trends in the urban social institutions and various urban social issues.

PO-07- Through this paper, the students are able to understand the theories and factors of social change

Programme Specific Outcomes (PSO'S)

A graduate in Sociology specifically efficient in

PSO1- Apply analytical, critical thinking and reasoning before comes to conclusion.

PSO2-Develop the core values, social responsibilities and have a better understanding of urban and rural power structure and social institutions of different society

PSO3- the students will get acquainted with various forms of social deviance and develop an ideology for finding solutions for such deviant behaviour

PSO4-The student will get proper knowledge and practical understanding to conduct authentic social research.

PSO-05 Logical reasoning which help them in competitive exams and finding solutions to prevent various forms of social deviance.

PSO6-Able to make a career in administrative, legal and social counselling fields.

PSO-7-Develop Civic Values towards marginality. social political issues and issues related to population. gender etc

Sociology MA. Course outcome

CO-1 This will help the students to attain basic understanding and the scope of the subject CO-2 recent trends of social development helps the students in enhancing their theoretical understanding CO-3 The students will be able to apply it to understand the social interaction process in everyday life.	P.G. Sem-1, Paper-1- Principles of Sociology
CO-1- This course is designed so that the students attain basic as well philosophical foundation of sociology by understanding the theories of Augste Comte, Karl Marx Emile Durkheim, Max Weber, Pareto etc CO-2 The students can understand the relevance of these theories in understanding and applying it to deal with the contemporary social issues. CO-3 It helps the students to develop philosophical, logical ,rational and critical thinking in their understanding of multifarious aspects of society.	P.G. Sem-1, Paper-2 Classical Sociology
CO-1- This course is designed so that the students attain basic as well philosophical foundation as well as perspectives to understand Indian society through the lens of Indian Sociologists like G.S. Ghurye, M.N. Srinivas, S C Dubey, A R Desai, D P Mukherjee, Surjit Sinha, Irawati Karve, A M Shah CO-2 The students can understand the relevance of these theories in understanding and applying it to deal with the contemporary social issues. CO-3 It helps the students to develop philosophical, logical ,rational and critical thinking in their understanding of multifarious aspects of Indian society.	P.G. Sem-1, Paper-3 Perspectives in Indian Sociology
CO-1 This helps the students to understand the rural Indian society CO-2- they can understand role of caste as an institution of Indian society, the rural urban dichotomy and continuum . CO-3- The students are also able to examine and evaluate the changing trends in rural power structure.	P.G. Sem-1, Paper-4- Rural Sociology
CO-1 The students get acquainted with the philosophy behind conducting social research CO-2 the students learn to apply different kinds of research design and tools techniques in accordance with the need of the research.	P.G. Sem-2, Paper-5- Research Methods in Sociology
CO-1 The students get aware about the impact of population on society and the factors behind change in population. CO-2 They also get informed about the important issues related to	P.G. Sem-2, Paper-6 Sociology of Population Studies

population.	
CO-1The students get sensitized about gender issues CO-2-The students will get information about the grave issue of gender inequality and violence against women and social construction of gender in society.	P.G. Sem-2, Paper-7 Gender and Society
CO-1The students' knowledge get enhanced about the emerging urban social issues CO-2 –the students will understand the theoretical perspectives of urban sociology	P.G. Sem-2, Paper-8- Urban Sociology
CO-1-The students get familiarised about sociological and legal delinquency CO-2The students get acquainted with the different theories of causes of crime and different types of crime and also theories of punishment. CO-3- They will develop critical thinking to solve such deviance and know about various correctional forms for different crimes executed by the Government.	P.G. Sem-2, Paper-9- Crime and Society
CO-1-The students will get an in depth understanding of the macro micro and middle range theories in sociology CO-2-They will get informed about the post modern theories of sociology, phenomenology, symbolic interactionism, ethnomethodology, social exchange theories etc.	P.G. Sem-3,Paper-10- Theoritical perspectives in sociology
CO-1 The students are able to get acquainted with multifarious causes of various social problems and the issues of weaker sections CO-2They will get sensitized about the issues of poverty, illiteracy, unemployment, black money and corruption and will thereby try to find solutions to curb such social problems	P.G. Sem-3,Paper-11- Social Problems in India
CO-1-The students will get acquainted with industrial psychology, productive relations. CO-2-They are also able to understand the sociological meaning of work and leisure, various aspects of industrial relations and issue of job satisfaction	P.G. Sem-3, Paper-12, Industrial Sociology
CO-1Through this paper, the students are able to understand the theories	P.G. Sem-3, Paper-13-

and factors of social change. CO-2-The students are able to understand social change through sanskritisation, westernisation, modernization and globalisation . CO-3They also get acquainted with various theories and models of development along with rhe process of planned development in India	Sociology of change and development
CO-1- the students will get sensitized about marginalization and the problems of marginalized communities. CO-2- The students will get informed about the various social movements by marginalized communities CO-3- The students will get informed about the steps and policies by government and constitutional provisions to minimize and eradicate the problems of marginalized communities.	P.G. Sem-3, Paper-14- Sociology of Marginalized Communities

CO PO Mapping: M.A. (Hons)Sociology

Part 1	CO\PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	
Course1	CO1			X	X	X	X	X	
	CO2			X	X	X	X		
	CO3				X				
Course 2	CO1			X	X	X	X		
	CO2				X				
	CO3				X				
Course3	CO1				X	X			
	CO2	X	X		X			X	
	CO3				X			X	
Course 4	CO1				X	X	X	X	
	CO2	X	X		X	X	X	X	
	CO3	X	X		X	X	X		

Course5	CO1			X		X	X	X	
	CO2	X	X	X		X	X	X	
Course6	CO1	X		X	X		X		
	CO2	X		X	X		X		
Course 7	CO1	X		X	X		X	X	
	CO2	X		X	X		X	X	
Course 8	CO1	X		X	X				
	CO2			X	X			X	
Course 9	CO1	X		X	X		X	X	
	CO2	X		X	X		X	X	
	CO3	X		X	X		X		
Course 10	CO1			X		X	X	X	
	CO2			X		X	X	X	
Course 11	CO1	X			X		X	X	
	CO2	X			X		X	X	
Course 12	CO1	X		X	X	X			
	CO2			X	X	X			
Course 13	CO1				X	X			
	CO2				X	X			
	CO3	X			X	X			
Course 14	CO1	X	X	X	X		X		
	CO2	X	X	X	X		X		

M.A. HOME SCIENCE

Course Outcome - Programme Outcome (CO PO Mapping)

PO. No.	Programme Outcome Upon completion of Home Science Degree Programme, the graduates will be able to
PO-1	Understand and appreciate the role of interdisciplinary sciences in the development and well- being of individuals, families and communities.
PO-2	Develop professional skills in food, nutrition, textiles, housing, product making, communication technologies and human development.
PO-3	understand the concept of communication, different media and role of interpersonal, group and mass communication in making communication effective and barriers in communication.
PO-4	Acquire scientific skills in the management of resources and develop basic skills for career options in the fields of dietetics, interior designing, textile and fashion designing.
PO-5	Acquire academic skills with an aptitude for higher studies / research/entrepreneurship in any branch of the programme.

Course Outcome (CO)

FIRST SEMESTER (M. A.)

Course Title - : Advance Nutrition

Course Code -CC I

CO 1 - Able to understand the techniques of measuring energy expenditure in individuals.
Critically evaluate and derive requirements for specific macronutrients.

Course Title - : Advance Study of Human Development

Course Code - CC II

CO 2 - Describe developmental tasks during infancy, preschool and middle childhood years.
To develop an awareness of important aspects of all development stages during this phase.

Course Title - : Concept of Home Management

Course Code - CC III

CO 3 - Know Management system and Family resource management and the important features of management process.

Course Title - : Research Methodology and Statistics

Course Code - CC IV

CO 4 - Understand the background and need of research and discuss the research process.
Demonstrate knowledge of the scientific method, purpose and approaches to research.

SECOND SEMESTER (M. A.)

Course Title - : Therapeutic Nutrition

Course Code -CC I

CO 1 - Interpret dietary modification for different diseases. Plan dietary counselling and prepare diet menu.

Course Title - : Maternal and Infant Nutrition

Course Code - CC II

CO 2 - Understand the inter-relationship between nutrition, growth and development during a life cycle.

Course Title - : Communication Technology

Course Code - CC III

CO 3 - Understand various aspect of communication technology and identify different forms of communication.

Course Title - : Women's Studies

Course Code - CC IV

CO 4 - Create awareness about the status of women in India. Understand the personal and civil laws related to women and know existing Women's Welfare Programmes.

Course Title - : Management of textile crafts and apparel industry

Course Code -Paper V

CO V - Understand the origin of different techniques and designs with reference to colours, motifs, layouts of different traditional textiles of India.

THIRD SEMESTER (M. A.)

Course Title - : Food Processing

Course Code -CC I

CO 1 - Understand food standard and related laws regarding food safety and quality.

Course Title - : Food Science and experimental food

Course Code - CC II

CO 2 - Gain knowledge about food science and acceptability of food. Learn the properties, sources and uses of carbohydrate and protein. Learn various cooking and preservation method to retain/enhance the nutritional quality.

Course Title - : Institutional food management

Course Code - CC III

CO 3 - State and discuss planning and management of food service system.

Course Title - : Community Nutrition

Course Code - CC IV

CO 4 - Familiarize with the concept of public health nutrition and acquire skills in nutritional assessment.

FOURTH SEMESTER (M. A.)

Course Title - : Practical Approach to Writing Research Activities

Course Code - EC-1

CO 1 - Acquaint with the research method application and preparation of research proposals and report writing.

Course Title - : Internship / Dissertation / Project / Seminar

Course Code - EC-II

CO 2 - Learn effective project organizational skills along with discussion, result, interpretation and paper writing.

CO PO Mapping of M. A. of Home Science

	PO CO	PO-1	PO-2	PO-3	PO-4	PO-5
Sem.-I	CO- 1		X		X	
	CO -2	X	X			
	CO -3				X	X
	CO -4	X				X
Sem.-II	CO -1		X		X	
	CO -2	X	X			
	CO -3			X		
	CO -4	X				
	CO -5		X			X
Sem.-III	CO -1		X		X	
	CO -2		X		X	
	CO -3				X	X
	CO -4		X		X	
Sem.-IV	CO -1				X	X
	CO-2					X

**B.A. (Hons.)
HOME SCIENCE
Course Outcome - Programme Outcome (CO PO Mapping)**

Programme Outcome (PO)

PO-1	Understand and appreciate the role of interdisciplinary sciences, the development and well- being of individuals, the families and communities.
PO-2	Develop professional skills in food, nutrition, textiles, housing, product making, communication technologies and human development.
PO-3	Acquire professional and entrepreneurial skills for economic empowerment of self in particular and community.
PO-4	Understand the science and technology that enhance the quality of life of people.

Course Outcome (CO)

FIRST YEAR (B. A. Part -I)

Course Title - : FOOD SCIENCE AND NUTRITION

Course Code -Paper I

CO 1 - Recall the basic concepts of food and nutrition and explain the nutrients, their functions, sources and clinical manifestation. Discuss and analyse the effects of cooking and processing techniques on nutritional properties of food

Course Title - : MOTHER CRAFT AND HUMAN DEVELOPMENT

Course Code - Paper II

CO 2 - Describe developmental tasks during infancy, preschool and middle childhood years.

SECOND YEAR (B. A. Part -II)

Course Title - : DIETETICS

Course Code -Paper I

CO 1 - Understand balanced diet and meal planning. Describe the nutritional requirements and concerns of children, adolescents and adulthood

Course Title - : HOME MANAGEMENT

Course Code -Paper II

CO 2 - Understand the fundamentals of resource management in a changing scenario

THIRD YEAR (B. A. Part -III)**Course Title - : TEXTILE AND CLOTHING****Course Code -Paper I**

CO 1 - Understand the structure, properties and production techniques of various natural and manmade fibres. Understand and apply various textile techniques including yarn spinning, dyeing, printing and fabric finishing.

Course Title - : CHILD PSYCHOLOGY**Course Code -Paper II**

CO 2 - Recognize the basic concept of puberty, health, family and peer relationship during adolescence

Course Title - : EXTENSION EDUCATION**Course Code -Paper III**

CO 3 - Understand the concept of Communication, its types and role of mass media in communication.

Course Title - : FAMILY RELATIONSHIP**Course Code -Paper IV**

CO 4 - Understand merits & demerits of marriage and family. Aware about areas of adjustment in family.

CO PO Mapping of B. A. (Hon's)

	PO	PO-1	PO-2	PO-3	PO-4
	CO				
B. A. Part I	CO- 1		X		X
	CO -2		X		
B. A. Part II	CO -1	X	X		
	CO -2			X	X
B. A. Part III	CO -1		X	X	X
	CO -2	X			

	CO -3		X		X
	CO -4	X			



JD WOMEN'S COLLEGE

Patliputra University

B.A. (Hons) ECONOMICS

Course Outcomes – Program Outcomes (COPO) Mapping

Program Outcomes (PO)

PO1: The program provides an understanding of foundational and advanced economic concepts.

PO2: Ability to analyze real-world economic problems using theoretical frameworks.

PO3: Critical thinking and decision-making skills in economic policies.

PO4: Application of quantitative methods for economic analysis.

PO5: Awareness of global economic systems, including the history and development of key economies.

Course Outcomes (CO)

FIRST – YEAR (PART-I)

Course Title: Micro Economics

Course Code: Paper I

CO1: Develops understanding of consumer behavior, market structures, and pricing mechanisms.

Course Title: Macro Economics

Course Code: Paper II

CO2: Explains national income, inflation, and employment, and assesses macroeconomic policies.

SECOND YEAR (PART- II)

Course Title: Indian Economy

Course Code: Paper III

CO1: Provides knowledge of economic issues and policy challenges in India, focusing on development and growth.

Course Title: Public Finance

Course Code: Paper IV

CO2: Introduces fiscal policy, government budgeting, taxation, and public expenditure.

THIRD YEAR (PART- III)

Course Title: Economic & Planning

Course Code: Paper V

CO1: Discusses theories and models of economic growth, focusing on planning strategies used by different countries.

Course Title: Economic Development of the UK, USA Russia, and Japan

Course Code: Paper VI

CO2: Analyze the economic history of these Countries, and learning from their growth and development trajectories.

Course Title: Statistics

Course Code: Paper VII

CO3: Provides tools for data analysis, helping in the interpretation of economic data.

Course Title: Mathematical Economics & Statistics

Course Code: Paper VIII

CO4: Focuses on the use of mathematical methods to solve economic problems, including optimization and modeling techniques.

COPPO Mapping Matrix

Year	PO CO	PO1	PO2	PO3	PO4	PO5
FIRST YEAR	CO1	X	X			
	CO2	X	X	X		
SECOND YEAR	CO1	X		X		
	CO2		X	X		
THIRD YEAR	CO1	X	X			X
	CO2			X		X
	CO3		X		X	
	CO4		X		X	



JD WOMEN'S COLLEGE

Patliputra University

M.A. ECONOMICS

(Under CBCS)

Course Outcomes – Program Outcomes (COPO) Mapping

Program Outcomes (PO)

PO1: Advanced understanding of microeconomic and macroeconomic theories.

PO2: The application of mathematical and statistical tools for analyzing economic problems.

PO3: Ability to critically evaluate and apply economic history and thought to contemporary economic issues.

PO4: Proficiency in qualitative and quantitative research methodologies in economics.

PO5: Understanding of national and international economic policies and their implications.

PO6: In-depth knowledge of economic growth, development theories, and their applications.

PO7: Expertise in specialized fields of economics such as financial, industrial, and agricultural economics.

PO8: Prepare students for roles in research, public policy, academia, and industry, equipping them with professional skills.

Course Outcomes (CO)

FIRST – SEMESTER

Course Title: Micro Economic Analysis- I

Course Code: CC- I

CO1: Develop an advanced understanding of microeconomic theories, including consumer behavior, firm decisions, market structures, and applications in real-world markets

Course Title: Macro Economic Analysis -I

Course Code: CC-2

CO2: Explore macroeconomic concepts like national income Accounting, Consumption, and Investment functions, and supply of money as well as Demand for money.

Course Title: Mathematical Methods

Course Code: CC-3

CO3: To gain proficiency in applying mathematical techniques such as calculus, optimization, matrix algebra, and differential equations to solve complex economic problems.

Course Title: History of Economic Thought

Course Code: CC-4

CO4: Analyze the development of economic ideas from classical to modern times, and understand their impact on contemporary economic theory and policy.

SECOND SEMESTER

Course Title: Indian Economy- Issues and Policies- I

Course Code: CC- 5

CO1: Examine the Indian Economy during British rule and critically analyze issues facing the Indian economy, including inequality, poverty, unemployment, and policy measures in various sectors such as agriculture, industry, and services as well as Economic reforms.

Course Title: Economics of Growth and Development- I

Course Code: CC-6

CO2: Understand key theories and models of economic growth and development, including conceptual framework, structural transformation of growth, and the role of social aspect in growth

Course Title: Micro Economic Analysis - II

Course Code: CC-7

CO3: Explore advanced topics in microeconomics, including Alternative theories of the firms, Distribution theories, Equilibrium analysis, and Welfare economics along with applications in the real world.

Course Title: Macro Economic Analysis - II

Course Code: CC-8

CO4: This course provides advanced macroeconomic models, such as post-Keynesian theories of Demand for money, neo-classical and Keynesian synthesis, theory of inflation, business cycles, new classical macroeconomics, open-economy issues, and policy analysis.

Course Title: Statistical Methods

Course Code: CC-9

CO5: Develop proficiency in statistical methods for analyzing economic data, including hypothesis testing, correlation and regression models, Concept of probability, and time-series analysis.

THIRD SEMESTER

Course Title: Indian Economy- Issues and Policies-II

Course Code: CC- 10

CO1: Study contemporary issues in the Indian economy, focusing on population and employment, social aspects, fiscal, financial and external sectors/ issues as well as Bihar economy.

Course Title: Economics of Growth and Development- II

Course Code: CC- 11

CO2: Delving into advanced topics in economic growth and development, focusing on internal and international migration theory and model, trade liberalization, and poverty reduction model in developing countries, in addition to this other concepts are Cost – benefits analysis, use of Input-Output analysis, linear programming in development planning and institutional development.

Course Title: Public Economics

Course Code: CC- 12

CO3: This course provides theoretical and practical knowledge of public choice and public policy, including government budgeting, taxation, public expenditure, and their impacts on the economy. Moreover, it explores fiscal policies and their role in economic development and stability.

Course Title: International Economics

Course Code: CC- 13

CO4: Analyze theories of international trade, measurement of Gains, exchange rate determination, balance of payments, and also examine the regional blocks and international institutions.

Course Title: Research Methodology

Course Code: CC- 14

CO5: students learn the research process, including data collection, analysis, and hypothesis testing using qualitative and quantitative methods, along with Computer and its application.

FOURTH SEMESTER

Course Title: Agricultural Economics

Course Code: EC- 1 (Group A)

CO1: this course examines the economic aspects of agricultural production and productivity, agricultural finance, rural development, and agricultural policies, with a focus on both national and global contexts.

Course Title: Industrial Economics- I

Course Code: EC- 1 (Group B)

CO2: Study industrial organization, market structures, firm behavior, and competition strategies.

Course Title: Financial Economics- I

Course Code: EC- I (Group G)

CO3: Understanding financial markets, commercial banking, money market, capital market, and corporate finance, focusing on economic and financial stability.

Course Title: Industrial Economics- II

Course Code: EC- 2 (Group B)

CO4: Continuing the study of Indian industrial growth & patterns, including liberalization and privatization in India, Industrial finance and financial soundness, and regulatory policies.

M.A. HISTORY

PROGRAM OUTCOME

The learning outcome achieved at the end of the programme is as follows:

PO-1) The students get a deeper understanding about History. They learn about the background of the earliest civilizations of the world. They are introduced to the medieval history of Europe, discussing the topics of feudalism, crusade etc. and the rise of Islam and its development in subsequent centuries. They learn about emergence of USA as a world power and its role in contemporary world.

PO-2) Students develop detailed knowledge of Indian history from ancient to the contemporary period. The course sensitizes them to appreciate the notions of continuity and change. They will have knowledge of political, social, economic and cultural history and also of science and technology. They will finally learn about the changes in the world. They will learn about various Historians. The course will help them to know about Bihar's History.

PO-3) The history of the subjugation of the country by Britain sensitizes them to the dangers of having internal divisions in the country. The students are familiarized with revolutionary phenomenon's of the world

PO-4) The history of the European and other Asian countries including the history of two world wars and emergence of totalitarian regimes inculcates in them the urgent need for scientific and rational thinking and teaches them to work for a better world.

PO-5) The students get prepared to appear in competitive exams.

PO-6) The students develop knowledge about Dalit tribal and Environment movements. They will also know about Indian theatre, Cinema, Media and above all Human Rights.

M.A. HISTORY

COURSE OUTCOME

Semester I

After completion of course a student will learn.

CC – 1 Histography.

Course Outcome - To introduce the students to major approaches in theorising historians and their writings.

CC – 2 History of Early Civilization and Medieval world.

Course Outcome - To generate awareness about the facts of early civilization and distinctive features of medieval world.

CC – 3 Early Medieval India

Course Outcome - Enhance understanding for the subject through tours to historical sights. The course will help students to gain insight about Early Medieval India. It will help them to prepare for competitive examination.

CC – 4 Science and Technology in India.

Course Outcome - To develop ability to contextualize Science and Technology to interrelate it with historical development and enhance their research skills.

Semester – II

CC – 5 History of Ideas.

Course Outcome - To deal with different thoughts and ideas of philosophers and identify their influence and interrelations on life.

CC – 6 History of Europe and Modern World

Course Outcome - To learn about world history. European nations ruled over a large part of the world so, it is important to learn about their history. It helps for pursuing higher studies.

CC – 7 History of Bihar (from the earliest time).

Course Outcome - This helps the student to obtain knowledge about their state, it helps in competitive exams.

CC – 8 Society and Economy in Indian History.

Course Outcome - Students will develop an understanding of society and economy of India, which will help them later in competitions.

Semester – III

CC – 10 National movement in India.

Course Outcome - The course aims to help students understand nationalism in India. It is important for students to learn the specific historical context of the strugglers against colonial rule in India.

CC – 11 Indian Historians.

Course Outcome - They can learn about the rise of Indian Historians, their writings and views on different aspects of History.

CC – 12 South Asia - 1950 onwards.

Course Outcome - This course will help the students understand the South Asian History and Modern World. The students will learn to evaluate events and development that has shaped South Asia.

CC – 13 USA (1860 – 1990).

Course Outcome - The students are familiarized with American History. Teaching of History of USA is a new thing so students get a wider perspective of the subject. They get an insight into the process of emergence of strongest world power.

CC – 14 Revolution and Revolutionary thought.

Course Outcome - The students are familiarized with the revolutionary phenomenon in the world. They learn to discern the similarities and the specifics of these revolutions.

Semester – IV

Elective Course – 1

Course Outcome: -

- ❖ **Popular Movements - Students will learn about the Dalit, Tribal, Gender and Environment Movements of India. This will give them insight into the movements and how its saved history.**

Elective Course – 2

Course Outcome: -

- a) **Indian Theatre**
- b) **Indian Cinema**
- c) **Media**
- d) **Human Rights - During the course student will acquaint themselves with aspects of human rights, their importance and this will help them in competitive exams.**

CO & PO Mapping of M.A. (History Hons.)

		PO-1	PO-2	PO-3	PO-4	PO-5	PO-6
M. A. Sem. I	CO – 1		X				
	CO – 2	X					
	CO – 3		X			X	
	CO – 4		X				
M. A. Sem. II	CO – 5		X				
	CO – 6	X					
	CO – 7		X			X	
	CO – 8		X				
M. A. Sem III	CO – 10			X		X	
	CO – 11		X				
	CO – 12				X		
	CO – 13	X					
	CO – 14			X			
M. A. Sem IV	CO – 15					X	X
	CO – 16						X

BA (HONOURS) MAPPING

		PO 1	PO 2	PO3
BA PART 1 (HONOURS) (GENERAL PSYCHOLOGY)	CO 1	X	X	X
	CO2	-	X	X
	CO3	X	-	X

		PO 1	PO2	PO3
BA PART 1 (HONOURS) (PSYCHOPATHOLOGY)	CO1	X	X	X
	CO2	X	X	X
		PO 1	PO2	PO3
BA PART I (HONOURS) (PRACTICAL)	CO1	-	X	X
	CO2	-	X	X

		PO 1	PO2	PO3
BA PART II (HONOURS) (EDUCATIONAL PSYCHOLOGY)	CO1	X	-	X
	CO2	-	-	X
	CO3	-	-	X

		PO 1	PO2	PO3
BA PART II (HONOURS) (SYSTEMS OF PSYCHOLOGY)	CO1	X	-	X
	CO2	-	-	X

		PO 1	PO2	PO3
BA PART II (HONOURS) (TESTING)	CO1	X	-	X
	CO2	X	-	-
	CO3	-	-	X

		PO 1	PO2	PO3
BA PART III (HONOURS) (SOCIAL PSYCHOLOGY)	CO1	X	-	X
	CO2	-	X	-

		PO 1	PO2	PO3
BA PART III (HONOURS) (RESEARCH METHODOLOGY)	CO1	-	X	-
	CO2	-	X	X
	CO3	-	X	X

		PO 1	PO2	PO3
BA PART III (HONOURS) (STATISTICS)	CO1	X	X	X
	CO2	-	X	-
	CO3	-	X	-

		PO 1	PO2	PO3
BA PART III (HONOURS) (INDUSTRIAL PSYCHOLOGY)	CO1	X	-	X
	CO2	-	-	X
	CO3	-	-	X

		PO 1	PO2	PO3
BA PART III (HONOURS) (CLINICAL PSYCHOLOGY)	CO1	X	-	X
	CO2	-	-	X

		PO 1	PO2	PO3
BA PART III (HONOURS) (EXPERIMENTS)	CO1	X	-	-
	CO2	X	-	-

		PO 1	PO2	PO3
BA PART III (HONOURS) (PROJECT/SURVEY	CO1	-	X	-
	CO2	-	X	-
	CO3	-	-	X

BA (SUBSIDIARY) MAPPING

		PO 1	PO2
BA PART I (SUBSIDIARY) (GENERAL PSYCHOLOGY)	CO1	X	-
	CO2	-	X

		PO 1	PO2
BA PART I (SUBSIDIARY) (PRACTICAL)	CO1	-	X
	CO2	X	-

		PO 1	PO2
BA PART II (SUBSIDIARY) (PSYCHOPATHOLOGY)	CO1	X	-
	CO2	-	X

		PO 1	PO2
BA PART II (SUBSIDIARY) (EXPERIMENT)	CO1	X	X
	CO2	-	X

P.G. (PSYCHOLOGY) MAPPING

		PO 1	PO2	PO3	PO4
PG CC1 ADVANCED GENERAL PSYCHOLOGY	CO1	X	-	X	-
	CO2	X	X	-	X
	CO3	-	X	-	X
	CO4	X	-	X	-

		PO 1	PO2	PO3	PO4
PG CC2 ADVANCED SOCIAL PSYCHOLOGY	CO1	X	-	X	X
	CO2	-	X	-	X

		PO 1	PO2	PO3	PO4
PG CC3 RESEARCH METHODOLOGY	CO1	-	-	X	X
	CO2		X	X	X
	CO3	-	X	X	-

		PO 1	PO2	PO3	PO4
PG CC4 EXPERIMENTS IN PSYCHOLOGY	CO1	X	X	--	-
	CO2	-	-	X	X
	CO3	-	-	X	X
	CO4	-	-	X	-

		PO 1	PO2	PO3	PO4
PG CC5 CCOGNITIVE PSYCHOLOGY	CO1	X	-	-	-
	CO2	X	X	-	-
	CO3	X	-	-	X
	CO4	-	-	X	X

		PO 1	PO2	PO3	PO4
PG CC6 NEUROPSYCHOLOGY	CO1	X	-	X	-
	CO2	X	X	-	-
	CO3	-	-	-	X

		PO 1	PO2	PO3	PO4
PG CC7 PSYCHOPATHOLOGY	CO1	X	X	-	-
	CO2	X	X	-	X
	CO3	X	X	-	X
	CO4	-	X	X	-

		PO 1	PO2	PO3	PO4
PG CC8 STATISTICS FOR PSYCHOLOGY	CO1	X	X	-	-
	CO2	X	X	-	-
	CO3	-	-	X	X

		PO 1	PO2	PO3	PO4
PG CC9 PSYCHOLOGICAL ASSESSMENT	CO1	-	X	-	X
	CO2	X	X	-	X
	CO3	-	-	-	X
	CO4	-	-	X	-

		PO 1	PO2	PO3	PO4
PG CC10 HEALTH PSYCHOLOGY	CO1	X	X	-	-
	CO2	-	X	-	X
	CO3	X	X	-	X

		PO 1	PO2	PO3	PO4
PG CC11 COUNSELLING PSYCHOLOGY	CO1	X	X	-	X
	CO2	X	-	-	X
	CO3	X	X	-	X

		PO 1	PO2	PO3	PO4
PG CC12 EDUCATIONAL PSYCHOLOGY	CO1	X	-	-	-
	CO2	-	X	X	X
	CO3	-	X	-	X
	CO4	X	-	-	X

		PO 1	PO2	PO3	PO4
PG CC13 HUMAN RESOURCE MANAGEMENT	CO1	-	X	-	-
	CO2	X	X	--	-
	CO3	-	-	-	X
	CO4	-	X	-	X

		PO 1	PO2	PO3	PO4
PG CC14 GENERAL COUNSELLING SKILLS	CO1	X	-	-	X
	CO2	-	X	-	X
	CO3	-	X	-	-
	CO4	-	-	X	X

		PO 1	PO2	PO3	PO4
PG EC1 SPECIALIZATION IN CLINICAL PSYCHOLOGY	CO1	X	X	-	-
	CO2	-	X	-	X
	CO3	-	X	-	X
	CO4	-	-	X	X
	CO5	X	-	X	X

		PO 1	PO2	PO3	PO4
PG EC 2 PSYCHOTHERAPY	CO1	X	X	-	-
	CO2	-	X	-	X
	CO3	-	-	X	X



JD WOMEN'S COLLEGE

Patliputra University

B.A. SOCIOLOGY

Course Outcomes – Program Outcomes (COPO) Mapping

Program Outcomes (PO)

PO-01-the students will get conceptual understanding of sociology as a discipline and will get a detailed understanding of Indian culture and social institutions

PO-02- The students will develop skill of performing authentic social research and will also develop research ethics

PO-03- The students will get acquainted with the rural power structure and rural leadership along with various government schemes and developmental programmes.

PO-04-The students will know about social psychology and group behaviour along with the development of social personality

PO-05- the students' philosophical understanding of sociology will get enhanced. They will know about the Indian and western perspective of sociology.

PO-06-The students' will get acquainted with the different forms and theories of deviance and also try to find their solution.

PO-07-The students will get acquainted with the social institutions of tribal society

Programme Specific Outcomes (PSO'S)

A graduate in Sociology specifically efficient in

PSO1- Apply analytical, critical thinking and reasoning before comes to conclusion.

PSO2-Develop the core values, social responsibilities and have a better understanding of social power structure and social institutions of different society

PSO3- student will become efficient in proper social stress management by getting knowledge about group behaviour and social psychology and Indian culture.

PSO4-Develop Logical reasoning which help them in competitive exams and finding solutions to prevent various forms of social deviance.

PSO5-Able to make a career in administrative, legal and social counselling fields.

PSO6 -Develop Civic Values towards gender, environment, humanity. social political issues and tribal issues.

Sociology U.G. Course outcome

COURSE OUTCOME	COURSE CODE	COURSE NAME
CO 01-The students will gain conceptual understanding about sociology as a discipline. CO-02Basic concepts like social group, social structure, culture. Social control, social change, stratification etc.	Paper-1	BA.-1 (Principles of Sociology)
CO-01-The students will get holistic view of Indian culture and social institutions like Muslim family, caste. CO-02- They will get an understanding of the decentralisation of power and government schemes like Panchayati raj, community development and the characteristics of Indian rural society	Paper-2	BA.-1 (Indian Society and Culture)

CO-01-This helps the students to get aware about the development of social personality CO-02- They will get acquainted with the concept of socialization, group behaviour and group feeling	Paper-3	BA.-2 (Social Psychology)
CO-01-This helps the students to develop logical thinking behind social phenomena and encourages them to conduct authentic and unbiased research in accordance with the need and background of research. CO-02-Through this paper the students get acquainted with various tools and techniques of research which is very important in conducting successful research.	Paper-4	BA.-2 (Social Research)
CO-01-The students' philosophical understanding of sociology gets enhanced through this paper. CO-02-The students get familiarised with both western and Indian foundational and classical thinkers ideas related to Sociology. They are able to critically analyse the viewpoint of A. Comte, Max Weber, H.Spencer CO-03-Students get an understanding of Indian sociological thought and perspectives of M. Gandhi, Raja Ram Mohan Roy, etc.	Paper-5	BA.-3 (Social Thought- Western and Indian Social Thought)
CO-01-This paper helps the students to assess the recent changes in the Indian rural society in context of the changes in the caste system CO-02- The students get an understanding of the emerging pattern of rural leadership and authority system	Paper-6	BA.-3 (Rural Sociology)
CO-01-Through this paper the students will be sensitized about the different types of social deviance and their multidimensional causes CO-02-They will also know about the various sociological theories related to it	Paper-7	BA.-3 (Social Deviance)
Co-O1-This paper will help in enhancing the knowledge of the students about different kind of races in human society. CO-02-They get an understanding of evolution of human culture. This paper also helps to get familiarised with the Indian tribal society and govt. welfare measures to resolve their issues.	Paper-8	BA.-3 (Social Anthropology)

CO PO Mapping: B.A. (Hons)Sociology

Part 1	CO\PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7
Course1	CO1							
	CO2		X			X		
Course 2	CO1		X			X	X	X
	CO2		X			X	X	X
Course3	CO1		X				X	X
	CO2		X	X				X
Course 4	CO1			X			X	X
	CO2			X	X	X	X	X
Course5	CO1			X	X		X	X
	CO2		X	X	X		X	X
Course6	CO1		X		X	X	X	X
	CO2		X			X	X	X
Course 7	CO1		X	X		X		X
	CO2		X			X		X
Course 8	CO1			X		X	X	
	CO2			X		X	X	