



Programme Outcome and Course Outcome

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DR. BHUPENDRA NATH DUTTA SMRITI MAHAVIDYALAYA

Department of Geography

Honours Course

Geography is the study of places and people's interactions with their surroundings. Geographers study the physical features of the Earth's surface as well as the human societies that live there. They also look at how human culture interacts with the natural environment and how such places and locations might affect individuals. Geography tries to figure out where things are, why they're there, and how they evolve and change over time. The study of the Earth's surface's various environments, places, and spaces and their relationships. It aims to provide answers to the questions of why things are the way they are. The current academic subject of geography has its roots in ancient practice, and it is concerned with the features of places, particularly their natural environments and peoples, as well as their interactions. As a result, when the students graduate, they will be able to:

➤ Programme Outcomes:

PO 1: To comprehend the breadth and evolution of Geography as a field.

PO2: Recognize, synthesize, and evaluate a variety of sources of information, arguments, and methodologies that are relevant to the study of human-environment issues. Explain the societal importance of geographic knowledge and how it can be applied to real-world human-environment issues.

PO3: Recognize the value of holistic and interpretative human environment viewpoints and critically reflect on them.

PO 4: An understanding and acceptance of the threats that jeopardize the earth's ecological systems. This contributes to a better understanding of the significance of

anthropogenic causes for many of the disasters and risks that threaten life on this planet.

PO5: Students' knowledge, skills, and overall comprehension of the discipline are developed. Students are encouraged to think scientifically and to conduct research scientifically. This purpose is accomplished through the Department's frequent field trips to various locations in India and the subsequent writing of a report.

PO6: Students get the ability to respond to natural and man-made disasters while also learning management skills. This is accomplished through the study and analysis of hazards, disasters, their impact, and management as part of the curriculum.

PO7: Capacity to research cross-disciplinary studies and topics or situations that are not strictly within the scope of geography.

➤ Programme Specific Outcomes:

PSO1: Students will learn about physical geography. The student will have a basic understanding of geomorphological and geotectonic processes and formations. They will be able to link their physical geography knowledge to their understanding of human geography.

PSO2: Associating landforms with structure and process; developing man-environment interactions, and investigating Geography's place and role among other social and earth sciences

PSO3: Developing a long-term strategy for the ecosystem and biosphere to preserve natural systems and maintain ecological balance.

PSO4: Students will be able to examine problems in both rural and urban situations, both physically and culturally. They'll also try to figure out what steps they can take to address the issues.

PSO5: Fostering a tolerant mindset and attitude toward India's huge socio-cultural variety through the study and discussion of contemporary social and cultural geography themes. Explaining and analyzing the regional diversity of India through interpretation of natural and planning regions.

PSO6: Investigating the differences in human habitation patterns across the globe through research of human settlements and population dynamics. Regional differences, poverty, unemployment, and the effects of globalization must all be understood and accounted for.

PSO7: Examining the subject's history; examining ancient and modern geographical ideas, as well as their connections to modern concepts of determinism, possibility, systematic, and regional approaches to geography.

PSO8: Raising awareness of the hazards and disasters to which the Indian subcontinent is exposed, as well as how to handle them.

PSO9: As a Course student, students will improve their observation skills through field experience, which will aid them in detecting socio-environmental issues in their community in the future.

PSO10: Training in practical mapping, cartography, software, map interpretation, pictures, and image interpretation, among other things, to comprehend the spatial variation of phenomena on the Earth's surface. They will learn how to create a GIS-based map utilizing modern geographic map-making approaches.

➤ **Course Outcomes:**

Semester-I

CC1: Geotectonics and Geomorphology

CO 1: Use the geological time scale to understand the earth's tectonic and structural evolution.

CO 2: Use seismology to learn more about the earth's innards.

CO 3: Become familiar with the notion of isostasy.

CO 4: Create an understanding of plate tectonics and the resulting landforms.

CO 5: Describe several geomorphic processes like weathering and mass wasting.

CO 6: A review and critique of landscape evolution and slope development models.

CO 7: Recognize the connection between geological structure, river systems, and landforms.

CO 8: Learn about different types of rocks.

CO 9: Learn about diverse geomorphological processes and the landforms that follow.

CC2 (Theory)-Cartographic Techniques and Geological map study

CO 1: Get a sense of the many types of maps.

CO 2: Acquire knowledge about different scales.

CO 3: Recognize the various map projection principles.

CO 4: Become familiar with the India Survey. Maps of the topography

CO 5: Rock and mineral identification

CC 6: Recognize the many types of geological maps.

CC2 (Practical) Cartographic Techniques and Geological Map Study

CO 1: Learn how to build several scales, including linear, diagonal, and vernier.

CO 2: Map projection is used to draw maps.

CO 3: Using geological and topographical maps to interpret, understand, analyze, and identify aspects.

Semester-II

CC-3: Human Geography

CO 1: Learn about the major ideas in human geography.

CO 2: Gain an understanding of human evolution, race, and ethnicity.

CO 3: Construct a mental model of space, civilization, and cultural zones.

CO 4: Investigate various areas of culture.

CO 5: Recognize human geography's approaches and processes, as well as the various patterns of habitat and adaptations.

CO 6: Learn about several aspects of population research.

CO 7: Investigate the morphology of rural communities.

CO 8: Learn about the different types of urban settlements and how to classify them.

CC4 (Theory)-Cartograms, Survey and Thematic Mapping

CO1: Gain a basic understanding of cartograms and the various types of thematic mapping tools.

CO2: Learn about basic surveying ideas and surveying equipment such as Abneys Level, Clinometer, Prismatic Compass, Dumpy Level, and Transit Theodolite.

CO3: Interpretation of maps showing land use and cover.

CC4 (Practical)-Cartograms, Survey and Thematic Mapping

CO1: Learn about age-sex pyramids, pie diagrams, dots and spheres, isopleths, and choropleths as diagrammatic representations of data.

CO2: Enables direct contact between various surveying tools and the environment, such as the Prismatic Compass, Dumpy Level, and Theodolite.

Semester-III

CC5- Climatology

CO1: Gaining a better understanding of the atmosphere's nature, composition, and layers.

CO2: Create an understanding of the atmosphere's insolation and heat budget.

CO3: Learn about temperature distribution, greenhouse effect, condensation, air mass, fronts, stability and instability, wind circulation, and climate change, among other atmospheric phenomena.

CO4: Become familiar with cyclones.

CO5: Climate classification approaches.

CC6 (Theory)-Statistical Methods in Geography

CO1: Gain an understanding of the importance of statistics in geography.

CO2: Recognize the significance of facts in geography.

CO3: Acquire knowledge of various measuring scales.

CO4: Understand the many forms of sampling.

CO5: Come up with a theoretical distribution hypothesis.

CO6: Gain a thorough understanding of central tendency, dispersion, correlation, linear regression, and time series analysis.

CC6 (Practical)-Statistical Methods in Geography

CO1: The ability to create data matrices.

CO2: Summarize, represent, analyze, and interpret the data matrix using statistical techniques.

CC7- Geography of India

CO1: Knowledge of India's geology, physiography, climate, soil, and vegetation.

CO2: Learn about India's population demographics and social distribution.

CO3: Create an understanding of India's economic resources.

CO 4: Learn about India's regionalization.

CO5: Gain an understanding of West Bengal geography from diverse perspectives.

SEC1- Computer Basics and Computer Applications

CO1: Understanding Numbering Systems (CO1)

CO2: Developing practical abilities in the application of various statistical approaches and the creation of notated diagrams using a computer.

CO3: Come up with a concept for internet surfing.

Semester-IV

CC8- Regional Planning and Development

CO1: Recognize and identify regions as a necessary component of geographical research.

CO2: Learn about the different types of planning, as well as the principles and procedures of regional and multilevel planning.

CO3: Recognize the various components of development and regional imbalance to generate balanced development measures.

CO4: Develop an understanding of regional development models and techniques.

CO5: Understand how to calculate development indicators.

CO6: Know what the NITI Aayog is and what it does.

CC9- Economic Geography

CO1: Understand the fundamental principles and approaches to economic geography.

CO2: Recognize the elements that influence the location of economic activity and the cost of transportation.

CO3: Develop an understanding of many forms of economic activities.

CO4: Learn about the numerous sorts of activities available in primary, secondary, and postsecondary education.

CO5: Develop an understanding of the theories of agricultural and industrial placement.

CO6: Evaluate the economic growth role of highways and international trade blocks.

CC10 (Theory)-Environmental Geography

CO1: Discover how geographers approach environmental research.

CC2: Construct an understanding of human-environment interactions.

CC3: Develop an understanding of the ecosystem's structure and operations.

CO4: Evaluate the importance of pollution and environmental degradation.

CO5: Knowledge of agricultural, waste management, and biodiversity-related environmental challenges.

CO6: Be aware of environmental policies and programmes.

CC10 (Practical)-Environmental Geography

CO1: Develop skills in questionnaire preparation for a perception study on environmental issues.

CO2: Use the Leopold Matrix to assess the environmental impact.

CO3: Using a field kit, gain practical knowledge of soil quality evaluation.

CO4: Using data from the EPA and state pollution control boards, gain a better understanding of how to assess air quality.

SE2 (Practical)-Advanced Spatial Statistical Techniques

CO1: Learn about the concept of probability and how it applies to geography.

CO2: Gain practical experience with statistical techniques such as correlation, regression analysis, time series analysis, t-test, and closest neighbour analysis.

Semester-V

CC11 (Theory)-Research Methodology and Field Work

CO1: Recognize the importance of geography research.

CO2: Have experience in identifying the area of investigation, establishing the research problem, aims, and hypothesis, methodology, quantitative and qualitative analysis, and drawing conclusions about the area—all of which are important in geographical research.

CO3: Recognize various field procedures and tools.

CC11 (Practical)-Research Methodology and Field Work

CO1: Organizing a field trip and writing a field report using primary and secondary data.

CC12 (Theory)-Remote Sensing and GIS

CO1: Understand remote sensing and GIS concepts, components, development, platforms, and types.

CO2: Acquire a working knowledge of aerial photography and satellite remote sensing

CO3: Be familiar with GIS data structures.

CO4: Create a concept for remote sensing and GIS interpretation and application.

CO5: Learn about the fundamentals of GNSS positioning.

CC12 (Practical)-Remote Sensing and GIS

CO1: Instruction in the use of Geographic Information Systems (GIS) software for modern mapping skills.

CO2: Gain hands-on experience with georeferencing, picture processing, classification, digitization, and the creation of thematic maps.

DSE1-Cultural and Settlement Geography

CO1: Recognize the scope, content, and progression of cultural geography.

CO2: Learn about cultural hearth and realm, cultural landscape, cultural innovation and diffusion, cultural segregation, diversity, and acculturation.

CO3: Learn about the world's many racial groups.

CO4: Recognize the breadth and depth of settlement geography.

CO5: Gain an understanding of rural settlements, including definitions and features, as well as the role of location and context.

CO 6: Understand the definition and classification of urban settlements as defined by the census.

CO7: Examine traditional urban morphology models.

CO8: Acquire an understanding of city functional classification.

DSE2- Population Geography

CO1: Recognize the evolution of population geography and the connection between demography and population geography.

CO2: Examine population dynamics' determinants.

CO3: Evaluate population growth theories and a model of demographic transition.

CO4: Examine India's population growth trend and pattern since its independence.

CO5: Gain a better understanding of India's demographics.

CO6: Analyze migration ideas and learn about the causes and types of migration.

CO7: Understand how to evaluate signs of human progress.

CO8: Investigate Sweden's and China's population plans.

CO9: Examining the relationship between health and unemployment as a current concern in population geography.

Semester-VI

CC13- Evolution of Geographical Thought

CO1: Recognize the scope and substance of geography as a spatial science and analyse geography as such.

CO2: Trace the history of geographic philosophy from antiquity to the present.

CO3: Recognize and value the contributions of geographers.

CO4: Be aware of many geographical schools of thought.

CO5: Examining modern and contemporary determinism, possibilism, neo-determinism, systematic, and regional approaches to geography.

CC14 (Theory)-Disaster Management

CO1: Recognize the types of dangers and disasters and how to classify them.

CO2: Evaluate risks in terms of risk, perception, and vulnerability.

CO3: Create a concept for disaster preparedness, trauma, resilience, and capacity building.

CO4: Become familiar with hazard mapping data and procedures.

CO5: Learn about earthquake, landslide, cyclone, and fire factors, vulnerabilities, effects, and management.

CC14 (Practical)-Disaster Management

CO1: Prepare an individual project report based on any field-based case study on earthquakes, landslides, cyclones, floods, droughts, riverbank erosion, mining area subsidence, or tsunami.

DSE3- Resource Geography

CO1: Recognize the value of resource geography and how it relates to other disciplines.

CO2: Gain a better understanding of resource concepts and classification. **CO3:** Consider the resource's functional theory.

CO4: Examine resource depletion issues and learn how to conserve resources.

CO5: Acquire a basic understanding of the notion of 'Limits to Growth.' **CO6:** Gain an understanding of mineral and energy resource distribution, consumption, issues, and management in India.

CO7: Examine the current energy problem and make projections for the future.

CO8: Analysis of sustainable resource development from a critical perspective.

DSE4- Soil and Bio Geography

CO1: Understand the definition of soil formation and the elements that influence it.

CO2: Learn about soil's physical and chemical qualities.

CO3: Learn about different types of soil, soil categorization concepts, soil degradation, and soil management.

CO4: Evaluate the biogeography's extent.

CO5: Ecosystem and biosphere concepts are introduced.

CO6: Examining the function and significance of biogeochemical cycles.

CO7: Recognize the elements that influence plant development.

CO8: Gain a better understanding of biomes and the causes and effects of biodiversity loss.



General Course

Geography is the study of places and people's interactions with their surroundings. Geographers study the physical features of the Earth's surface as well as the human societies that live there. They also look at how human culture interacts with the natural environment and how such places and locations might affect individuals. Geography tries to figure out where things are, why they're there, and how they evolve and change over time. The study of the Earth's surface's various environments, places, and spaces and their relationships. It aims to provide answers to the questions of why things are the way they are. The current academic subject of geography has its roots in ancient practice, and it is concerned with the features of places, particularly their natural environments and peoples, as well as their interactions. As a result, when the students graduate, they will be able to:

➤ Programme Outcomes:

PO1: To comprehend the breadth and evolution of Geography as a discipline.

PO2: Students will be able to examine issues in both rural and urban locations, including physical and cultural environments. They will also try to determine what steps may be taken to address the issues.

PO3: Studying and analyzing contemporary notions of social and cultural geography in order to instill a tolerant mindset and attitude toward India's huge socio-cultural variety.

PO4: Raising awareness of the risks and disasters that the subcontinent is subject to, as well as how to mitigate them.

PO5: Instruction in practical mapping, cartography, software, and map interpretation techniques in order to comprehend the spatial variation of phenomena on the earth's surface and to promote scientific thinking through the use of maps.

PO 6: Students have a variety of employment options, including academia, civil service, and other fields.

➤ **Programme Specific Outcomes:**

PSO 1: Students will learn about physical geography. The student will have a basic understanding of geomorphological and geotechnical processes and formations. They will be able to link their physical geography knowledge to their understanding of human geography.

PSO 2: Associating landforms with structure and process; developing man-environment interactions, and investigating Geography's location and role among other social and earth sciences

PSO 3: Developing a long-term strategy for the ecosystem and biosphere in order to preserve natural systems and maintain ecological balance.

PSO 4: Recognize how persons adapt to their surroundings and track current changes.

PSO 5: Investigate practical geography principles and apply them to the creation and understanding of maps.

PSO 6: Learn about the various types of hazards.

➤ **Course Outcomes:**

Semester-I

CC1A: Geomorphology and Cartography (Theory)

Unit I- Geotectonics and Geomorphology (Theory)

CO1: Learn about the different types of weathering and how they affect landforms.

CO2: Using seismic evidence, get an understanding about the earth's interior structure.

CO3: Create an understanding of plate tectonics and the resulting landforms.

CO4: Learn about diverse geomorphological processes and the landforms that arise.

CO5: Examine the importance of groundwater and the worldwide hydrological cycle.

Unit II- Scale and Cartography (Practical)

CO1: Develop the ability to draw linear and comparative scales in a practical manner.

CO2: Acquire data cartographic representation knowledge and skills.

Semester-II

CC1B- Physical Environment and Surveying

Unit-I-Climatology, Soil, and Biogeography

CO1: Recognize weather and climate characteristics, as well as the composition and layers of the atmosphere.

CO2: Learn about various atmospheric phenomena such as temperature distribution and precipitation.

CO3: Become familiar with cyclones and climate classification.

CO4: Learn about the physical and chemical features of soil, as well as the forces that influence soil formation.

CO5: Ecosystem and biosphere concepts are introduced.

Unit II- Surveying and Levelling (Practical)

CO1: Recognize surveying's definition and classification.

CO2: Enables direct connection between several surveying equipment's such as the Plane Table, the Prismatic Compass, and the Dumpy Level.

Semester-III

CC1C- Human Geography and Map Study

Unit I- Human Geography (Theory)

CO1: Recognize the nature of human geography and its current relevance.

CO2: Explore diverse facets of culture and develop an idea about space, society, and cultural areas.

CO3: Analyze the population growth trend and pattern, as well as the demographic transition hypothesis.

CO4: Learn about the many forms and patterns of rural communities, as well as how to classify urban towns.

CO5: Gain a better understanding of how towns are classified according to their functions.

Unit II- Map Projection and Map Interpretation (Theory)

CO1: Map projection is used to create maps.

CO2: Using topography and weather maps to interpret, analyse, and identify features

SEC1- Computer Basics and Computer Applications

CO1: Understanding of Numbering Systems.

CO2: Developing practical skills in the application of various statistical approaches and the use of a computer to create annotated diagrams.

CO3: Create a concept for surfing the internet.

Semester-IV

CC1D- Environmental Geography

Unit I- Theoretical

CO1: Learn about geographers' approach to environmental studies.

CC2: Construct an idea about human-environment interactions.

CC3: Develop an understanding of ecosystem structure and functions.

CC4: Evaluate the importance of environmental issues and management.

CC5: Understand environmental policies and programmes.

Unit II- Practical

CO1: Develop abilities in questionnaire preparation for air pollution and health perception surveys.

CO2: Using a field kit, gain a practical understanding of soil quality assessment.

CO3: Use a topographical sheet to learn about mapping wetlands and forests.

SEC2- GIS-Based Project Report

CO1: Preparation of a GIS-based project report based on fieldwork, incorporating several cartographic and statistical methodologies.

Semester-V

DSE1A- Geography of India

Unit I- Geography of India

CO1: Learning about India's topography, drainage, and climate.

CO2: Examine India's population growth trend and pattern since its independence.

CO3: Construct an understanding of India's economic potential.

CO4: Recognize Sundarban and Marusthali as distinct regional entities.

Unit II- Field Work

CO1: Conducting field excursion and preparation of field report based on primary and secondary data for either a rural area or an urban area.

SEC3- Field Techniques and Survey Based Project Report

CO1: Recognize the value of fieldwork in geography.

CO2: Have competence in identifying the study area, goals and objectives, methodology, quantitative and qualitative analysis, and conclusions to be formed about the study region—essential to geographical fieldwork.

CO3: Recognize the many types of field procedures and tools.

CO4: Ability to build a field report.

CO5: Fieldwork and field report preparation using primary and secondary data.

Semester-VI

DSE1B- Disaster Management

Unit I- Disaster Management

CO1: Recognize the types of dangers and disasters and how to classify them. **CO2-** Evaluate risks in terms of risk, perception, and vulnerability.

CO3: Create a concept for disaster preparedness, trauma, resilience, and capacity building.

CO4: Become familiar with hazard mapping data and procedures.

CO5: Gain an understanding of earthquakes, landslides, cyclones, flood sources, consequences, and management.

Unit II- Disaster Management Project Work

CO1: Preparation of an individual project report based on anyone field-based case study on landslide, cyclone, flood, or drought.

SEC4- Collection, Mapping, and Interpretation of Pedological Data

CO1: Learn how to sample soil.

CO2: Learn how to use a soil kit to calculate soil nitrogen, pH, and organic carbon.

CO3: Create a concept for soil pH and organic carbon analysis and mapping.



DR. BHUPENDRA NATH DUTTA SMRITI MAHAVIDYALAYA

Department of Philosophy

PROGRAMMES OFFERED BY THE DEPARTMENT OF PHILOSOPHY

1. B.A. HONS IN PHILOSOPHY

2. B.A. PROGRAM IN PHILOSOPHY

Honours Course

PROGRAM LEARNING OUTCOMES OF B.A.HONS IN PHILOSOPHY:

Knowledge of Indian tradition and culture, including training in Western thought:

Upon graduation in philosophy students will gain knowledge of Indian traditional philosophical thought as their HONS subject and at the same time, they will have a firm foothold in the Western line of philosophical conjecture.

Acquiring of Basic Competency/Skill: Students will acquire basic skills in creating philosophical questions. They will be able to recognize philosophical problems.

Acquiring the Habit to Enquire: Students will develop a sense of Epistemological, Ontological, Metaphysical, Ethical, and Aesthetic perception and the ability to explore or categorize any of these broad themes.

Skill of Logical Thinking: Students would acquire a rigorous training of the mind in understanding logical derivations. It would be possible both in case of understanding the logical framework of thoughts that a particular Philosopher must have projected in his theory and also in case of verifying an argument as valid or invalid.

Skills of Ethical Analysis: Students would for sure acquire skills in ethically judging any social issue. Here is the case where Students become specially oriented in adopting interdisciplinary study; like in the field of Law or Political Science or Medicine (medical ethics) or in business studies (business ethics) and so on and so forth

COURSE OUTCOME

SL NO.	NAME OF THE COURSE	SEMESTER	COURSE CODE	COURSE OUTCOME
1.	OUTLINES OF INDIAN PHILOSOPHY-I	1 ST	CC-1	<ol style="list-style-type: none"> 1. Knowledge of the definition and division of Orthodox schools of Indian philosophy and heterodox schools. 2. Description of Carvaka Philosophy and gain knowledge about the Epistemology, Metaphysics, Ethics and Materialism of Carvaka view. 3. Description of the different concepts of Jaina Philosophy as well as the theory of reality and seven forms of judgments. 4. Knowledge about life and four noble truths as well as the various theories associated with Boudha Philosophy. 5. Description, analysis of various concepts of Nyaya school, know the instruments, methodology, and classification of perception.
2	OUTLINES OF WESTERN PHILOSOPHY-I	1 ST	CC-2	<ol style="list-style-type: none"> 1. All things are exchanged for fire and fire for all, according to Heraclitus. 2. Learn about Aristotle's ideas, substance, and causation. 3. Understanding to Descartes' Cogito Ergo Sum, Criterion of truth, Interactionism. 4. Knowing the theories of Spinoza and Leibniz will enrich their knowledge base.

3.	OUTLINES OF INDIAN PHILOSOPHY- II	2 ND	CC-3	<ol style="list-style-type: none"> 1. Description of Samkhya theory of cause and explanation of the dualistic view of Prakriti and Purusa. 2. Knowledge about the different Samadhi or meditation, as well as the eightfold path of discipline, Astanga Yoga which generates certain supra-normal power. 3. Knowledge about the Ramanujacharya's attempt to harmonize the absolute and the personal theism and also the detail view of Brahman which is Jiva and Jagat. 4. Able to know through explanation of the Prabhakara and Bhatta school and the theories associated with this school.
4.	OUTLINES OF WESTERN PHILOSOPHY- II	2 ND	CC-4	<ol style="list-style-type: none"> 1. Knowledge of the Theory of Ideas, Distinction between Qualities and theory of substance. 2. Ideas will be increased i.e. innate ideas, the origin and formation of ideas, simple and complex ideas, substance, modes and relations, knowledge and its degrees, limits of knowledge, primary and secondary qualities, representative realism etc. 3. Concept of ideas, causality and Scepticism. Impression and ideas, association of ideas, distinction between judgements concerning relations of ideas and judgements concerning matters of fact, and personal identity. 4. Knowledge of the Possibility of Metaphysics and the Elimination of Metaphysics

				5. Knowledge of the Dialectical Method as advocated by Hegel.
5.	INDIAN ETHICS	3 RD	CC-5	<ol style="list-style-type: none"> 1. Knowledge of the puruṣārtha (Cārvāka, Bauddha and āstika views). 2. Buddhist Ethics: Able to realize Buddhist Ethics i.e. Pancaśīla, Brahmavihārabhāvanā (Bauddha) Anubrata, Mahābrata, Ahimsā. 3. Knowledge of the Fundamental Vedic Concepts like vidhi and nisedha. 4. Knowledge of Jaina Ethics and Yoga Ethics.
6.	WESTERN ETHICS	3 RD	CC-6	<ol style="list-style-type: none"> 1. Knowledge of the Nature and Scope of Ethics and also knowing of basic concepts like Morality, Values and Moral Judgment. 2. Description of the moral theories of eminent philosophers like Plato and Aristotle which explain the moral relation between individual and Society and also the science of morality. 3. Understands the different theories regarding the ultimate moral standard. Moral theories are different in nature, know the true nature and types of various theory. 4. Knowledge of Environmental Ethics: Anthropocentrism and Non-anthropocentrism. 5. Knowledge of some normative theories like Ethical Egoism and Utilitarianism.

7	INDIAN LOGIC	3 RD	CC-7	<ol style="list-style-type: none"> 1. Help Students to penetrate into the arena of Indian logic and gather the concepts of pramana, prama, jnana, buddhi, smriti. 2. Students will get knowledge about ultimate reality. 3. Students will understand the similarities and dissimilarities between Nyaya and Vaisesika philosophy. 4. Students acquire the knowledge of epistemological concepts such as of sannikarsa, anupalabdhi, samanyalaksana, jnanalaksana, jogaja pratyaksa. 5. Knowing the Logic behind the different classification of Anumana like the anvayvytireki, kevalanvayi and kevalvytireki.
8	WESTERN LOGIC -I	4 TH	CC-8	<ol style="list-style-type: none"> 1. Students would be acquainted with the significance of Logic as a science of reasoning. 2. Students would be acquainted with various kinds of Inferences and their application. 3. Symbolic Logic: value of symbols, Truth-Functions, Dagger and stroke functions; interdefinability of truth functions. Tautologous, Contradictory and Contingent Statement-Forms; The Paradoxes of Material Implication; The three Laws of Thought. 4. The Method of Deduction: How to prove the formal proof of validity and invalidity.

				5. Formal Proof of Validity: Difference between Implicational Rules and the Rules of Replacement; Construction of Formal Proof of Validity by using nineteen rules; Proof of invalidity by assignment of truth-values.
9.	PSYCHOLOGY	4 TH	CC-8	<ol style="list-style-type: none"> 1. This course help students to understand themselves and others better and to solve, to a great extent, their own problems. 2. Knowledge of different Psychological Research Methods. 3. Knowledge of the various theories of Learning. 4. Mutual understanding and respect will produce a society where peace and harmony will prevail. 5. Learners would be able to discern the different states of consciousness.
10	PHILOSOPHY OF RELIGION	4 TH	CC-10	<ol style="list-style-type: none"> 1. Description about the nature as well as scope of Philosophy of Religion. 2. Knowledge of the origin and development of Religion. 3. Knowledge of the relation between Dharma and Dhamma. 4. Learners would be able to elucidate proofs for and against the existence of God. 5. Acquire skills which are moral, psychological, socio-religious and cultural regarding the Problem of Evil.
11	SOCIO-POLITICAL PHILOSOPHY	5 TH	CC-11	<ol style="list-style-type: none"> 1. Knowledge of the scope of Social and Political Philosophy. 2. Knowledge of Basic sociological concepts like Social Group, Community,

				<p>Association, Institution, Customs, Folkways and Mores.</p> <p>3. Awareness of Socio-political ideas like Democracy, Socialism and Secularism.</p> <p>4. Acquaintance with Rabindranath Tagore's view on Nation, Nationalism and Internationalism.</p> <p>5. Awareness of theories (Humanism) propagated by Socialist thinkers like Manabendranath Roy.</p>
12	WESTERN LOGIC-II	5 TH	CC-12	<p>1. Acquire functional knowledge of Set Theory and Relations.</p> <p>2. Identify arguments in ordinary language, distinguish premises from conclusion, differentiate deductive arguments from inductive arguments and construct arguments of their own.</p> <p>3. Knowledge of relations like, Symmetrical, Asymmetrical and Non-symmetrical.</p>
13	SPECIAL TEXT: Kathopaniṣad	5 TH	DSE-1	<p>1. Knowledge of the Upanishad concepts of Self, Nature and Physicality.</p> <p>2. Building of concepts of the Samhitās, Brahmanas and Aranyakas.</p> <p>3. Pleasures seemingly good, capable of causing addiction.</p> <p>4. The story of Nachiketa and his thinking.</p>
14	SPECIAL TEXT: Bertrand Russell: The Problems Of Philosophy	5 TH	DSE-2	<p>1. Acquaintance with the Text written by an eminent Philosopher like Bertrand Russell.</p> <p>2. Skills to address the most sort after issues like Appearance and Reality in Philosophy on Physical Object.</p>

				<ol style="list-style-type: none"> 3. Assessing the significance of newly framed categories like Knowledge by acquaintance and Knowledge by Description. 4. Problem about the existence of matter. 5. Two sorts of knowledge: knowledge of things, and knowledge of truths.
15	Philosophy In The Twentieth Century: Indian	6 TH	CC-13	<ol style="list-style-type: none"> 1. The students will be able to get a broader concept on Rabindranath Tagore and also Nature of Religion, Problem of Evil, Surplus in man. Fecundity. 2. Acquiring contemporary Philosophical ideas of Universal Religion, Practical Vedanta and Yoga. 3. Sri Aurobindo Nature of Reality, Human Evolution– its different stages, Integral Yoga. 4. S. Radhakrishnan nature of Man, Nature of Religious Experience, Nature of Intuitive Apprehension. 5. Acquiring the knowledge and the wisdom of intertwining literature and Philosophy through the writings of a poet-philosopher like Iqbal. Having both the literary knowledge of Iqbal's verses and his philosophical perceptions on life, world and God. 6. Mahatma Gandhi's view of God and Truth , Ahimsa, Trusteeship.
16	Philosophy In The Twentieth Century: Western.	6 TH	CC-14	<ol style="list-style-type: none"> 1. This course help students tounderstand how the crucial events of twentieth century philosophy shaped the work of a particular thinker.

				<ol style="list-style-type: none"> 2. The Learner would come to know the neo western approach of redefining philosophical ideas by way of philosophical analysis of meaning and language. 3. The learner would be able bring in his practice of blending existentialism and phenomenology. 4. The whole range of existential thoughts from the concept of Sartre's freedom and nothingness to the refutation of Idealism by Moore would be open to the learner for more philosophical speculation.
17	<p>SPECIAL TEXT: Rabindranath Tagore: Sadhana</p>	6 TH	DSE-3	<ol style="list-style-type: none"> 1. Tagore stresses the idea that 'activity is the play of joy' for just as the Brahma finds joy in creation so does man need to realize Brahma through his everyday action – a two-way process. ... In quoting the Upanishad. 2. Tagore emphasizes that God's nature itself lies in knowledge, power and action. 3. Understanding the relation of the individual to the universe. 4. The problem of evil, Is this imperfection the final truth, is evil absolute and ultimate?
18	<p>SPECIAL TEXT: David Hume: An Enquiry Concerning</p>	6 TH	DSE-4	<ol style="list-style-type: none"> 1. Learners would be able to understand the philosophical arguments and views presented by Edinburgh's leading philosopher; David Hume in his definitive work 'An Enquiry Concerning Human Understanding'.

	Human Understanding			<ol style="list-style-type: none"> 2. Learners would be able to appreciate the reasons from the place of Hume and the Enquiry in the philosophical canon. 3. Learners would be able to read and critically assess one of the major works in the philosophical canon. 4. Learners would be able to write intelligibly on a topic covered in the work and relate it to the whole.
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DR. BHUPENDRA NATH DUTTA SMRITI MAHAVIDYALAYA

Department of Philosophy

General Course

After completion of the programme, the graduates will be capable of:

1. Understanding the nature and basic concepts of Indian philosophy and as well as Western philosophy related to the area of logic, Ethics, Metaphysics, and Epistemology. They also will be able to assess arguments and philosophical perspectives using critical reasoning and can also express complex thoughts logically & ethically.
2. Understand the intricacies of logic and learn to use the power of analysis and reasoning to systematically support the established premise.
3. Learn about the contribution of prominent Indian and Western philosophers in the development of philosophical ideas in the twentieth century.
4. Understand the historical process of the development of Western philosophical thoughts and ideas.
5. The ability to apply knowledge and skills in philosophy will develop where the ability to analyze complex problems and develop possible solutions from a philosophical point of view will increase.

SL. NO.	NAME OF THE COURSE	SEMESTER	COURSE CODE	COURSE OUTCOME
31				1. Students can get the fundamental historical introduction outlying the sources of philosophical thought and gain the

1.	INDIAN PHILOSOPHY	1ST	CC-1A	<p>common characteristic of Indian philosophy.</p> <ol style="list-style-type: none"> 2. Knowledge of the materialism of Indian thought, which never had the power, will know about the source of the Charvaka School and the theory or perception of direct as the only source of knowledge. As well as conjecture and word, you will know how to refute materialism. 3. Understand the Jaina theory of Reality which is realistic and relativistic pluralism, theory of sevenfold judgment that distinguishes seven forms of judgments. 4. Able to know the Buddha's life and philosophy, which comprises of four Noble Truths and the different theories i.e. theory of Impermanence, Nairatmavada as well as the theory of Dependent Origination which is the foundation of all the teaching of Buddha. 5. Description of Nyaya school which is allied to the Vaishesika system. Know the concepts of perception, inference, comparison or analogy and Get the idea of Saptapadartha or seven categories. 6. Understand the concept of cause in Samkhya philosophy, which is dualistic in nature, able to know the theory of Casualty and theory of evolution associated with the idea of cause. 7. Gain knowledge about the Yoga School of Indian thought which is allied to Samkhya, the concept of Chittavrittis and Astanga Yoga. 8. Description of the two concepts of Mimamsa school, i.e. Arthapatti and Anupalabdhi or non-apprehension as a source of knowledge. 9. Able to know the Advaita Vedanta concepts of Brahman, Jiva and Jagat.
2.	WESTERN PHILOSOPHY	2ND	CC-1B	

				<ol style="list-style-type: none"> 1. The concept of metaphysics is the knowledge of things within oneself. Will gather knowledge about the impossibilities of metaphysics and the nature of metaphysics. 2. Description of the concept of realism explains the fact that there is a world of real thought and persons, with qualities and relations which are as real as things. 3. Knowledge about Idealism which is the doctrine of epistemological dualism as it believes in two worlds – the World of mind, the world of external substance. 4. Description of the very idea of Kant's critical theory. We know that Kant's theory is an attempt at avoiding the 5. Critical understanding of the various basic concepts of philosophy such as reality, mind, causal theory, evolutionary theory, and various aspects of philosophical metaphysical thought.
3.	LOGIC	3RD	CC-1C	<ol style="list-style-type: none"> 1. In common parlance it helps to identify arguments, to separate the premise from the conclusion, to separate the deductive argument from the introductory argument, and formulate their own arguments. 2. Will learn to identify errors in reasoning, including both formal and informal errors. 3. Translate sentences from ordinary language into the standard form of a categorical proposition. 4. Translate ordinary language arguments into a standard-form categorical syllogism, evaluate immediate inference and syllogism using the traditional square of opposition and Venn diagrams.
4.	PHILOSOPHY IN PRACTICE	3RD	SEC-1	<ol style="list-style-type: none"> 1. This course helps students to distinguish between 'philosophy' and 'darsana'. 2. Both epistemological and metaphysical research in philosophy and philosophy help to know. 3. A few model world-views and corresponding paths leading to Perfection; Plato, Kant Samkhya and Advaita Vedanta point of view. 4. some methods of philosophical discourse as vāda, jalpa, vitandā, chhala, jātiand nigrasthāna.

5.	CONTEMPORARY INDIAN PHILOSOPHY	4TH	CC-1D	<ol style="list-style-type: none"> 1. Students will be able to get a comprehensive idea about the nature of Rabindranath Tagore's religion, the problem of evil, and the surplus among people. 2. Swami Vivekananda Practical Vedānta, Universal Religion, Yoga. 3. Sri Aurobindo will get an idea of the nature of reality, the different stages of human evolution, the unbroken yoga. 4. S. Radhakrishnan nature of Man, Nature of Religious Experience, Nature of Intuitive Apprehension. 5. Get an idea of Mahatma Gandhi's views on God and truth, non-violence, trusteeship and Md. Iqbal's Nature of the Self, Nature of the World, Nature of God.
6.	PHILOSOPHY OF HUMAN RIGHTS	4TH	SEC-2	<ol style="list-style-type: none"> 1. Identify and evaluate historical, philosophical, political, and cultural developments that establish human rights among students as a set of rules, treaties, and procedures worldwide. 2. Understand the importance of the Human Rights Act 1998. 3. To explore global human rights organizations, laws, and processes and to evaluate the impact of their interactions with national and local cultures, practices, and norms. Helps to explore global human rights organizations, laws, and processes, and evaluate the impact of their interactions with national and local cultures, practices, and rules. 4. Teaches to critically examine the impact of different geographical, cultural and theoretical contexts on the social acceptance and practical application of human rights policy. 5. Teaches to evaluate the effectiveness of human rights practice in local, national or international humanitarian efforts.
7.	PHILOSOPHY OF RELIGION	5TH	DSE-1A	<ol style="list-style-type: none"> 1. There will be an opportunity to gain knowledge of the philosophy of religion as well as the nature of narration. 2. They will be able to analyze various doctrines of action, rebirth or reincarnation and the theory of liberation. 3. Understand the meaning and concept of the Philosophical teachings of the Holy Quran'.

				<ol style="list-style-type: none"> 4. Knowledge about the different features of religion and can know the basic tenets of Christianity. 5. Gather knowledge about the concept of religious pluralism and the concept of universal religion.
8.	PHILOSOPHICAL ANALYSIS	5TH	SEC-3	<ol style="list-style-type: none"> 1. Students can learn concepts of word meaning and sentence meaning. 2. Learns to distinguish between testability and money. 3. The concept of truth is the three most accepted contemporary theories of truth. 4. Philosophical analysis of nature and the source of knowledge.
9.	Tarkasaṃgraha (saptapadārtha)	6TH	DSE-1B	<ol style="list-style-type: none"> 1. Students will gain knowledge about the ultimate reality. 2. Students will get a clear picture Nyaya-Vaisesika philosophy. 3. Students will understand the similarities and dissimilarities between Nyaya and Vaisesika philosophy. 4. Students can understand in details about the four 'Pramana's in Nyaya philosophy.
10.	ETHICS IN PRACTICE	6TH	SEC-4	<ol style="list-style-type: none"> 1. Students can evaluate the logic and philosophical perspectives using critical reasoning. 2. They can write clear and concise explanations and arguments about the basis of ethical problems. 3. They can learn about difference between motive and intention, moral and moral judgment. 4. Will learn the practical application of Kant's ethical theory. 5. Learn about the concepts of Ahimsa, Niskamakarma, Pancasila, Panchabrata. .



Honours Course

Upon successful completion of the B.A. (Honours) program, students will be able to –

Program Outcomes

<u>PO1</u>	Express thoughts and ideas effectively in writing and orally, communicate with others using appropriate media, confidently share one's views and express herself, demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups.
<u>PO2</u>	Apply analytic thought to a body of knowledge, analyze and evaluate evidence, arguments, claims, and beliefs on the basis of empirical evidence, identify relevant assumptions or implications; formulate coherent arguments, critically evaluate practices, policies and theories by following scientific approach to knowledge development.
<u>PO3</u>	Extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems, rather than replicate curriculum content knowledge and apply one's learning to real life situations.
<u>PO4</u>	Evaluate the reliability and relevance of evidence, identify logical flaws and holes in the arguments of others, analyze and synthesize data from a variety of sources, draw valid conclusions and support them with evidence and examples, and addressing opposing viewpoints.
<u>PO5</u>	Ask relevant/appropriate questions, problem solving, synthesizing and articulating, ability to recognize cause-and-effect relationships, define problems, formulate hypotheses, test hypotheses, analyze, interpret and draw conclusions from data, establish hypotheses, predict cause-and-effect relationships, ability to plan, execute and report the results of an experiment or investigation.
<u>PO6</u>	Analyze, interpret and draw conclusions from quantitative/qualitative data; and critically evaluate ideas, evidence and experiences from an open-minded and reasoned perspective.
<u>PO7</u>	Critical sensibility to lived experiences, with self-awareness and reflexivity of both self and society.

<u>PO8</u>	Possess knowledge of the values and beliefs of multiple cultures and a global perspective; and capability to effectively engage in a multicultural society and interact respectfully with diverse groups.
<u>PO9</u>	Ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and uses ethical practices in all work. Capable of demonstrating the ability to identify ethical issues related to one's work, avoid unethical behavior 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.
<u>PO10</u>	Ability to acquire knowledge and skills, including learning how to learn, "that are necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades.

Program Specific Outcomes

PSO1	Providing undergraduate students with quality education in the communication and journalism disciplines that is contemporary, relevant and practical. Ever since its inception, the journalism programme has aimed to provide pragmatic learning where theory and practice meet the social and professional needs of students.
PSO2	Gather, analyze and create journalistic content on contemporary issues for print, broadcast and other digital media outlets
PSO3	Produce compendious and articulate work incorporating diverse groups and perspectives, on local, national and international issues.
PSO4	Use reliable visual aids to tell news stories ethically and the ability to meet deadlines.
PSO5	Be prepared for a diverse and multi-cultural world and workplace and be conversant about contemporary media issues.
PSO6	Demonstrate an awareness of journalism as an ethical practice.

PSO7	Be prepared for field work by photography, documentary production and community Outreach Programme.
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Course Outcomes

Semester - I

Course Code	Course Name	Outcomes
CC1	Introduction to Journalism	This course provides the basic concepts of journalism and the contemporary issues relating to the media.
CC2	Introduction to Media and Communication	This course provides an elaborate description of the basic models and theories of Mass Communication.

Semester – II

Course Code	Course Name	Outcomes
CC3	Reporting and Editing for Print	This course provides the contents regarding reporting and editing style for print media.
CC4	Development of Media in India and Bengal	This course provides the growth and development of press in Bengal and India in Pre-independence and Post- independence era.

Semester – III

Course Code	Course Name	Outcomes
CC5	Introduction to Broadcasting Media - Radio	This course provides the historical development of radio broadcasting and acoustic treatment and digital editing of sound.
CC6	Introduction to Broadcasting Media - TV	This course provides the historical developmental of television broadcasting and the constructive approaches of television news production.
CC7	Advertising and Public Relations	This course provides the socio-economic, regulatory and ethical aspects of advertising and the theoretical foundation of Public Relations.
SEC1	Radio Production	This course provides broadcasting production techniques, editing techniques and the creative use of sound.
	Development Journalism	This course provides media specific developmental coverage in the light of journalism.

Semester – IV

Course Code	Course Name	Outcomes
CC8	Introduction to New Media	This Course contains key concepts and theories of new age media and its important usages in day-to-day life.
CC9	Development Communication	This course provides developmental approaches and Paradigm of Mass Communication.
CC10	Media Ethics and The Law	This course Provides ethical, legal theoretical and Practical framework of media practices and several media laws with case studies.
SEC2	Documentary Production	This course Provides Pure Practical based paper that provides guidance for Documentary film making and several theatrical aspects of Documentary.
	Photography	This course Provides practical scenario of photo journalism including editing techniques and guide to light the sense of Photography.

Semester – V

Course Code	Course Name	Outcomes
CC11	Global Media and Politics	This course Provides discourse studies of media and international communication, and also the importance of embedded journalism.
CC12	Introduction to Film Studies	This course Provides emergence and development of Indian and world films and the technical aspects of film making.

DSE1	Communication Research and Methods	This course provides different media research methodological perspectives, techniques, ethical framework and guidance to conduct research upon mass media.
	Print Journalism and Production	This course contains the principles of modern newspaper production techniques and practical guidance through several software, on page making.
DSE2	Corporate Social Responsibility	This course provides proper concepts, strategies and tools of CSR with suitable case studies.
	Media Gender and Human Rights	This course provides conceptual framework upon gender studies under the light of media with several theoretical background of Human rights.

Semester – VI

Course Code	Course Name	Outcomes
CC13	Rural Communication	This course provides different approaches of rural developmental communication with the perspectives of Indian rural agrarian culture.
CC14	Media Industry and Management	This course provides changing pattern of media ownership (monopolization) and hierarchical structures of mass media industries.
DSE3	Multimedia Journalism	This course provides a complete guidance upon the several theoretical and practical aspects of multimedia journalism and on photography with technical perspectives.
	Dissertation	This course provides a complete guidance on how to conduct research, related with any discipline of Mass communication with hand on experience.
DSE4	Media and Industry	This course provides legal and ethical issues of media management in global perspective.
	Community Outreach Programme	This course provides proper understanding of community and to address the contemporary social issues through communication research to develop their social responsibility.



DR. BHUPENDRA NATH DUTTA SMRITI MAHAVIDYALAYA

Department of Bengali

Honours Course

ড ভূপেন্দ্রনাথ দত্ত স্মৃতি মহাবিদ্যালয়

বাংলা বিভাগ

বাংলা স্নাতক কার্যক্রম

কার্যক্রম থেকে প্রাপ্তি

প্রাপ্তি ১- এই কার্যক্রম ছাত্রছাত্রীদের নিজের বিষয় পড়ার সাথে সাথে অন্য অনেক ভিন্ন ধারার বিষয় পড়ার সুযোগ করে দেয়।

প্রাপ্তি ২- ঘনঘন শ্রেণি পরীক্ষা দেওয়ার ফলে ছাত্রছাত্রীদের পাঠমনস্কতা বেড়ে ওঠে।

প্রাপ্তি ৩- পরীক্ষা ব্যবস্থায় 'ছোট-প্রশ্ন' থাকার ফলে ছাত্রছাত্রীরা পাঠ্য বিষয় কে খুঁটিয়ে পড়তে বাধ্য হয়।

প্রাপ্তি ৪- এই কার্যক্রম ছাত্রছাত্রীদের ক্রেডিট স্কোর বাড়িয়ে তুলতে সাহায্য করে।

প্রাপ্তি ৫- এই কার্যক্রম স্নাতকোত্তর পড়াশোনার ক্ষেত্রে ছাত্রছাত্রীরা উৎসাহী করে তোলে।

প্রাপ্তি ৬- এই কার্যক্রম পড়া শেষ হলে ছাত্র ছাত্রীরা বিভিন্ন অর্থকরী কাজের সুযোগ পেতে পারে।

প্রাপ্তি ৭- যেহেতু এই কার্যক্রম বিষয়কে বিভিন্ন দিক থেকে আলোচনা করে, তাই ছাত্রছাত্রীদের বিষয়ানুগ একটি সামগ্রিক ধারণা গড়ে ওঠে।

প্রাপ্তি ৮- যেহেতু এই কার্যক্রম ছাত্রছাত্রীদের নিজেদের লেখার সুযোগ দেয় তাই তাদের ভাষার প্রকাশ বোধ, বানান সম্পর্কে ধারণা, নিজেদের বক্তব্য প্রকাশের অভ্যাস গড়ে ওঠে।

কার্যক্রম নির্দিষ্ট ফলাফল

বিশেষ প্রাপ্তি ১- এই পাঠ্যক্রম বাংলা সাহিত্যের প্রাচীনযুগ, মধ্যযুগ এবং আধুনিক যুগের সাহিত্যের বিস্তারিত আলোচনা তুলে ধরেছে।

বিশেষ প্রাপ্তি ২- এই পাঠ্যক্রম থেকে ছাত্রছাত্রীরা বাংলার ইতিহাস, সংস্কৃতি এবং ঐতিহ্য কে জানতে পারে।

বিশেষ প্রাপ্তি ৩- বাংলা সাহিত্য ছাড়াও অন্য বিষয়ে যেমন ইতিহাস বা সমাজতত্ত্ব কিংবা দর্শনেও ছাত্রছাত্রীদের উৎসাহ জেগে ওঠে।

বিশেষ প্রাপ্তি ৪- বাংলা সাহিত্য, ব্যাকরণ, ভাষাতত্ত্ব সম্পর্কে ছাত্রছাত্রীদের ধারণা গড়ে ওঠে।

বিশেষ প্রাপ্তি ৫- যেহেতু এই পাঠ্যক্রমে ছাত্রছাত্রীরা ইংরাজি শেখার সুযোগ পায় তাই

ইংরাজি ভাষার ধারণা ও জ্ঞানও তাদের গড়ে ওঠে।

বিশেষ প্রাপ্তি ৬- ইংরাজি শিখবার ফলে সারা বিশ্বে ছাত্রছাত্রীদের কাজের সুযোগ তৈরি হয়।

বিশেষ প্রাপ্তি ৭-ইংরাজি শেখার ফলে ছাত্রছাত্রীরা ইংরাজি সাহিত্য এবং ইংরাজিতে অনুদিত অন্যান্য অনেক সাহিত্য পড়তে পারে।

বিশেষ প্রাপ্তি ৮- বিভিন্ন ভাষার সাহিত্যের স্বাদ গ্রহণের পাশে পাশে ছাত্রছাত্রীরা বাংলা সাহিত্যের সাথে অন্য সাহিত্যের তুলনামূলক আলোচনাও করতে পারে।

বিশেষ প্রাপ্তি ৯- এই পাঠ্যক্রমে সাহিত্যের সম-আলোচনামূলক উত্তর তৈরির ক্ষেত্রে ছাত্রছাত্রীদের প্রস্তুত করা হয়।

বিশেষ প্রাপ্তি ১০- এই পাঠ্যক্রম থেকে ছাত্রছাত্রীরা স্নাতকোত্তর পড়ার এবং পরবর্তীকালে গবেষণা করার প্রেরণা পায়।

পাঠ্যক্রম থেকে প্রাপ্তি

Semester	I
Course Code	CC-I/CC-II/GE-I/AECC-I

Credit Value

22

CC-1

পাঠক্রম শিরোনাম -বাংলা সাহিত্যের ইতিহাস (প্রাচীন ও মধ্যযুগ)

পাঠক্রম প্রাপ্তি ১- বাংলার প্রাচীন এবং মধ্যযুগীয় সাহিত্য সম্পর্কে বিশেষ জ্ঞানপ্রাপ্তি হয়।

পাঠক্রম প্রাপ্তি ২- প্রাচীন এবং মধ্যযুগীয় সমাজ ধর্ম এবং দর্শন সম্পর্কে ধারণা এবং বোধ গড়ে ওঠে।

CC-2

পাঠক্রম শিরোনাম- ছন্দ, অলঙ্কার

পাঠক্রম প্রাপ্তি ১- ছাত্রছাত্রীরা কবিতার ছন্দ এবং সাহিত্যে অলঙ্কার প্রয়োগ সম্পর্কে বিস্তারিত জানতে পারে।

পাঠক্রম প্রাপ্তি ২- ছাত্রছাত্রীরা বাংলাসাহিত্য রচনা এবং আলোচনার ক্ষেত্রে ছন্দ এবং অলঙ্কারের ভূমিকা এবং তাৎপর্য বুঝতে পারে।

GE-1

পাঠক্রম শিরোনাম- বাংলা ছাড়া অন্য বিষয়ের ছাত্রছাত্রীদের জন্য

পাঠক্রম প্রাপ্তি ১- বাংলা ছাড়া অন্য বিষয়ের ছাত্রছাত্রীরা বাংলা সাহিত্য পড়তে পারে।

পাঠক্রম প্রাপ্তি ২- বাংলা সাহিত্য এবং ব্যাকরণ সম্পর্কে তাদের জ্ঞান এবং বোধ তৈরি হতে পারে।

AECC-1

পাঠক্রম শিরোনাম- পরিবেশবিজ্ঞান

পাঠক্রম প্রাপ্তি ১- পরিবেশ বিজ্ঞান পাঠের দ্বারা ছাত্রছাত্রীদের পরিবেশ সম্পর্কে জ্ঞানপ্রাপ্তি হয়।

পাঠক্রম প্রাপ্তি ২- পরিবেশ সচেতনতা এবং পরিবেশের ভারসাম্য বজায় রাখতে নিজের ভূমিকা সম্পর্কে ধারণা গড়ে ওঠে।

Semester II	
Course Code	CC-3/CC-4/GE-2/AECC-2
Credit Value	20

CC-3

পাঠক্রম শিরোনাম- বৈষ্ণব পদাবলী, শাক্ত পদাবলী

পাঠক্রম প্রাপ্তি ১- বাংলা সাহিত্যের অমূল্য রত্ন ‘বৈষ্ণব পদাবলী’। বাংলার মধ্যযুগীয় সাহিত্যে বৈষ্ণব ধর্ম এবং বৈষ্ণব সাহিত্যের বিপুল জনপ্রিয়তা এবং তাৎপর্য ছিল, সেই বিষয়ে ছাত্রছাত্রীদের ‘বৈষ্ণবপদাবলী’ পাঠের দ্বারা জানতে পারে।

পাঠক্রম প্রাপ্তি ২- অষ্টাদশ শতকের বাংলার সমাজ, ইতিহাস, শাক্ত সাধনতত্ত্ব এবং তার মানবিক কাব্যমূল্য ইত্যাদি জানা হয় ‘শাক্তপদাবলী’ পাঠের দ্বারা।

CC-4

পাঠক্রম শিরোনাম- রামায়ণ, অন্নদামঙ্গল

পাঠক্রম প্রাপ্তি ১- বাংলা সাহিত্যের সমৃদ্ধ রত্ন কৃত্তিবাসের ‘রামায়ণ’। মধ্যযুগের সমাজ, ধর্ম এবং দর্শন সম্পর্কে জানা যায় পাঠ্য কৃত্তিবাসের ‘রামায়ণ’ থেকে।

পাঠক্রম প্রাপ্তি ২- অষ্টাদশ শতকের বাংলার সমাজ, ইতিহাস, রাষ্ট্রনীতিকে ভিন্ন দৃষ্টিকোণে জানতে পারা যায় ‘অন্নদামঙ্গল’ পাঠের দ্বারা।

পাঠক্রম প্রাপ্তি ৩- ভারতচন্দ্রের ‘অন্নদামঙ্গল’ আগ্রিকের দিক থেকেও ছাত্রছাত্রীদের বহু নতুন বিষয় শেখায়।

GE-2

পাঠক্রম শিরোনাম- বাংলা ছাড়া অন্য বিষয়ের ছাত্রছাত্রীদের জন্য

পাঠক্রম প্রাপ্তি ১- বাংলা ছাড়া অন্য বিষয়ের ছাত্রছাত্রীরা বাংলা সাহিত্য পড়তে পারে।

পাঠক্রম প্রাপ্তি ২- বাংলা ছোটগল্প সম্পর্কে তাদের জ্ঞান এবং বোধ তৈরি হতে পারে।

AECC-2

পাঠক্রম শিরোনাম-সংযোগমূলক ইংরাজি

পাঠক্রম প্রাপ্তি ১- বাংলা সাহিত্যের ছাত্রছাত্রীরা সংযোগমূলক ইংরাজি শেখার সুযোগ পায়।

পাঠক্রম প্রাপ্তি ২- পাশ্চাত্যের সাহিত্যতত্ত্ব সম্পর্কে জানতে পারে।

Semester	II
Course Code	CC-5/CC-6/CC-7/GE-3/SEC-1
Credit Value	20

CC-5

পাঠক্রম শিরোনাম - বাংলা সাহিত্যের ইতিহাস (১৮০১-১৯৫০)

পাঠক্রম প্রাপ্তি ১- ছাত্রছাত্রীরা বাংলা ভাষার আধুনিক রূপটি কীভাবে গড়ে উঠল সেই বিষয়ে বিস্তারিত জানতে পারে।

পাঠক্রম প্রাপ্তি ২- উনিশ এবং বিশশতকের বাংলার সমাজ, ইতিহাস এবং সাহিত্যের সম্পর্কে জানতে পারে।

পাঠক্রম প্রাপ্তি ৩- বাংলা সাহিত্যের আধুনিক যুগের ক্রমবিকাশ সম্পর্কে জানতে পারে।

CC-6

পাঠক্রম শিরোনাম-ভাষাতত্ত্ব

পাঠক্রম প্রাপ্তি ১- বাংলা ভাষাতত্ত্ব সম্পর্কে প্রাথমিক ধারণা গড়ে ওঠে।

পাঠক্রম প্রাপ্তি ২- আধুনিক ভাষাতত্ত্বের বিভিন্ন দিক সম্পর্কে জানা হয়।

CC-7

পাঠক্রম শিরোনাম- উনিশশতকের কাব্য

পাঠক্রম প্রাপ্তি ১- ছাত্রছাত্রীরা উনিশশতকে বাংলার আধুনিক যুগের সূচনায় কাব্য সাহিত্যের বিকাশ সম্পর্কে জানতে পারে।

পাঠক্রম প্রাপ্তি ২- উনিশশতকের বাংলার নবজাগরণ এবং বাংলা কাব্যে তার প্রভাব সম্পর্কে জানতে পারে।

পাঠক্রম প্রাপ্তি ৩- বাংলা কাব্যের ঔপনিবেশিক ইতিহাস এবং সমাজ পরিবর্তনের সাথে সাথে কাব্যের বিষয় ও আঙ্গিকের পরিবর্তনের কথা জানতে পারে।

GE-3

পাঠক্রম শিরোনাম- বাংলা ছাড়া অন্য বিষয়ের ছাত্রছাত্রীদের জন্য

পাঠক্রম প্রাপ্তি ১- অন্য বিষয়ের ছাত্রছাত্রীরা এই পাঠক্রমের দ্বারা বাংলা সাহিত্যের ইতিহাসকে জানার সুযোগ পায়।

পাঠক্রম প্রাপ্তি ২- সাহিত্যের ইতিহাস পাঠের মধ্য দিয়ে তারা দেশ, কাল, সমাজ এবং জাতির ইতিহাসকে জানতে পারে।

SEC-1

পাঠক্রম শিরোনাম- বাংলা ব্যাকরণ

পাঠক্রম প্রাপ্তি ১- বাংলা ব্যাকরণের নানা দিক নিয়ে আলোচনার মধ্য দিয়ে ছাত্র ছাত্রীরা ভাষার গঠন সম্পর্কে জানতে পারে।

পাঠক্রম প্রাপ্তি ২- তাদের নিজেদের রচনা শুদ্ধ এবং নির্ভুল হয়ে ওঠে।

Semester	IV
Course Code	CC-8/CC-9/CC-10/GE-4/SEC-2
Credit Value	26

CC-8

পাঠক্রম শিরোনাম- কবিতা

পাঠক্রম প্রাপ্তি ১- রবীন্দ্রনাথের সাহিত্যের সঙ্গে ছাত্রছাত্রীদের স্নাতক স্তরে প্রথম পরিচয় হয়।

পাঠক্রম প্রাপ্তি ২- রবীন্দ্র কবিতা সম্পর্কে ছাত্রছাত্রীদের প্রাথমিক ধারণা গড়ে ওঠে।

পাঠক্রম প্রাপ্তি ৩- ছাত্রছাত্রীরা বাংলা আধুনিক কবিতার ইতিহাস এবং আঙ্গিক জানতে পারে।

পাঠক্রম প্রাপ্তি ৪- আধুনিক কবিতার বিশ্লেষণমূলক পাঠ ছাত্রছাত্রীদের সমৃদ্ধ করে।

CC-9

পাঠক্রম শিরোনাম- উপন্যাস

পাঠক্রম প্রাপ্তি ১- বাংলা সাহিত্যে উপন্যাসের ইতিহাস, ক্রমবিকাশ সম্পর্কে ছাত্রছাত্রীদের ধারণা তৈরি হয়।

পাঠক্রম প্রাপ্তি ২- উপন্যাসের নিবিড় বিশ্লেষণাত্মক পাঠের মধ্য দিয়ে বাংলা উপন্যাসের আঙ্গিক সম্পর্কে ছাত্রছাত্রীরা জানতে পারে।

CC10

পাঠক্রম শিরোনাম- নাটক

পাঠক্রম প্রাপ্তি ১- বাংলা নাটকের ইতিহাস ও ক্রমবিকাশ সম্পর্কে ছাত্রছাত্রীদের ধারণা তৈরি হয়।

পাঠক্রম প্রাপ্তি ২- সমাজের পরিস্থিতি এবং নাটকের পরিবেশের তুলনামূলক বিশ্লেষণের মধ্য দিয়ে নাটকের সামাজিক অভিঘাত সম্পর্কে ধারণা তৈরি হয়।

GE-4

পাঠক্রম শিরোনাম- বাংলা ছাড়া অন্য বিষয়ের ছাত্রছাত্রীদের জন্য

পাঠক্রম প্রাপ্তি ১- অন্য বিষয়ের ছাত্রছাত্রীরা এই পাঠক্রমের দ্বারা বাংলা ভাষাতত্ত্ব জানার সুযোগ পায়।

পাঠক্রম প্রাপ্তি ২- ছাত্রছাত্রীরা বাংলা সাহিত্যের উৎপত্তি এবং ক্রমবিকাশ সম্পর্কে জানতে পারে।

SEC-2

পাঠক্রম শিরোনাম- রচনাশক্তির নৈপুণ্য

পাঠক্রম প্রাপ্তি ১- ছাত্রছাত্রীদের রচনাশক্তি বাড়ে, নির্ভুল হয় এবং নিজে লিখতে পারার আত্মবিশ্বাস তৈরি হয়।

পাঠক্রম প্রাপ্তি ২- ছাত্রছাত্রীরা চিঠি, প্রতিবেদন এবং প্রবন্ধ রচনার আঙ্গিক এবং রীতির বিষয়ে জানতে পারে।

Semester	V
Course Code	CC-11/CC-12/DSE-1/DSE-2
Credit Value	24

CC-11

পাঠক্রম শিরোনাম- গল্প

পাঠক্রম প্রাপ্তি ১- রবীন্দ্র ছোটগল্প পাঠের দ্বারা ছাত্রছাত্রীরা বাংলা ছোটগল্পের ধারণা পেয়ে থাকে।

পাঠক্রম প্রাপ্তি ২- বিশ্বসাহিত্যে আদৃত রবীন্দ্রগল্পগুলি ছাত্রছাত্রীদের কল্পনা, সংবেদনশীলতা, সমাজবোধ এবং ছোটগল্পের শিল্পসার্থকতার ধারণা গড়ে তোলে।

পাঠক্রম প্রাপ্তি ৩- আধুনিক ছোটগল্প পাঠের দ্বারা আধুনিক সমাজ এবং সমসাময়িক গল্পের নিবিড় সম্পর্ক সূত্রটি ছাত্রছাত্রীদের কাছে আবিষ্কৃত হয়।

পাঠক্রম প্রাপ্তি ৪- আধুনিক জীবনবাস্তবতার প্রেক্ষিতে গল্পের শিল্পরূপেরও ধারণা গড়ে ওঠে।

CC-12

পাঠক্রম শিরোনাম- প্রবন্ধ ও প্রাচ্যকাব্যতত্ত্ব

পাঠক্রম প্রাপ্তি ১- প্রবন্ধ সাহিত্যের প্রাথমিক পাঠ সূচিত হয়। প্রবন্ধ রচনার আঙ্গিক এবং বিষয় নির্বাচন সম্পর্কে ধারণা তৈরি হয়।

পাঠক্রম প্রাপ্তি ২- প্রাচীন ভারতীয় কাব্যতত্ত্বের আলোচনার দ্বারা সাহিত্যতত্ত্বের সাথে প্রাথমিক পরিচয় ঘটে।

পাঠক্রম প্রাপ্তি ৩- প্রাচ্য সাহিত্যতাত্ত্বিক মতবাদগুলি জানা যায়।

DSE-1

পাঠক্রম শিরোনাম- উনিশ শতকের বাংলা কাব্য ও প্রবন্ধ

পাঠক্রম প্রাপ্তি ১- উনিশ শতকের বাংলা কাব্য সম্পর্কে বিস্তারিত আলোচনার দ্বারা বাংলা কাব্যের নানা দিক এবং ক্রমবিকাশ জানতে পারা যায়।

পাঠক্রম প্রাপ্তি ২- উনিশ শতকের বাংলা প্রবন্ধ সাহিত্যের আলোচনার দ্বারা প্রবন্ধ সম্পর্কে ধারণা তৈরি হয়।

পাঠক্রম প্রাপ্তি ৩- বাংলা গদ্য ভাষার বিকাশ এবং আত্মগত ও বস্তুগত প্রবন্ধের বিষয়ে বিস্তারিত জানা হয়।

DSE-2

পাঠক্রম শিরোনাম- উনিশ শতকের বাংলা নাটক ও কথাসাহিত্য

পাঠক্রম প্রাপ্তি ১- উনিশ শতকের বাংলা নাটকের উৎপত্তি, নিজস্ব পরিসর নির্মাণ এবং ক্রমবিকাশ জানতে পারা যায়।

পাঠক্রম প্রাপ্তি ২- উনিশ শতকের বাংলা কথাসাহিত্যের উদ্ভব, ক্রমবিকাশ এবং প্রথমে উপন্যাস ও পরে ছোটগল্পের রচনা বাংলার সমাজে কীভাবে অভিঘাত সৃষ্টি করেছিল জানা যায়।

Semester	VI
Course Code	CC-13/CC-14/DSE-3/DSE-4
Credit Value	24

CC-13

পাঠক্রম শিরোনাম- সংস্কৃত এবং ইংরাজি সাহিত্যের ইতিহাস

পাঠক্রম প্রাপ্তি ১- ছাত্রছাত্রীদের সংস্কৃত এবং ইংরাজি সাহিত্য সম্পর্কে প্রাথমিক ধারণা গড়ে ওঠে।

পাঠক্রম প্রাপ্তি ২- সংস্কৃত সাহিত্যের ইতিহাস পাঠের দ্বারা ভারতীয় সাহিত্যের মহান ঐতিহ্যের ধারণা প্রাপ্তি হয়।

পাঠক্রম প্রাপ্তি ৩- ছাত্রছাত্রীরা ইংরাজি সাহিত্যের মহান লেখকদের কথা জানতে পারে।

পাঠক্রম প্রাপ্তি ৪- ছাত্রছাত্রীরা আধুনিক বাংলা সাহিত্যে, সংস্কৃত এবং ইংরাজি সাহিত্যের বিপুল প্রভাবকে বুঝতে পারে এবং আলোচনা করতে পারে।

CC-14

পাঠক্রম শিরোনাম- সাহিত্যের রূপরীতি ও সংরূপ

পাঠক্রম প্রাপ্তি ১- ছাত্রছাত্রীদের আধুনিক সাহিত্যের বিভিন্ন মতবাদ সম্পর্কে ধারণা গড়ে ওঠে।

পাঠক্রম প্রাপ্তি ২- ছাত্রছাত্রীরা পাশ্চাত্যের সাহিত্য তাত্ত্বিক মতবাদ গুলির বিষয়ে জানতে পারে।

পাঠক্রম প্রাপ্তি ৩- ছাত্রছাত্রীদের সাহিত্যের বিভিন্ন শৈলী এবং তার প্রয়োগ সম্পর্কে ধারণা তৈরি হয়।

DSE-3

পাঠক্রম শিরোনাম- বিশশতকের স্বাধীনতা-পূর্ববর্তী বাংলা কথাসাহিত্য

পাঠক্রম প্রাপ্তি ১- ছাত্রছাত্রীরা বিশশতকের স্বাধীনতা-পূর্ববর্তী বাংলা কথাসাহিত্য সম্পর্কে জানতে পারে।

পাঠক্রম প্রাপ্তি ২- বাংলা উপন্যাস এবং ছোটগল্পের ক্ষেত্রে বিশশতকে কোন কোন নতুন বৈশিষ্ট্য দেখা গিয়েছিল ছাত্রছাত্রীরা তা জানতে পারে।

DSE-4

পাঠক্রম শিরোনাম- সাহিত্য বিষয়ক প্রবন্ধ ও লোক সাহিত্য

পাঠক্রম প্রাপ্তি ১- ছাত্রছাত্রীরা বিশশতকের সাহিত্য বিষয়ক প্রবন্ধ এবং তার প্রকরণ, বিষয়ের বহুমাত্রিকতার সম্পর্কে জানতে পারে।

পাঠক্রম প্রাপ্তি ২- ছাত্রছাত্রীদের লোকসাহিত্য এবং লোকসংস্কৃতি সম্পর্কে প্রাথমিক কিছু ধারণা তৈরি হয়।



General Course

ড ভূপেন্দ্রনাথ দত্ত স্মৃতি মহাবিদ্যালয় বাংলা বিভাগ

বাংলা জেনারেল কার্যক্রম

কার্যক্রম থেকে প্রাপ্তি

- প্রাপ্তি ১- এই কার্যক্রম ছাত্রছাত্রীদের নিজের বিষয় পড়ার সাথে সাথে অন্য অনেক ভিন্ন ধারার বিষয় পড়ার সুযোগ করে দেয়।
- প্রাপ্তি ২- ঘনঘন শ্রেণি পরীক্ষা দেওয়ার ফলে ছাত্রছাত্রীদের পাঠমনস্কতা বেড়ে ওঠে।
- প্রাপ্তি ৩- পরীক্ষা ব্যবস্থায় ‘ছোট-প্রশ্ন’ থাকার ফলে ছাত্রছাত্রীরা পাঠ্য বিষয় কে খুঁটিয়ে পড়তে বাধ্য হয়।
- প্রাপ্তি ৪- এই কার্যক্রম ছাত্রছাত্রীদের ক্রেডিট স্কোর বাড়িয়ে তুলতে সাহায্য করে।
- প্রাপ্তি ৫- এই কার্যক্রম স্নাতকোত্তর পড়াশোনার ক্ষেত্রে ছাত্রছাত্রীরা উৎসাহী করে তোলে।
- প্রাপ্তি ৬- এই কার্যক্রম পড়া শেষ হলে ছাত্র ছাত্রীরা বিভিন্ন অর্থকরী কাজের সুযোগ পেতে পারে।
- প্রাপ্তি ৭- যেহেতু এই কার্যক্রম বিষয়কে বিভিন্ন দিক থেকে আলোচনা করে তাই ছাত্রছাত্রীদের বিষয়ানুগ একটি সামগ্রিক ধারণা গড়ে ওঠে।
- প্রাপ্তি ৮- যেহেতু এই কার্যক্রম ছাত্রছাত্রীদের নিজেদের লেখার সুযোগ দেয় তাই তাদের ভাষা, বানান সম্পর্কে ধারণা, নিজেদের বক্তব্য প্রকাশের অভ্যাস গড়ে ওঠে।

কার্যক্রম নির্দিষ্ট ফলাফল

বিশেষ প্রাপ্তি ১- এই পাঠক্রম বাংলা সাহিত্যের প্রাচীনযুগ, মধ্যযুগ এবং আধুনিক যুগের সাহিত্যের আলোচনা তুলে ধরেছে।

বিশেষ প্রাপ্তি ২- এই পাঠক্রম থেকে ছাত্রছাত্রীরা বাংলার ইতিহাস, সংস্কৃতি এবং ঐতিহ্য কে জানতে পারে।

বিশেষ প্রাপ্তি ৩- বাংলা সাহিত্য ছাড়াও অন্য বিষয়ে যেমন ইতিহাস বা সমাজতত্ত্ব কিংবা দর্শনেও ছাত্রছাত্রীদের উৎসাহ জেগে ওঠে।

বিশেষ প্রাপ্তি ৪- বাংলা সাহিত্য, ব্যাকরণ, ভাষাতত্ত্ব সম্পর্কে ছাত্রছাত্রীদের ধারণা গড়ে ওঠে।

বিশেষ প্রাপ্তি ৫- যেহেতু এই পাঠক্রমে ছাত্রছাত্রীরা ইংরাজি শেখার সুযোগ পায় তাই

ইংরাজি ভাষার ধারণা ও জ্ঞান ও তাদের গড়ে ওঠে।

বিশেষ প্রাপ্তি ৬- ইংরাজি শিখবার ফলে সারা বিশ্বে ছাত্রছাত্রীদের কাজের সুযোগ তৈরি হয়।

বিশেষ প্রাপ্তি ৭-ইংরাজি শেখার ফলে ছাত্রছাত্রীরা ইংরাজি সাহিত্য এবং ইংরাজিতে অনুদিত অন্যান্য অনেক সাহিত্য পড়তে পারে।

বিশেষ প্রাপ্তি ৮- বিভিন্ন ভাষার সাহিত্যের স্বাদ গ্রহণের পাশে পাশে ছাত্রছাত্রীরা বাংলা সাহিত্যের সাথে অন্য সাহিত্যের তুলনামূলক আলোচনাও করতে পারে।

বিশেষ প্রাপ্তি ৯- এই পাঠক্রমে সাহিত্যের সম-আলোচনামূলক উত্তর তৈরির ক্ষেত্রে ছাত্রছাত্রীদের প্রস্তুত করা হয়।

বিশেষ প্রাপ্তি ১০- এই পাঠক্রম থেকে ছাত্রছাত্রীরা স্নাতকোত্তর পড়ার এবং পরবর্তীকালে গবেষণা করার প্রেরণা পায়

পাঠক্রম থেকে প্রাপ্তি

Course Code	CC-1A/CC-2A/CC-L ₁ -1/AECC-I
Credit Value	22

CC-1A/CC-2A

পাঠক্রম শিরোনাম – প্রবন্ধ সাহিত্য বঙ্কিমচন্দ্র ও রবীন্দ্রনাথ

পাঠক্রম প্রাপ্তি ১- উনিশ শতকের বাংলা প্রবন্ধ সাহিত্যের আলোচনার দ্বারা প্রবন্ধ সম্পর্কে ধারণা তৈরি হয়।

পাঠক্রম প্রাপ্তি-২- বাংলা গদ্য ভাষার বিকাশ এবং আত্মগত ও বস্তুগত প্রবন্ধের বিষয়ে বিস্তারিত জানা হয়।

পাঠক্রম প্রাপ্তি ৩-বঙ্কিমচন্দ্র এবং রবীন্দ্রনাথের প্রবন্ধের বিষয়ে বিস্তারিত জানা যায়।

CC-(L₁-1)

পাঠক্রম শিরোনাম- বাংলা ছাড়া অন্য বিষয়ের ছাত্রছাত্রীদের জন্য

বিশেষ প্রাপ্তি ১- যেহেতু এই পাঠক্রমে ছাত্রছাত্রীরা ইংরাজি শেখার সুযোগ পায় তাই

ইংরাজি ভাষার ধারণা ও জ্ঞান ও তাদের গড়ে ওঠে।

AECC-1

পাঠক্রম শিরোনাম- পরিবেশবিজ্ঞান

পাঠক্রম প্রাপ্তি ১- পরিবেশ বিজ্ঞান পাঠের দ্বারা ছাত্রছাত্রীদের পরিবেশ সম্পর্কে জ্ঞানপ্রাপ্তি হয়।

পাঠক্রম প্রাপ্তি ২- পরিবেশ সচেতনতা এবং পরিবেশের ভারসাম্য বজায় রাখতে নিজের ভূমিকা সম্পর্কে ধারণা গড়ে ওঠে।

Semester II	
Course Code	CC-1B/CC-2B/CC-L ₂ -1/AECC-2
Credit Value	20

CC-1B/CC-2B

পাঠক্রম শিরোনাম- গল্প প্রভাতকুমার ও শরৎচন্দ্র

পাঠক্রম প্রাপ্তি ১- ছোটগল্প পাঠের দ্বারা ছাত্রছাত্রীরা বাংলা ছোটগল্পের ধারণা পেয়ে থাকে।

পাঠক্রম প্রাপ্তি ২- সাহিত্যে আদৃত গল্পগুলি ছাত্রছাত্রীদের কল্পনা, সংবেদনশীলতা, সমাজবোধ এবং ছোটগল্পের শিল্পসার্থকতার ধারণা গড়ে তোলে

CC-L₂-1

পাঠক্রম শিরোনাম- বাংলা ছোটগল্প

পাঠক্রম প্রাপ্তি ১- আধুনিক ছোটগল্প পাঠের দ্বারা আধুনিক সমাজ এবং সমসাময়িক গল্পের নিবিড় সম্পর্ক সূত্রটি ছাত্রছাত্রীদের কাছে আবিস্কৃত হয়।

পাঠক্রম প্রাপ্তি ২- আধুনিক জীবনবাস্তবতার প্রেক্ষিতে গল্পের শিল্পরূপেরও ধারণা গড়ে ওঠে।

AECC-2

পাঠক্রম শিরোনাম- প্রবন্ধ, প্রতিবেদন, গল্প ও কবিতা

পাঠক্রম প্রাপ্তি ১- রবীন্দ্র ছোটগল্প পাঠের দ্বারা ছাত্রছাত্রীরা বাংলা ছোটগল্পের ধারণা পেয়ে থাকে।

পাঠক্রম প্রাপ্তি ২-প্রবন্ধ সম্পর্কে ধারণা তৈরি হয়।

পাঠক্রম প্রাপ্তি ২- রবীন্দ্র কবিতা সম্পর্কে ছাত্রছাত্রীদের প্রাথমিক ধারণা গড়ে ওঠে।

পাঠক্রম প্রাপ্তি ২- ছাত্রছাত্রীরা প্রতিবেদন লিখতে শেখে।

Semester		III
Course Code		CC-1C/CC-2C/SEC-1
Credit Value		20

CC-1C/CC-2C

পাঠক্রম শিরোনাম- বাংলা সাহিত্যের ইতিহাস

পাঠক্রম প্রাপ্তি ১- বাংলার প্রাচীন এবং মধ্যযুগীয় সাহিত্য সম্পর্কে বিশেষ জ্ঞানপ্রাপ্তি হয়।

পাঠক্রম প্রাপ্তি ২- প্রাচীন এবং মধ্যযুগীয় সমাজ ধর্ম এবং দর্শন সম্পর্কে ধারণা এবং বোধ গড়ে ওঠে।

পাঠক্রম প্রাপ্তি ১- ছাত্রছাত্রীরা বাংলা ভাষার আধুনিক রূপটি কীভাবে গড়ে উঠল সেই বিষয়ে বিস্তারিত জানতে পারে।

পাঠক্রম প্রাপ্তি ২- উনিশ এবং বিশশতকের বাংলার সমাজ, ইতিহাস এবং সাহিত্যের সম্পর্কে জানতে পারে।

পাঠক্রম প্রাপ্তি ৩- বাংলা সাহিত্যের আধুনিক যুগের ক্রমবিকাশ সম্পর্কে জানতে পারে।

SEC-1

পাঠক্রম শিরোনাম- বাংলা ব্যাকরণ

পাঠক্রম প্রাপ্তি ১- বাংলা ব্যাকরণের নানা দিক নিয়ে আলোচনার মধ্য দিয়ে ছাত্র ছাত্রীরা ভাষার গঠন সম্পর্কে জানতে পারে

পাঠক্রম প্রাপ্তি ২- তাদের নিজেদের রচনা শুদ্ধ এবং নির্ভুল হয়ে ওঠে।

Semester	IV
Course Code	CC-1D/CC-2D/CC-L ₂ -2/SEC-2
Credit Value	20

CC-1D/CC-2D

পাঠক্রম শিরোনাম-ভাষাতত্ত্ব

পাঠক্রম প্রাপ্তি ১- বাংলা ভাষাতত্ত্ব সম্পর্কে প্রাথমিক ধারণা গড়ে ওঠে।

পাঠক্রম প্রাপ্তি ২- আধুনিক ভাষাতত্ত্বের বিভিন্ন দিক সম্পর্কে জানা হয়।

CC-L₂-2

পাঠক্রম শিরোনাম- বাংলা কবিতা

পাঠক্রম প্রাপ্তি ২- রবীন্দ্র কবিতা সম্পর্কে ছাত্রছাত্রীদের প্রাথমিক ধারণা গড়ে ওঠে।

পাঠক্রম প্রাপ্তি ৩- ছাত্রছাত্রীরা বাংলা আধুনিক কবিতার ইতিহাস এবং আঙ্গিক জানতে পারে।

পাঠক্রম প্রাপ্তি ৪- আধুনিক কবিতার বিশ্লেষণমূলক পাঠ ছাত্রছাত্রীদের সমৃদ্ধ করে।

SEC-2

পাঠক্রম শিরোনাম- রচনাশক্তির নৈপুণ্য

পাঠক্রম প্রাপ্তি ১- ছাত্রছাত্রীদের রচনাশক্তি বাড়ে, নির্ভুল হয় এবং নিজে লিখতে পারার আত্মবিশ্বাস তৈরি হয়।

পাঠক্রম প্রাপ্তি ২- ছাত্রছাত্রীরা চিঠি, প্রতিবেদন এবং প্রবন্ধ রচনার আঙ্গিক এবং রীতির বিষয়ে জানতে পারে।

Semester

V

Course Code	DSE-1A/DSE-2A/GE-1/SEC-3
Credit Value	20

DSE-1A/DSE-2A

পাঠক্রম শিরোনাম- উনিশ শতকের বাংলা উপন্যাস/ গল্প

পাঠক্রম প্রাপ্তি ১- বাংলা সাহিত্যে উপন্যাসের ইতিহাস, ক্রমবিকাশ সম্পর্কে ছাত্রছাত্রীদের ধারণা তৈরি হয়।

পাঠক্রম প্রাপ্তি ২- উপন্যাসের নিবিড় বিশ্লেষণাত্মক পাঠের মধ্য দিয়ে বাংলা উপন্যাসের আঙ্গিক সম্পর্কে ছাত্রছাত্রীরা জানতে পারে।

পাঠক্রম প্রাপ্তি ১- রবীন্দ্র ছোটগল্প পাঠের দ্বারা ছাত্রছাত্রীরা বাংলা ছোটগল্পের ধারণা পেয়ে থাকে।

পাঠক্রম প্রাপ্তি ২- বিশ্বসাহিত্যে আদৃত রবীন্দ্রগল্পগুলি ছাত্রছাত্রীদের কল্পনা, সংবেদনশীলতা, সমাজবোধ এবং ছোটগল্পের শিল্পসার্থকতার ধারণা গড়ে তোলে।

GE-1

পাঠক্রম শিরোনাম- উনিশ শতকের বাংলা প্রবন্ধ

পাঠক্রম প্রাপ্তি ২- উনিশ শতকের বাংলা প্রবন্ধ সাহিত্যের আলোচনার দ্বারা প্রবন্ধ সম্পর্কে ধারণা তৈরি হয়।

পাঠক্রম প্রাপ্তি ৩- বাংলা গদ্য ভাষার বিকাশ এবং আত্মগত ও বস্তুগত প্রবন্ধের বিষয়ে বিস্তারিত জানা হয়।

SEC-3

পাঠক্রম শিরোনাম- প্রবন্ধ ও প্রতিবেদন রচনা

পাঠক্রম প্রাপ্তি ১- ছাত্রছাত্রীরা বিশশতকের সাহিত্য বিষয়ক প্রবন্ধ এবং তার প্রকরণ, বিষয়ের বহুমাত্রিকতার সম্পর্কে জানতে পারে।

পাঠক্রম প্রাপ্তি ২- ছাত্রছাত্রীরা প্রতিবেদন রচনার আঙ্গিক এবং রীতির বিষয়ে জানতে পারে।

Semester	VI
Course Code	DSE-1B/DSE-2B/GE-2/SEC-4
Credit Value	20

DSE-1B/DSE-2B

পাঠক্রম শিরোনাম- উনিশ শতকের বাংলা নাটক /প্রবন্ধ

পাঠক্রম প্রাপ্তি ২- উনিশ শতকের বাংলা প্রবন্ধ সাহিত্যের আলোচনার দ্বারা প্রবন্ধ সম্পর্কে ধারণা তৈরি হয়।

পাঠক্রম প্রাপ্তি ৩- বাংলা গদ্য ভাষার বিকাশ এবং আত্মগত ও বস্তুগত প্রবন্ধের বিষয়ে বিস্তারিত জানা হয়।

পাঠক্রম প্রাপ্তি ১- উনিশ শতকের বাংলা নাটকের উৎপত্তি, নিজস্ব পরিসর নির্মাণ এবং ক্রমবিকাশ জানতে পারা যায়।

পাঠক্রম প্রাপ্তি ২- উনিশ শতকের বাংলা কথাসাহিত্যের উদ্ভব, ক্রমবিকাশ এবং প্রথমে উপন্যাস ও পরে ছোটগল্পের রচনা বাংলার সমাজে কীভাবে অভিঘাত সৃষ্টি করেছিল জানা যায়।

GE-2

পাঠক্রম শিরোনাম- উনিশশতকের বাংলার ভ্রমণ সাহিত্য ও চিঠিপত্র

পাঠক্রম প্রাপ্তি ১- ভ্রমণ সাহিত্যের প্রাথমিক পাঠ সূচিত হয়।

পাঠক্রম প্রাপ্তি ১- ভ্রমণ সাহিত্যের উদ্ভব বিকাশ ও বিবর্তন সম্পর্কে ধারণা তৈরি হয়।

পাঠক্রম প্রাপ্তি ২- বিভিন্ন প্রকার চিঠি কেখার পদ্ধতির সাথে প্রাথমিক পরিচয় ঘটে।

SEC-4

পাঠক্রম শিরোনাম- ব্যাবহারিক বাংলা চর্চা ও অনুবাদ চর্চা

পাঠক্রম প্রাপ্তি ১- ছাত্রছাত্রীরা চিঠি লিখতে, প্রতিবেদন রচনা করতে এবং অনুচ্ছেদ লিখতে শেখে।

পাঠক্রম প্রাপ্তি ২- ও অনুবাদের প্রকার ভেদ, অনুবাদের শৈলী শিখতে পারে ছাত্রছাত্রীরা।

পাঠক্রম প্রাপ্তি ৩- বাংলা গদ্য ভাষার বিকাশ এবং আত্মগত ও বস্তুগত প্রবন্ধের বিষয়ে বিস্তারিত জানা হয়।



General Course

Programme Specific and Course Outcomes

Programme Specific Outcome (PSO):

Physical Educators to foster and strengthen developing motor skills and to provide children and teens with a basic skill set that builds their movement repertoire, which allows students to engage in various forms of games, sports, and other physical activities throughout their lifetime.

Physical Education is a course that keeps concentrate on the physical fitness of the students. The benefits of introducing physical education as a subject in college levels are that it makes students physically fit with the interest in various sports activities.

Through physical education and sports one can improve various aspects of their life. Like physical, social, psychological, mental etc. Physical education and sports can improve professional life also.

- To get Preliminary idea of Physical Education.
- To study about the Indian and World history of Physical Education.
- Get knowledge about accessing E-library.
- Learn about the structure and function of human being.
- Knowledge of exercise effects on various systems of human being.
- Learn about Different Therapeutic process and its use.
- Get knowledge about maintain and development of the Physical Fitness.
- How to organize the Standard Tournament and Athletic meet.
- Learn officiating skills and rules of various games and sports.
- How to Maintain Popper Health and Active Life Style
- To Understand the sports Psychology and its importance.
- Knowledge about maintaining healthy and proper lifestyle.
- To encourage self-reporting and monitoring of exercise.
- Understanding the meaning of physical education for an individual development and improving general health for professional activity.
- Fostering motivational attitude to physical education, healthy lifestyle and regular exercise.
- Learning special knowledge, practical skills, which provide health protection, formcompensatory process, correct present health abnormalities, provide mental prosperity, development and improvement of psycho physical skills, form professional qualities of an individual.
- Body's adaptation for physical and mental workload, it increase the capability of physiological systems

as well as raising the resistance of immune system...

- Acclimatize unfavourable factors and working conditions while decreasing fatigue during the professional activities and improving the quality of life.

Course Outcomes (CO)

CC 1 A

Theory:

- ❖ Get knowledge about the Yoga and history of Physical Education and in India.
- ❖ Learn about the biological and sociological foundation of human.

Field Practical:

- ❖ Yoga.
- ❖ Improving fitness through callisthenics and aerobic activities.

CC 1 B

Theory:

- ❖ Learn about the management of sports,
- ❖ Learn about how to organize a annual athletic meet and tournament and how to maintain sports goods.
- ❖ Get knowledge about Leadership.

Field Practical:

- ❖ Lay out and officiating ability about Track and Field, Football, Kabaddi, Volleyball.

CC 1C

Theory:

- ❖ Get knowledge of Anatomy and Physiology of human body. Learn different body parts and it's mechanism.
- ❖ Knowledge about the Effect of exercise on various systems of human body.

Lab Practical:

- ❖ Learn about Body Mass Index (BMI) and Waist Hip Ratio (WHR)
- ❖ How to assess heart rate, blood pressure, respiratory rate and pick flow rate.

SEC 1

- ❖ Get practical knowledge about various tools and techniques of Track and Field (Running, Jumping, Throwing)

CC 1 D

Theory:

- ❖ Knowledge about Health, Health Education and various Health Agencies in the world.
- ❖ Learn how to maintain proper Health and active life style.
- ❖ Knowledge about causes and prevention of Health problems in India.
- ❖ Get knowledge about sports injuries and First Aid management.
- ❖ Knowledge about various therapeutic aspects to prevent and control sports injuries.

Lab Practical:

- ❖ Practical knowledge of various First Aid techniques.
- ❖ Get Practical knowledge about Hydro therapy and Thermo therapy.

SEC 2

Learn about the knowledge and techniques and benefits of Gymnastics and Yoga.

DSE 1

Theory:

- ❖ Learn about the Test, Measurement and Evaluation in Physical Education and sports.
- ❖ Acquire knowledge about the various fitness and sports skill test.
- ❖ Knowledge about sports training and various techniques of sports training while improving sports performance.

Lab/ Field Practical:

- ❖ Acquire practical knowledge about how to measure somatotype and body fat percentage. (manual/digital machine)
- ❖ Knowledge about how to Asses physical fitness through various fitness test (AAHPERD and Harvard Step Test)
- ❖ Practical knowledge about various training methods (weight training, circuit training etc.)
- ❖ Knowledge about how to measure speed, strength, explosive strength (leg) and flexibility.

GE 1

Theory:

- ❖ Get Preliminary idea about History of Physical Education.
- ❖ Get knowledge of Biological Sociological and psychological foundation of Physical education.
- ❖ Knowledge about Olympics and Asian games.
- ❖ Get knowledge about various systems of human body and exercise effects on various systems on human body.

SEC 3

- ❖ Achieve the proper Rules and Skills of Indian games and Racket games.

DSE 2

Theory:

- ❖ Get knowledge about psychology and sports psychology.
- ❖ knowledge about learning (theories of learning, laws of learning, learning curve and tranfer of learning)

- ❖ Knowledge about psychological factors effecting sports performance.

Lab Practical:

- ❖ Knowledge about how to asses personality stress and anxiety.
- ❖ Knowledge about how to measure reaction time, depth perception, and mirror drawing.

Dissertation/ Project work

- ❖ Knowledge and prepare the dissertation/project work in details while using fitness components, body composition, somatotype, health status / Educational tour or Leadership Camp with proper format.

GE 2

- ❖ Learn how to maintain proper Health and active life style. Know about Hypo-kinetic Diseases, Postural deformities and Physical activities.
- ❖ Get knowledge of First Aid management.
- ❖ Get knowledge of Measurement of Body composition and Somatotype assessment.
- ❖ Learn about the Fitness testes.

SEC 4

- ❖ Learn about the proper Rules and fundamental Skills of various Ball Games. (Football, handball, Basketball, Volleyball, Netball, Throw ball)

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DR. BHUPENDRA NATH DUTTA SMRITI MAHAVIDYALAYA

Department of English

Honours Course

Program Outcomes

PSO1: Aims at providing a comprehensive as well as intensive knowledge on myriad aspects of reading British literature and study its various literary forms like prose, poetry, drama and fiction.

PSO2: Helps in apprehending different cultural and linguistic sensibilities across the globe.

PSO3: A study of the major literary movements that existed in different ages.

PSO4: Develop the knowledge of the evolution of English language.

PSO5: Define literary theory and terms in criticism since antiquity to the present times.

PSO6: Develop four language skills L for Learning, S for Speaking, R for Reading and W for Writing.

PSO7: Write analytically in different formats like essays, reviews, research papers etc.

PSO8: Scope of employability and entrepreneurship in the field of Media and Journalism, Teaching, Public Relations, Human Resource, Civil Service, Creative Writing both at home and abroad.

Course Outcomes of English Honours

Semester I

Course Code: CC1

Course Name: Indian Classical Literature

CO1: The objective of this course is to acquaint the students with the rich cultural heritage of ancient Indian literature, especially Sanskrit Literature through such immortal creative excellences like 'A Selective Reading' of Vyasa's *The Mahabharata*, Sudraka's *Mrcchakatika*, Banabhatta's *Kadambari*, Kalidasa's *Abhijnana Shakuntalam*.

CO2: The texts have timeless appeal and relevance. The students get a deeper insight into the fundamental aesthetics of Indian classical theories and modes of interpretations.

CO3: A familiarity is created with the Indian Epic Tradition, its central themes, stylistics and recensions.

CO4: The students gain knowledge on the tenets of Classical Indian Drama as well, its basic theories and practices that in time become an integral part of their understanding of any Indian core text as well as develop their comparative perspective as now they know their indigenous roots.

CO5: Books on Indian theories like 'Alankara and Rasa, Dharma and the Heroic' form a vital reading.

CO6: Thus after completing this Core Course paper, the learner shall have a better understanding of and appreciation for the rich Indian classical literary tradition including its distinctive aesthetic philosophies. It will also provide him/her with the conceptual resources to make a comparative assessment between the Indian and the Western classical tradition, thereby enabling their knowledge and understanding of the two great ancient literary traditions.

Course: CC2

Course Name: EUROPEAN CLASSICAL LITERATURE

CO1: The purpose of this course is to acquaint learners with the great heritage of European classical literature, starting from Homer's epic *The Iliad* to Plautus's *Pot of Gold*.

CO2: The importance of this course rests on the fact that English literature is heavily indebted to the classical works of Greece and Rome. Whether it is tragedy or comedy, satire or criticism, epic or lyric, the influence of classical literature in the works of the English authors is clearly in evidence.

CO3: The students get to learn about the difference between the Greek classics and the Latin classics, the different genres dabbled in by the classical writers, such as, tragedy, comedy, epic, satire, criticism and so forth.

CO4: The texts included in CBCS syllabus pave an access for the Indian students into the rich, overwhelming ancient European canon. They successfully decode its various thematic aspects and stylistics, and thus it helps them to take up the area with a strong, informative, formative perspective in their future course of study and research as well.

SEMESTER II

Course code: CC3

Course Name: Indian Writing in English

CO1: The course include 'Indian Writings' originally in English as well as texts translated from regional languages.

CO2: Compared to other branches of study in Indian Literature, Indian Writing in English is a late development, mainly beginning from the later quarter of nineteenth century. However, it is a fastest growing branch of Indian Literature. The course is essential for full appreciation of the influence of English language in India and how it acts as the link in the later development of Indian postcolonial writings and Indian diasporic literature.

CO3: Students get to know a rich and vibrant body of writing spanning all major genres, like novels, drama and poems.

CO4: A 'twice born' form of writing, it partakes of both the native and western perspectives on the emergence of Indian nationhood and also shows how in later stages of growth it has an inherent inclination to be postcolonial, multicultural.

CO5: An awareness is created towards the problems of interpreting Indian culture through the foreign lens of (British) English. Suggested 'Reading Section' thus includes texts like Raja Rao's *Kanthapura*.

CO6: Intertextuality across various regional writings in pre-independent and post-independent area is focussed on.

CO7: Students are also informed about its indigenous and global readership and marketability. Helpful in pursuing international courses on regional writings in English.

Course Code: CC4**Course Name: British Poetry, Drama (16th –17th Centuries), and Rhetoric and Prosody**

CO1: The first part of the paper comprises 16th and 17th centuries' seminal poems ranging from Shakespearean Sonnets to John Donne's Metaphysical Poetry.

CO2: The Aesthetics and Stylistics of reading a poem is taught through the basics of reading Rhetoric and Prosody. This helps the students in their lifelong venture in independently explicating a poem with all its thematic and stylistic nuances.

CO3: The second part includes three major dramatic works of the period, William Shakespeare's *Macbeth* and *Twelfth knight*, and Chritopher Marlowe's *Edward II*. The students are introduced to the concepts of 'Renaissance Humanism, Courtly conventions, Senecan Revenge Tradition in Drama, The Elizabethan Stage and Theatrical conventions', contemporary courtly culture, religious and political thought and ideas, the ideas on Elizabethan concept of love and marriage.

CO4: The place of Man in the universal design, the place of a writer or artist in society are taught and examined. An interactive platform is created where students peep into one of the most enriching period in human history that exploded human imagination with strong doses of innovative ideas, invention and conventions.

CO5: The poetic sensibility of Western Metaphysical creativity of the Caroline age is systematically targeted.

CO6: The students learn how the literature of the Tudor age is transformed and appropriated in the Jacobean age enriching their comparative reading of this canonical area of study.

CO7: The paper is one of the key areas in studying English Literature and is a staple for higher education courses in any university across the globe.

Course Code: AECC2**Course Name: Communicative English/MIL**

CO1: The purpose of the course is to introduce students to the theory, fundamentals and tools of communication.

CO2: The learners develop the vital skills which is an integral element in personal, social and professional interactions.

CO3: It increases their efficiency and fluency in effective sharing of their thoughts and emotions in a technically correct and usable form of English.

CO4: In their later course of study and even in their professional environment, the students become adept in their communicative skills such as in the case of facing interviews and participating in group discussions, giving professional talks etc. as well as it enhances their writing skills such as doing report writing, letter writing, note-making, documenting etc.

CO5: Leading to the improvement of students' faculty in making wise discrimination of what are the aesthetics between personal communication and professional one.

CO6: The overall improvement of learning and understanding ability in English especially for students from other honours subjects is targeted.

SEMESTER III

Course Code: CC5

Course Name: American Literature

CO1: The first part of the paper comprises a novel and two short stories and an essay. Mainly the post-war period that is after 1918 popularly called the 'Roaring Twenties', an America of nineteen thirties that is the period of Great Depression and the post war generation of 1945 are sensitively portrayed. The Southern Cuulture of the then time along with poisonous effect of Racism is heavily dealt with. Stuedents are acquainted with an An America which is ironically juxtaposed against the much hyped notion American deam and the concept of 'melting pot'. It creates a much encompassing vision on the land and the evolution of its culture and political system.

CO2: The genre of detective story is introduced along with the highly philosophical mode of writing of Fitzgerald. Intellectual agility is build up and sensibility is also enhanced. A very well formulated section.

CO3: The Second part has some important poems by writers like Anne Bradstreet, Walt Whitman, Alexie Sherman, and a canonical novel *The Glass Menagerie* by Tennessee Williams. The students are informed about the form of American novel and its main thematic concerns along with the issues relating American folklore, the issues delved by American Black Women writers, and et al. A comprehensive knowledge on American Literature in a very easy and compact way is imparted.

CO4: A well exposure to the historical, political and aesthetic evolution of America and its culture and literature is provided to the students.

Course Code: CCVI

Course Name: Popular Literature

CO1: The two sections comprise four major representative works on Popular Literature—*Tintin in Tibet*,

CO2: Acquainted with the difference between canonical and popular literature.

CO3: The Concept of Adolescent Reader is introduced.

CO4: The graphic Novel Writing which has a good commercial, modern reading audience. The emerging jobs centring on journalistic reviews on such comics have a good corporate openings. Hence, the paper can be a building block in their later professional courses to get employment in the field of Academic cum Corporate Writings.

Course Code:CCVII

Course Name: British Poetry and Drama (17th and 18th Centuries)

CO1: A thoroughbred understanding is created amongst the students on the literary and cultural implications of the Restoration of the Stuart line of monarchy to the English throne and the eventual mature formulation of the 18th century Neo-Classical intellectual climate is also dealt with a selection of an epic poem, a mock-epic poem, an anti-sentimental comedy and novel.

CO2: Emphasis is on the religious and secularism in the 17th century and on the role of women.

CO3: The changes and evolution in the English stage from the earlier century is a vital read for the students.

CO4: The course offers ample scope in pursuing scholarly work on such great literary figures like John Milton, Alexander Pope who themselves have emerged as individual institution of research.

SEMESTERIV

Course Code: CCVIII

Course Name: British Literature (18th Century)

CO1: The issues covered in the paper are 'Enlightenment', 'Neoclassicism', 'The Emergence of Restoration Comedy' and how it is different from the 'Sentimental Comedy of Manners'. The section makes the readers aware of the role of the periodical press and the flourishing of the genre of satire and prose (and thus Swift's *Gulliver's Travels* and Daniel Defoe's *Moll Flanders* are made a part of the UG curriculum) leading to the development of novels in the succeeding era.

CO2: Known as the 'age of reason' students learn varied areas of social, political, ethical, religious discourses that still ring with a note of contemporaneity.

CO3: In their higher education or specialization area there is still much scope in delving with topics related to this area of study.

CO4: The students also learn the corresponding classical theories mainly of the Latin authors like Horace that is again helpful in their later courses especially during their Masters in English.

Course Code: CCIX

Course Name: British Romantic Literature

CO1: Introduced to the philosophical and aesthetic theories that had a profound impact on the development of the Romantic Literature in pan Europe.

CO2: The selected poetry include all the major names like William Wordsworth, S.T. Coleridge, William Blake, P.B. Shelley and John Keats and the novel Pride and Prejudice by Jane Austen, and a selected section of an epic poem of Byron titled Child Harolde's Pilgrimage each of which teaches the students to comprehend and critically appreciate the importance of the literary theories formulated during this epoch making era and how they have found their way even in contemporary literary aesthetics.

CO3: The period saw the rise of iconic literary figures who are part of the curriculum in almost every educational institution both at home and abroad. Hence their lifelong relevance.

CO4: Romantic writers are a must read from the formative classes in schools as well as they are included in the syllabus of many competitive exams like PSC, SSC, CSC, UGC-NET, SET, UPSC and the like.

Course Code: CCX

Course Name: British literature (19th Century)

CO1: This course focuses on the interfaces including literature and the history of science, medicine and psychology; Darwinism and the evolutionary theories of culture and the human body, the transition from Romantic to Victorian precepts and the societal changes, race theories, utilitarianism, industrial revolution, issues relating to marriage and sexuality, the concept of Victorian feminism and the 'Woman Question' through such seminal works like 'My

Last Duchess', *The Goblin market*, *Jane Eyre*, 'The Lady of Shallot', *Hard Times*, *Return of the Native*.

CO2: The students are acquainted with the working class movements and the rise of labour politics and the issues are still relevant.

CO3: The tenets of 'Gender Studies' are introduced.

CO3: Interdisciplinary studies can be pursued as specialized paper in higher studies.

CO4: The concepts and principles both textual and theoretical help in analysis in specific area and have social, political impact.

SEMESTER V

Course Code: CCXI

Course Name: Women's Writing

CO1: The course delves deep on a body of literature that has emerged with growing awareness of women's lives and their representations in male dominated society. Women centric issues are given a fair play in expressing from an unbiased perspective. Thus, they are introduced to the 'Confessional Mode in Women's Writing'.

CO2: They are also acquainted with the principle tenets of what is sexual politics, the theory of caste, race and gender.

CO3: The study details on the social reforms undertaken during the period prioritizing the issues relating 'women's rights' and their place in society. Students learn about how women's texts address to the historical and political conditions of their times, and are important in creating an alternative narrative that challenge the androcentric readings and thus these texts embody a politics of resistance.

CO4: The students also examine the ways in which texts take active part in and are themselves produced by pressing demands of a changing time and thus making them aware of how a paradigm shift occurs in relation to the changing ethos in political, economic and societal structures of an era.

CO5: The aim of the course is to acquaint the students with the complex and multifaceted literature by women across the globe, reflecting the diversity of women's experience in their specific time and space and highlighting the varied cultural moorings too. The syllabus thus

focuses on different forms of literature—poetry, fiction, non-fictional and critical prose writings.

CO6: It interlocks concerns of women's literary history, women's studies and feminist criticism. This branch of study has much potential for carrying further specialization and research work.

Course Code: CCXII

Course Name: British Literature (Early 20th century)

CO1: Students are given an insight into the major issues related to the socio-economic, political, cultural contexts of English literature in the conclusive years just after the First World War.

CO2: Perceive the major theoretical trends like modernism, post-modernism, women's movement, stream of consciousness, psychoanalysis, the avant garde, etc. that prevailed in writing both poetry and novels.

CO3: Reinterpretation of different genres like dramatic monologue, comedy, tragedy, melodrama, etc.

CO4: Fostered technical, stylistic innovations in the writings of the artists of the period.

CO5: Students comprehend the development of 20th century fiction and elements of style, narrative forms and point of view.

CO6: in poetry, they learn about the different schools of poetry, theories and their influence in creating modern literary devices, and coining and reinventing of new literary terms.

CO7: It is a significant course in the understanding of the evolution and maturation of English literature. It is a target area in many competitive, academic examinations both at home and abroad.

DSE-1 (Choice Based)

Any One:

A. Modern Indian Writing in English in Translation

CO1: Students learn to examine the issues discussed in the in the particular socio-historic and cultural context.

CO2: The poetry of Rabindranath Tagore taken from his book Gitanjali acquaint them with the particular flavour of the romanticism and crisis in Bengal and how the specific historical concerns are presented in an indigenised vocabulary and stylistics.

CO3: Students learn about the theory and aesthetics of translation studies which has a much wider scope for pursuing research in higher education and doing independent literary, comparative regional studies in English.

CO4: The modernity in Indian literature is projected and such issues like caste, gender, resistance are effectively dealt with through proper selection of texts.

CO5: Students also determine the difference in form and technique in Twentieth century Indian literature.

B. Travel Writing

CO1: A familiarity is created with the historical places and a realization of the cultural heritage, ethnicity and the religious background of the places is attempted for the students.

CO2: Issues that are addressed are travel writing and ethnography, the role of gender in travel documentaries, subverting the gaze, role of orientalism in travel writing and the importance of globalization.

CO2: Improve the factual knowledge and problem solving skills, and creates mental agility.

CO3: An awareness is created on adaptability, cross-cultural competence and attitude change through a variety of experiences of the protagonists of the given texts.

CO4: A highly popular genre of writing in present times.

DSE-2

A. Partition Literature

CO1: Identifying the key issues like colonialism, nationalism and the partition movement.

CO2: The history of communal violence is approached from a fresh theoretical perspective.

CO3: The place of women and women writers in ventilating the hitherto been silenced, marginalized voices are taken into due consideration.

CO4: A sensitive, refined perspective is created amongst the students.

B. British Literature: Post WWII

CO1: The impact of postmodernism and the role of holocaust in literature is a major concern.

CO2: A study of Britishness or Englishness after 1960s.

CO3: Studying the experimental techniques and the interaction between literature and counterculture at a crossroad.

CO4: Students learn to validate and critically appreciate the forms of postmodern literature by applying the literary devices and the new theoretical framework upheld by different schools of criticism.

Course Code: CCXIII

Course Name: Modern European Drama

CO1: Showcases the anxiety and loose moorings of the modernist existence ventilating through such powerful dramatic productions.

CO2: The students get acquainted with and learn to identify the familiar of European drama and their particular characteristics.

CO3: They learn to analyse the different social issues in Europe.

CO4: Endowed with intellectual acumen and exposure to determine the complex and interconnected social issues in Europe.

CO5: Students also become aware of the changes and development in European drama.

CO6: Assess mastery in analysing and comparing different aspects of plot, setting, themes in the dramas produced in different countries in Europe.

CO7: The intricacies of 'Performative Art' is understood in a more enriched manner.

Course Code: CCXIV

Course Name: Postcolonial Literatures

CO1: The course introduces the students to postcolonial literature--- a body of writings that respond to the discourses which is an outcome of the Eurocentric colonial thinking and empire building in Asia, Africa, Middle East, the Pacific and elsewhere.

CO2: It brings together a variety of poems and novels written from different colonial locations and thus providing the students with an opportunity to think and understand the layered response---compliance, resistance, mimicry, challenges and subversion—that colonial power structures have provoked from such colonies who powerfully record a voice of their own.

CO3: How British English is modified and appropriated by the colonized voices to reach to the wider population through their indigenized form of English and to show their resentment towards forceful homogeneity.

CO4: A very contemporary and relevant area of research and further studies. The postcolonial theories are highly significant at the Masters' level.

CO5: Even documentary and survey work can be done to uphold the trauma of the stifled voices and how reactionary responses are recorded in due courses in time.

CO6: The course promotes interdisciplinary studies and study on cultural, linguistic history.

CO7: Collaborative study can also be done on this area of research.

DSE-3

A. Literary Theory

CO1: Topics covered relate to both western and oriental field of criticism such as Marxism, Poststructuralism, Feminism and Orientalism, Nation and Nationalism, Postcolonialism and the like.

CO2: students learn to interpret and apply the critical ideas, values and theories of important critics and thinkers across the globe.

CO3: Apply critical and theoretical approaches to the literary texts of the past and present.

CO4: They learn to apply such critical ideas in different formats like essays, reviews, research papers, etc.

CO5: They can apply the theoretical framework in evaluating other forms of art like making reviews on movies, music, painting, etc.

B. Research Methodology

CO1: Students learn the technical aspects of writing a research paper. Such vital areas of formatting are covered like conceptualizing, drafting research proposals, how to use the style manuals, making notes, references, works citations and bibliography.

CO2: Such training for students in early years of their degree course is very useful for any publication work.

CO3: A very job oriented course if it is pursued as a field of specialization. Technical writers, content writers, editors, proof readers have demand in corporate firms too.

DSE-4

A. Literary Criticism and History of the English Language

CO1: Literary Criticism had a long history of development with its origins in ancient Greece and Rome. Its progress was hindered in the middle ages but since the renaissance the methodological and analytical attempts at criticism are in continuous mode of progress and amelioration. The texts in the course make the students familiar with the entire process of evolution of this branch of study since antiquity to the present times.

CO2: They learn about the history and applicability of literary criticism and how to formulate their own ideas, thoughts and philosophies in a critical framework of writing.

CO3: Literary Criticism is an essential part of the curriculum in higher studies as students become aware of how these writings influence any literary production.

CO4: Literary Criticism has interdisciplinary approach as it easily blends with any new developments in such diverse fields as natural and social sciences, psychology, linguistics, etc.

CO5: The history of the English language part helps students understand how English as a language is organized and how it has evolved and functions.

CO6: The course enhance the learner's language awareness and help them to describe, analyse and explain language in a systematic manner.

CO7: The history of English Language or philology can be pursued in future as an independent course of study.

B. Literature of the Indian Diaspora

CO1: Indian diasporic literature since its very inception has huge readership globally. The students gain familiarity with the varied aspects of this genre of writing and about its international prospect.

CO2: The students know the principal area of concerns relating to identity, roots, homelessness, process of acclimatization, etc. This course is further taken on at university level so a basic knowledge is already given about the major authors and their works.

CO3: Diasporic texts create a web of connectivity with other countries and their cultures across the globe.

CO4: A very fruitful area of scholarly work and research for aspirants.



Honourse Course

Programme Outcomes

Knowledge outcomes:

PO1: Apply the fundamental knowledge of the basic principles of major fields,

PO2: Apply knowledge to solve the issues related to animal sciences,

PO3: Apply knowledge to take appropriate steps towards conservation of endemic and endangered animal species

Skill outcomes:

PO4: To encourage curiosity in the students

PO5: To create awareness amongst students

PO6: To conform students about the importance of abiotic and biotic factors

PO7: To provide an insight to the aspects of animal diversity

Generic outcomes:

PO8: To demonstrate knowledge and understanding of subject

PO9: To recognize the need and have the preparation and ability to engage in independent and life-long learning

Programme Specific Outcomes

PSO1 –It helps to understand the nature and basic concepts of biology

PSO2 – It helps to analyze the relationships among animals with their ecosystems

PSO3 - To develop procedures as per laboratory standards

PSO4 – It helps to understand the applications of Zoology in various fields

PSO5- It helps to gain knowledge about research methodologies and skills of problem solving protocols

PSO6 – It plays important role in Nation building

Course Outcome

CC PAPERS

Semester I:

NON-CHORDATES AND ECOLOGY

Non-Chordates I

Learning Objective:

To know about the general characters and classification of Non-chordates

Learning Outcome:

After completion of the course the student should be able to know the general organization of Non-chordates as a group and know the taxonomy and characteristic features of the various Non-chordate phyla.

Ecology*Learning Objective:*

To know about the environment and their interactions between them.

Learning outcomes:

After successfully completing this course, the students will be able to about the evolutionary and functional basis of animal ecology.

Semester II:**NON-CHORDATES AND CELL BIOLOGY*****Non-Chordates II****Learning Objective:*

The course provides an insight to the learner about the existence of different life forms on the Earth,

Learning outcomes:

Learn about the importance of systematics, taxonomy and structural organization of animals in varied habit and habitats.

Cell Biology*Learning Objective:*

The course is to help the students to learn and develop an understanding of a cell as a basic unit of life and enable them to understand the functions of cellular organelles and how a cell carries out and regulates cellular functions.

Learning outcomes:

The course helps to understand fundamental principles of cell biology. It helps to appreciate how cells grow, divide, survive, die and regulate these important processes.

Semester III:**CHORDATES, ANIMAL PHYSIOLOGY AND BIOCHEMISTRY*****Chordates****Learning Objective:*

The course is designed with an aim to provide scope and historical background of chordates. It imparts knowledge regarding basic concepts of origin of chordates and understands the characteristics and classification of animals with notochord.

Learning outcomes:

It helps to understand different classes of chordates, level of organization and evolutionary relationship between different subphyla and classes, within and outside the phylum.

Animal Physiology*Learning Objective:*

Physiology is the study of life, specifically, how cells, tissues and organ function. It is a core and fundamental scientific discipline that underpins the health and well-being. Besides satisfying a natural curiosity about how our body systems function, it gives us knowledge about the functions of all the parts and systems of the body.

Learning outcomes:

It helps to explain how all physiological systems work in to maintain homeostasis in the body and use of feedback loops to control the same. It synthesizes ideas to make connection between knowledge of physiology and real world situations, including healthy life style decisions and homeostatic imbalances.

Biochemistry*Learning Objective:*

The aim of the course is to comprehend the fundamental principles of chemistry that govern complex biological systems. The program is designed to enable a student acquire sound knowledge of biochemistry and its practicable applicability.

Learning outcomes:

The course helps to gain knowledge and skill in the fundamentals of biochemical sciences, interactions and interdependence of physiological and biochemical processes.

Semester IV:**COMPARATIVE ANATOMY, ANIMAL PHYSIOLOGY AND IMMUNOLOGY****Comparative Anatomy***Learning Objective:*

This course aims to provide details and comparative account of the different organ systems of the body from lower to higher vertebrates. It also helps to understand evolutionary basis of morphological and anatomical differences as well as similarities that occur among vertebrates

Learning outcomes:

It helps to understand the pattern of vertebrate evolution, organization and functions of various systems. It helps to understand the evolution of heart, modification in aortic arches, and structure of respiratory organs used in aquatic, terrestrial and aerial vertebrates; and digestive system and its anatomical specializations with respect to different diets and feeding habits.

Animal Physiology*Learning Objective:*

It is the study of life, specifically, how cells, tissues and organ function. It is a core and fundamental scientific discipline that defines the health and well-being of living organisms. Besides satisfying a natural curiosity about how our body systems function, it gives us knowledge about the functions of all the parts and systems of the body. It is also of central importance in medicine and health sciences.

Learning outcomes:

It helps to recognize and explain how all physiological systems work to maintain homeostasis in the body; and use of feedback loops to control the same.

Immunology*Learning Objective:*

This course aims to provide details on immune systems of the body and how it functions.

Learning outcomes:

The Course helps students to understand the basic process of how the immune cells play role in defending the body from infections against bacteria, virus or any foreign bodies.

Semester V:**MOLECULAR BIOLOGY AND GENETICS**

Molecular Biology

Learning Objective:

The course aims to study primarily about structure and synthesis of deoxyribo nucleic acids and ribonucleic acids, formation of proteins, and regulation of gene expression.

Learning outcomes:

Elucidate the molecular machinery and mechanism of information transfer processes– transcription and translation-in prokaryotes and eukaryotes.

Genetics

Learning Objective:

This course aims to provide an overview of genetics starting from the work of Mendel to the current understanding of various phenomena like recombination, transposition, sex determination and mutations.

Learning outcomes:

Gain knowledge of the basic principles of inheritance. It helps to analyze pedigree leading to development of analytical skills and critical thinking enabling the students to present the conclusion of their findings in a scientific manner.

Semester VI:

DEVELOPMENTAL BIOLOGY AND EVOLUTION

Developmental Biology

Learning Objective:

This paper provides the students an in-depth knowledge on the embryonic and post embryonic developmental processes. The approach of this paper is to make the students realize the most fascinating aspect of developmental biology that a single fertilized egg can give rise to a fully developed complex organism.

Learning outcomes:

This paper understands the events that lead to formation of a multicellular organism from a single fertilized egg, the zygote. This paper also describes the general patterns and sequential developmental stages during embryogenesis.

Evolution

Learning Objective:

This course emphasizes on the development of evolutionary thought by dealing in general with the process and pattern of biological evolution. On one hand, it offers a chance to students to learn about deciphering evidences ranging from fossil records to molecular data and arranges them to establish phylogenetic relationships of species.

Learning outcomes:

This paper acquire problem solving and high order analytical skills by attempting numerical problems as well as performing simulation studies of various evolutionary forces in action. Predict the practical implication of various evolutionary forces acting on the human population in the field of human health, agriculture, wildlife conservation and use of various software to generate interest towards the field of bioinformatics and coding used in programming language.

ANIMAL BEHAVIOUR

Animal Behaviour

Learning Objective:

The behavioural biology has high applied value and currently linked to conservation biology, molecular biology, behavioural ecology and integrated pest management. This course will help the learners to understand and appreciate different types of animal behaviours, their adaptive, evolutionary and practical significance.

Learning outcomes:

This paper understands types of animal behaviour and their importance to the organisms. It enhances their observation, analysis, interpretation and documentation skills by taking short projects pertaining to behavior of animals.

ANIMAL BIOTECHNOLOGY

Animal Biotechnology

Learning Objective:

The present paper on biotechnology attempts to give a wholesome idea of biotechnology at a basic level. It provides a tool kit in the form of a number of various techniques and processes developed over time to solve problems involving primarily human welfare with focus on health and medicine.

Learning outcomes:

This paper teaches the use of the basic techniques of biotechnology like DNA isolation, PCR, transformation, restriction digestion etc.

ENDOCRINOLOGY

Endocrinology

Learning Objective:

The main goal of this Discipline Specific Elective (DSE) paper is to provide students with a basic understanding of human endocrine glands, neuro-endocrine glands and their structure, function and signaling pathways.

Learning outcomes:

This paper helps the students to understand the endocrine system and the basic properties of hormones. This paper also helps the students to appreciate the importance of endocrine system and the crucial role it plays along with the nervous system in maintenance of homeostasis.

PARASITOLOGY

Parasitology

Learning Objective:

Parasites cause diseases. There is an enormous diversity of parasites in nature and knowing and understanding them well becomes very important in the light of controlling and managing the parasites effectively. The economic impact of these organisms is often huge and that makes it even more important to study them. Parasitology will enable us diagnose parasites correctly, understand their life cycle and control them effectively and use some of them as bio control agents.

Learning outcomes:

This paper helps to understand the variation amongst parasites, parasitic invasion in both plants and animals; applicable to medical and agriculture aspects. Helps to know the stages of the life cycles of the parasites and the respective infective stages.

APICULTURE

Apiculture

Learning Objective:

This course will make the student aware about the significance of beekeeping as the economically viable industry. It will help the students to understand the biology and behaviour of bees. It would also help the students to develop entrepreneurial skills required for self-employment in beekeeping sector.

Learning outcomes:

This paper helps to learn about the various species of honey bees in India, their social organization and importance. It helps to develop entrepreneurial skills necessary for self-employment in beekeeping sector.

AQUARIUM FISH KEEPING

Aquarium fish keeping

Learning Objective:

The course will impart basic knowledge of ornamental fish Industry and inculcate its scope as an avenue for career development as an entrepreneur or as an aquariculturist. It will provide a clear understanding of the basics of biology and habits of aquarium fish, so as to facilitate taking up ornamental fish keeping as an enterprise, even at the household level.

Learning outcomes:

Upon completion of the course, students should be able to acquire knowledge about different kinds of fish their compatibility in aquarium. Develop personal skills on maintenance of aquarium. To know about the basic needs to set up an aquarium, i.e., dechlorinated water, reflector, filters, scavenger, aquatic plants etc. and the ways to make it cost-effective.



General Course

Programme Outcomes

Knowledge outcomes:

PO1: Apply the fundamental knowledge of the basic principles of major fields,

PO2: Apply knowledge to solve the issues related to animal sciences,

PO3: Apply knowledge to take appropriate steps towards conservation of endemic and endangered animal species

Skill outcomes:

PO4: To encourage curiosity in the students

PO5: To create awareness amongst students

PO6: To conform students about the importance of abiotic and biotic factors

PO7: To provide an insight to the aspects of animal diversity

Generic outcomes:

PO8: To demonstrate knowledge and understanding of subject

PO9: To recognize the need and have the preparation and ability to engage in independent and life-long learning

Programme Specific Outcomes

PSO1 –It helps to understand the nature and basic concepts of biology

PSO2 – It helps to analyze the relationships among animals with their ecosystems

PSO3 - To develop procedures as per laboratory standards

PSO4 – It helps to understand the applications of Zoology in various fields

PSO5- It helps to gain knowledge about research methodologies and skills of problem solving protocols

PSO6 – It plays important role in Nation building

Course Outcome

CC PAPERS

Semester I:

ANIMAL DIVERSITY

Animal Diversity

Learning Objective:

Animals are the most diverse creatures on this earth. This course gives a framework for understanding the diversity within different groups, and interrelationship among different species and genera within each group.

Learning Outcome:

Learners will be able to distinguish between major phyla of animals through a demonstrated understanding of their taxonomic classification and diversity.

Semester II:

COMPARATIVE ANATOMY AND DEVELOPMENTAL BIOLOGY OF VERTEBRATES

Comparative anatomy and developmental biology of vertebrates

Learning Objective:

This course aims to provide details and comparative account of the different organ systems of the body from lower to higher vertebrates. It also helps to understand evolutionary basis of morphological and anatomical differences as well as similarities that occur among vertebrates

Learning outcomes:

It helps to understand the pattern of vertebrate evolution, organization and functions of various systems. It helps to understand the evolution of heart, modification in aortic arches, and structure of respiratory organs used in aquatic, terrestrial and aerial vertebrates; and digestive system and its anatomical specializations with respect to different diets and feeding habits.

Semester III:

PHYSIOLOGY AND BIOCHEMISTRY

Physiology

Learning Objective:

Physiology is the study of life, specifically, how cells, tissues and organ function. It is a core and fundamental scientific discipline that underpins the health and well-being. Besides satisfying a natural curiosity about how our body systems function, it gives us knowledge about the functions of all the parts and systems of the body.

Learning outcomes:

It helps to explain how all physiological systems work in to maintain homeostasis in the body and use of feedback loops to control the same. It synthesizes ideas to make connection between knowledge of physiology and real world situations, including healthy life style decisions and homeostatic imbalances.

Biochemistry

Learning Objective:

The aim of the course is to comprehend the fundamental principles of chemistry that govern complex biological systems. The program is designed to enable a student acquire sound knowledge of biochemistry and its practicable applicability.

Learning outcomes:

The course helps to gain knowledge and skill in the fundamentals of biochemical sciences, interactions and interdependence of physiological and biochemical processes.

Semester IV:

GENETICS AND EVOLUTIONARY BIOLOGY

Genetics

Learning Objective:

This course aims to provide an overview of genetics starting from the work of Mendel to the current understanding of various phenomena like recombination, transposition, sex determination and mutations.

Learning outcomes:

Gain knowledge of the basic principles of inheritance. It helps to analyze pedigree leading to development of analytical skills and critical thinking enabling the students to present the conclusion of their findings in a scientific manner.

Evolution

Learning Objective:

This course emphasizes on the development of evolutionary thought by dealing in general with the process and pattern of biological evolution. On one hand, it offers a chance to students to learn about deciphering evidences ranging from fossil records to molecular data and arranges them to establish phylogenetic relationships of species.

Learning outcomes:

This paper acquire problem solving and high order analytical skills by attempting numerical problems as well as performing simulation studies of various evolutionary forces in action. Predict the practical implication of various evolutionary forces acting on the human population in the field of human health, agriculture, wildlife conservation and use of various software to generate interest towards the field of bioinformatics and coding used in programming language.

DSE PAPERS

AQUATIC BIOLOGY

Aquatic Biology

Learning Objective:

This program helps students to study about aquatic life and equip students with skills that can later lead into a profession in aquatic biology. This paper focuses on research and explains processes, structures and pathways in most aquatic and wet ecosystems.

Learning outcomes:

Realize how human activities influence the physicochemical environment of water bodies, and devastating impact it has on aquatic organisms. Understand and apply relevant scientific principles in the area of aquatic biology and educate others or work to conserve our natural resources.

IMMUNOLOGY

Immunology

Learning Objective:

The immune system is incredibly complex. This course is hence designed to enable understanding the molecular and cellular basis of the development and function of the immune system and identification of its biological, clinical and therapeutic implications.

Learning outcomes:

This paper helps to understand learners about the cellular and molecular aspects of lymphocyte activation, homeostasis, differentiation, and memory. Integrate knowledge of each subsystem to see

their contribution to the functioning of higher-level systems in health and disease including basis of vaccination, autoimmunity, immunodeficiency, hypersensitivity and tolerance

SEC

MEDICAL DIAGNOSTICS

Medical Diagnostics

Learning Objective:

This paper is aimed to provide students a unique opportunity to study how doctors or clinicians come to a conclusion regarding disease prediction, prevention, diagnosis, and optimal treatment regimens. Students will learn about multiple diagnostic tools, techniques and technologies used in medical practices.

Learning outcomes:

Develop their skills in various types of tests and staining procedure involved in hematology, clinical biochemistry and will know the basics of instrument handling. Learn scientific approaches/techniques used in the clinical laboratories to investigate various diseases and will be skilled to work in research laboratories.

SERICULTURE

Sericulture

Learning Objective:

It will help the students to understand the biology of silkworms and its nutritional requirement to secrete quality silk. The course would clarify the techniques of silkworm rearing, reeling of silk and various measures to be taken to maximize the benefits. *Learning outcomes:*

Upon completion of the course, students should be able to acquire knowledge Learn about the history of sericulture and silk route. Recognize various species of silk moths in India, and exotic and indigenous races. Gain thorough knowledge about the techniques involved in silkworm rearing and silk reeling. Develop entrepreneurial skills necessary for self-employment in mulberry and seed production and be apprised about practicing sericulture as a profit-making enterprise.

COMMUNITY NUTRITION AND HEALTH STATISTICS

Community Nutrition and Health Statistics

Learning Objective:

It will help the students to understand the participation of community and statistics will help to measure different parameters

Learning outcomes:

Upon completion of the course, students should be able to acquire knowledge about the different nutritional values of substances and statistical analysis help to interpret different parameters measure and also help in research techniques



Honours Course

After successful completion of B.com (hons.) the students will be capable to:

Program Outcome:

PO1: Strengthen their knowledge in the field of commerce including the discipline of various branches of accounting, finance and taxation.

PO2: Correlate the knowledge of accounting and taxation with economics. The student able to judge the logic behind the government policy on economics, finance and taxation by correlating the

PO3: Gain a thorough and complete knowledge on computerised accounting and data base management system.

PO4: Enhance problem solving skills to face day to day socio-economic problems like inflation, devaluations etc.

PO5: Acquire the knowledge of Auditing principles, procedures and techniques in accordance with current legal requirements and professional standards.

Program Specific Outcome:

PSO1: Acquire thorough knowledge of E-commerce and able and capable to start their own business as a self employed person.

PSO2: Develop themselves as a competent accountant, tax consultant etc.by applying their knowledge and start their own consultancy firm.

PSO3: Proceed for further study either by UGC based various course or various professional courses like CA, ICWA, CS etc. in order to avoid general competitive examination.

PSO4: Acquire knowledge in the field of management and management accounting. They can illustrate themselves as a complete commerce graduate by interlinking the knowledge earned during the course.

PSO5: Update the knowledge of new trends in e-commerce and digital payment.

PSO6: Learn the concepts and objectives of Management Accounting and its various tools and techniques including preparation of budget, cash flow statement and ratio analysis for prediction trends, comparison and aids to various managerial decisions making.

PSO7: Can make them eligible for internal auditor of a concern.

Course Outcome:

Semester I

- CO1:** Recall the various accounting postulates and principles.
- CO2:** Acquire the basics of Indian Accounting Standards and international financial reporting standards.
- CO3:** Acquire the conceptual knowledge and gain the skills for recoding various kinds of business transactions.
- CO4:** Learn the procedure and value assessment for claiming insurance claim for loss of stock and loss of profit.
- CO5:** Know the specific feature of partnership accounts.
- CO6:** Acquire the concept of various functions and principles of business management.
- CO7:** The students can familiarise themselves basics of mathematical tools in order to apply their knowledge to business and economic situations.
- CO8:** Acquire the knowledge of linear programming and apply these techniques to allocate or utilise the limited resources for proper allocation of limited resources with a specified objective function.

Semester II

- CO1:** Recall the basic concepts of cost accounting and able to interpret cost accounting statements.
- CO2:** Learn the various methods and techniques of costing and capable to prepare estimated and actual production cost.
- CO3:** Gain knowledge for reconciliation of cost and financial accounts.
- CO4:** Acquire the basic knowledge of the important business legislation relevant to business entrepreneur and consumer protection.
- CO5:** Acquire the basic knowledge on statistical techniques with an emphasis on application to business and economic situations.

Semester III

- CO1:** Enhance their skills on computerised information accounting technology, Data based management system and internet.
- CO2:** Enhance the knowledge on various methods and techniques involved in advanced stage of cost accounting.
- CO3:** Able to evaluate and analyse the information of cost planning, cost control and help in various managerial decision making.
- CO4:** Enhance the conceptual knowledge of Financial Accounting in advanced stage for recording various kinds of business transactions hire purchase and instalment purchase and their accounting, Branch Accounting, Royalty Accounting etc.
- CO5:** Can enhance the knowledge of Partnership Accounts in advance stage.

CO6: Gain the knowledge of Company Accounts and learn to record transactions relating to issue of shares, Buyback of shares and accounting for ESOP, accounting for ESPS etc.

CO7: Acquire the knowledge of new trends in E-commerce and digital payment.

CO8: The students can acquaint themselves with the basic principles economics.

Semester IV

CO1: The students can acquire the knowledge of Indian Economy and able to apply their knowledge in commerce, management and graph major economic problems in Indian Economy.

CO2: Enhance the knowledge of Financial Accounting in relation to advanced Corporate Accounting and corporate Financial Statements.

CO3: Acquire the knowledge of various elements and functions of Marketing Management and Human Resource Management.

CO4: Get the knowledge of important Corporate Laws and features of Companies Act.

CO5: Acquire the carrier oriented concept of entrepreneurship and able to mobilising resources for start up their carrier.

Semester V

CO1: Acquire the knowledge of Principal and provision of Income Tax Act 1961, and make competent themselves to compute the taxable income and income tax of an assessee.

CO2: Acquire the knowledge of Auditing principles, procedures and techniques in accordance with current legal requirements and professional standards.

CO3: Learn the concepts and objectives of Management Accounting and its various tools and techniques including preparation of budget, cash flow statement and ratio analysis for prediction trends, comparison and aids to various managerial decisions making.

CO4: Can make them eligible for internal auditor of a concern.

Semester VI

CO1: The students able to familiarise with fundamentals of personal selling and basics of salesmanship can create their carrier opportunities as a perfect sales and marketing personnel.

CO2: Acquire these knowledge in business mathematics and statics and can familiarise themselves to apply those techniques in business decision making.

CO3: Acquire the knowledge of Indirect Taxation system of India.

**DR. BHUPENDRA NATH DUTTA SMRITI MAHAVIDYALAYA****Department of Physics****Programme Outcomes****B.SC..**

POs	Programme Outcomes
1	To learn the basic philosophy of science.
2	To understand basic concepts of science subjects like physics, chemistry, mathematics, botany and Zoology.
3	To adopt different measurement techniques in science.
4	To develop the ability of innovation in science.
5	To make awareness about the environment and its sustainability among the students.
6	Willingness to take up responsibility in study and work confidence in his/her capabilities capacity to work effectively in a team motivation for learning and experimentation.
7	Use and apply professional software for scientific data analysis and presentation.
8	Respond effectively to unfamiliar problems in scientific contexts.
	Capable of oral and written scientific communication, and will prove that they can think critically and work independently.
9	To recognize the need and have the preparation and ability to engage in independent and life-long learning
10	It helps to gain knowledge about research methodologies and skills of problemsolving protocols.

B.Sc in Physics(General)

Programme Specific Outcomes

We are offering six semester B.Sc. general programme in Physics under The University Of Burdwan, following the Choice Based Credit System (CBCS), prescribed by UGC, India with effect from the session 2017-2018. The syllabus of each course is framed so as the programme is able to raise the scientific temper of the scholar and provide a firm foundation in every aspect of Physics and to explain a broad spectrum of modern trends in physics and to develop experimental, computational and mathematics skills.

Physics, being a natural science, investigates on the interactions among various particles and forcefields; those govern the rhythms of the dynamics of the ever-alive universe. There are different aspects of the phenomena, like mechanical, thermal, electrical, magnetic properties etc. Mankind has learned to see the world from the macroscopic to microscopic length and time scales. We have jumped from the quantum to nano-ages in science and technology. We realized that the physics changes when the speed of a matter becomes comparable with speed of light, which makes the scientists to reconsider the absoluteness of space-time and put forward the theory of relativity. The exploration of the different corners of physics through hard-core mathematical calculations and demonstrative verification of the theories through table-top experiments, our students learn and practice under the guidance of a group of qualified and trained mentors.

PSOs	Programme Specific Outcomes
1	To learn and understand different theories in the physics.
2	Apply and demonstrate knowledge of concepts of physics, to analyze a variety of physical phenomena.
3	To motivate the student for deep and micro study in the subject of physics.
4	To strengthen the students with experimental techniques in physics.
5	To make awareness about the environment and its sustainability among the students.
6	The study of kinetics of Chemical reactions.
7	Use and apply professional software for scientific data analysis and presentation.
8	Respond effectively to unfamiliar problems in scientific contexts.
	Capable of oral and written scientific communication, and will prove that they can think critically and work independently.
9	To recognize the need and have the preparation and ability to engage in independent and life-long learning
10	It helps to gain knowledge about research methodologies and skills of problemsolving protocols.

Course Outcome

B. Sc. Physics

Class	Course	Course Outcomes
1 st .Y.B.Sc. Sem I	CC- 1A: Mechanics	<ul style="list-style-type: none"> ➤ CO1: Able to Solve ordinary differential equations of second order types and different types of problems in vector analysis that are common in physics. ➤ CO2: Explain the basic concept of Newton's Laws, relate them with different natural phenomenon and the equations of motion of different systems. ➤ CO3: Understanding with central force and idea about various satellite system in Earth gravitational field. ➤ CO4: Apply the concepts of elasticity to real world problems. ➤ CO5: Explain the fundamental principles of the special theory of relativity ➤ CO5: Understand rigorously all theory by all practical.
1 st .Y.B.Sc. Sem II	CC-1B: Electricity and Magnetism	<ul style="list-style-type: none"> ➤ CO1: Define the basic terms such as electric field, electric potential, magnetic intensity, magnetic induction, magnetic susceptibility and electric and magnetic flux. ➤ CO2: Solve numerical problems using Coulombs Law, Gauss's law, Biot-Savart's law, Ampere circuital law and Faraday's law. ➤ CO3: Derive the relation between three magnetic vectors and compare different types of magnetic material. ➤ CO4: Explain the concept of various type of capacitor. ➤ CO5: Understand the Maxwell's equations and electromagnetic waves. ➤ CO6: Understand rigorously all theory by all practical.

2nd.Y.B.Sc. Sem III	CC-1C : Thermal Physics and Statistical Mechanics	<ul style="list-style-type: none"> ➤ CO1: Define laws of thermodynamics, entropy, thermodynamic processes etc. ➤ CO2: Describe and derive expression of Heat engine & Carnot engine, entropy, latent heat equation and various thermodynamic potentials. ➤ CO3: Explain the maxwell's distribution law of gas particles, concept of equipartition of energy and transport phenomena of gases. ➤ CO4: Derive the Plank's law, Wine's distribution law, Rayleigh-Jeans Law, Stefan Boltzmann Law and Wien's displacement law for Black body radiation. ➤ CO5: Understand the concept of phase space, macro & micro state and also able to explain & compare all three types of statistics. ➤ CO6: Understand rigorously all theory by all practical.
2nd.Y.B.Sc. Sem III	SEC- 1. Renewable Energy and Energy harvesting	<ul style="list-style-type: none"> ➤ CO1: Understand the Fossil fuels and about the alternate sources of energy. ➤ CO2: Explain solar energy, its uses and describe solar cell and photovoltaic cell. ➤ CO3: Explain and application of various type renewable energy sources as wind energy, solar energy, ocean energy, geothermal energy and hydro energy. ➤ CO4: Understand the piezoelectric and electromagnetic energy harvesting. ➤ CO5: Understand rigorously all theory by all demonstration.
2nd.Y.B.Sc. Sem IV	CC- 1D: Waves and Optics	<ul style="list-style-type: none"> ➤ CO2: Define periodic and oscillatory motion, setup and solve differential equations of motion for simple harmonic, damped, and forced oscillators, set and solve differential equation for wave motion for longitudinal and transverse waves and also understanding the Sabine's formula of acoustics of buildings. ➤ CO2: Describe the superposition of two collinear and perpendicular harmonic oscillator with graphical and analytical method and also understand the concept of Lissajous figure and its application. ➤ CO3: Define the surface tension and its application to various type of liquid or air drops also about the

		<p>Poiseuille's formula, define the coefficient of viscosity and types of pump system which creating low pressure and some type of gauge for measuring low pressure.</p> <ul style="list-style-type: none"> ➤ CO4: Explain the wave front of light and its propagation, also can describe the interference of light by various measurements like Young's Double Slit experiment, Newton's Ring experiment, etc. CO5: Determine the wavelength, refractive index, etc. by Michelson's Interferometer experiment. ➤ CO6: Understand about the Fraunhofer and Fresnel diffraction of light with some experiment and also explain the plane, circular and elliptical polarization of light. ➤ CO7: Understand rigorously all theory by all practical.
2 nd .Y.B.Sc. Sem IV	SEC-2. Weather Forecasting	<ul style="list-style-type: none"> ➤ CO1: Understand the basic idea about atmosphere and weather. ➤ CO2: Determine how to produce wind also measuring its speed and direction and also understand about the humidity clouds and rainfall. ➤ CO3: Describe the global wind system, thunderstorm and tropical cyclones also define the climate, its change due to global warming and pollution. ➤ CO4: Forecast of weather by various analysis. ➤ CO5: Understand rigorously all theory by all demonstration.
3 rd .Y.B.Sc. Sem V	DSE- 1A: Elements of Modern Physics	<ul style="list-style-type: none"> ➤ CO1: Explain the Plank's constant, photo electric effect and Compton scattering and also describe the wave particle duality by Davisson-Germer and double slit experiment. ➤ CO2: Describe the Rutherford and Bohr's atomic model and from it define the energy spectra of hydrogen atom and also describe the uncertainty principle by thought experiment. CO3: Define the Schrodinger wave equation for non-relativistic particles its application on one dimensional box and understand about the momentum operator, energy operator, eigen value, eigen function and also about the normalization of wavefunction. ➤ CO4: Describe the quantum mechanical scattering and tunnelling across various potential barrier. ➤ CO5: Understanding about the atomic nucleus its relation with atomic weight also describes the

		<p>nuclear forces and binding energy from semi-empirical mass formula.</p> <ul style="list-style-type: none"> ➤ CO6: Define the various type of radioactive decay, law of decay, fission and fusion, and about nuclear reactor. ➤ CO7: Understand rigorously all theory by all practical. <ul style="list-style-type: none"> ➤ CO1: Describe the general properties of nuclei. ➤ CO2: Understanding about the various existing nuclear models like liquid drop model, Fermi gas model and shell model. ➤ CO3: Define the three types of radioactive decay i.e., alpha, beta and gamma decay and also describe the nuclear reaction. ➤ CO4: Explain the interaction of nuclear radiation with matter and also describe the various type of detector for nuclear radiation i.e., gas detectors, scintillation detectors and semiconductor detectors. ➤ CO5: know the particle accelerator facility available in India and also describe the basic particle physics.
	❖ OR Nuclear and Particle Physics	
3rd.Y.B.Sc. Sem V	SEC-3: COMPUTATIONAL PHYSICS	<ul style="list-style-type: none"> ➤ CO1: Use of computational methods to solve physical problems ➤ CO2: Use of various computer languages like FORTAN, Linux. ➤ CO3: Control of various statements and understand of introductory level of LaTeX and its uses. ➤ CO4: Understand rigorously all theory by all hands-on exercise.
3rd.Y.B.Sc. Sem VI	DSE- 2A: Quantum Mechanics	<ul style="list-style-type: none"> ➤ CO1: Describe time dependent and independent Schrodinger equation for non-relativistic particles and its application and also understand about the momentum operator, energy operator, eigen value,

		<p>eigen function and also about the normalization of wavefunction.</p> <ul style="list-style-type: none"> ➤ CO2: Define the bound state in an arbitrary potential like square well potential and simple harmonic oscillator. ➤ CO3: Apply quantum theory to hydrogen like atoms and using the Frobenius method and also understand about orbital angular momentum quantum numbers. ➤ CO4: Understand about electron angular momentum, spin, spin angular momentum and spin magnetic moment and also understand about the Zeeman effect, Gyromagnetic ratio and Bohr Magnetron. ➤ CO5: Describe the Pauli's Exclusion principle, total angular momentum and vector model of Spin orbit coupling. ➤ CO6: Understand rigorously all theory by all practical
	<p style="text-align: center;">❖ OR</p> <p>Digital, Analog and Instrumentation</p>	<ul style="list-style-type: none"> ➤ CO1: Using the logic circuit and Boolean algebra and also understand the Binary numbers. ➤ CO2: Understanding the various type of semiconductor diodes and bipolar junction transistors. ➤ CO3: Understanding about the Operational amplifiers and Sinusoidal oscillators. ➤ CO4: Understand about various measuring instruments like CRO, Power Supply, Rectifiers, capacitor filter, Zener Diode and also about Timer IC. ➤ CO5: Understand rigorously all theory by all practical.
3rd.Y.B.Sc. Sem VI	SEC- 4: ELECTRICAL CIRCUITS AND NETWORK SKILLS	<ul style="list-style-type: none"> ➤ CO1: Understand the basic principles of electricity and electrical circuits. ➤ CO2: Define electrical drawing and symbols and also understanding about electric motors, generators and transformers.

		➤ CO3: Describe about various solid-state devices electrical protection and electrical wirings.
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Honours Course

Course outcome of the curriculum

The CBCS curriculum which was introduced in 2017 is excellent. The syllabus in this curriculum is designed in such a way that maintains the main feature of history that is continuity. Continuity of history is maintained in two separate avenues. It introduces students to the incidents of the world and European history from ancient to present-day. On the other hand, it enhanced the thought of the students on the Indian history from ancient to contemporary times.

Moreover, this curriculum incorporates new courses which are new open dimensions of history to the students, such as museums, archives, understanding the heritage of India, art and architecture etc. Museums and Archives are among the most important such repositories and these courses explain their significance and how they work. Students will be encouraged to undertake collection, documentation and exhibition of such materials in their localities and colleges. Understanding heritage will enable students to understand the different facts of heritage and their significance. The purpose of the art and architecture course is to introduce students to Indian art from ancient to contemporary times in order to understand and appreciate its diversity and its aesthetic richness. The course will equip students with the ability to understand art as a medium of cultural expression.

History Honours Course

CC 1: History of India- I (From Earliest times to 600 AD)

- i) Early Indian notions of History and historical Sources and historical reconstruction in ancient Indian history.
- ii) Phases of Pre-historic Cultures: Palaeolithic, Mesolithic & Neolithic cultures- regional and chronological distribution; new developments in technology and economy; subsistence, and patterns of exchange; Mehrgarh - The advent of food production
- iii) The Harappa civilization: Origins; Antiquity and Extent settlement patterns and town planning; agrarian base; craft productions and trade; social and political organization; religious beliefs and practices; art; the problem of urban decline and the late/post-Harappan traditions. Development of Neolithic and Chalcolithic cultures in post Harappan period.
- iv) Cultures in transition; Coming of the Aryans and Aryan Debate, Vedic Literature, expansion of Brahmanavarta to Aryavarta, Vedic religion and philosophy; Vedic economy and society. Religious protest movements; Second Urbanisation, Sixteen Mahajanpadas to the rise of Magadha.

- v) New political formations (circa 300 BCE to circa CE 300): The Mauryan Empire & politics- Asoka and the Fall of the Mauryas Post-Mauryan Polities with special reference to the Kushanas and the Satavahanas; Gana-Sanghas. Rise of the Guptas, development of Gupta Empire, Gupta Art, Architecture and Literature
- vi) Understanding early Indian Society Economy and Culture; Agrarian expansion: land grants, changing production relations; graded Land rights and peasantry. Urban growth: north India, central India and the Deccan; craft production: trade and trade routes; coinage, Social stratification: class, varna, jati, untouchability; gender; marriage and property relations the problem of urban decline: patterns of trade, Currency and urban Settlements.

CC II: Social Formations and Cultural Patterns of the Ancient World

- i) Evolution of human Society & Food production: Beginnings of agriculture and animal husbandry.
- ii) Bronze Age Civilizations in general with reference to Mesopotamia (up to the Acadian Empire;- economy, social stratification, state structure and religion
- iii) Nomadic groups in Central and West Asia: Debate on the advent of iron and its implications.
- iv) Polis in ancient Greece: origin, features, nature and class composition; Sparta and Athens; decline of the Polis.
- v) Peloponnesian War: Origin; Resources of belligerents; Course of war; Melos, Mytilene, Periclean strategy; Sicilian expedition
- vi) Greek Culture and Religion: Sophists, Socrates, Games, Drama, Art and Architecture, Greek Gods.

CC III: History of India II (600 –1206 AD)

- i) Studying Early Medieval India: Historical Geography – Sources: texts, epigraphic and numismatic data Debates on Indian feudalism, rise of the Rajputs and the nature of the state
- ii) Evolution of political structures: North India- Harsha, Sasanka, Pala, Sena and Pratiharas, Rise of Rajputs , South India –Chalukyas of Badami, Rashtrakutas, Cholas. Legitimization of kingship; brahmanas and temples; royal genealogies and rituals.
- iii) Arrival of Islam in India, Arab conquest of Sindh: nature and impact of the new set-up; Causes and consequences of early Turkish invasions: Mahmud of Ghazni; Shahab-ud-Din of Ghur.
- iv) Agrarian Structure and Social Change ;Land grants; Agricultural expansion; the feudal debate Proliferation of castes; status of untouchables.
- v) Trade and Commerce; Inter-regional trade, Maritime trade, Forms of exchange, Process of urbanization and de urbanization Merchant guilds of South India.
- vi) Religious and Cultural Developments: Bhakti, Tantricism, Puranic traditions; Buddhism and Jainism; popular religious cults Islamic intellectual traditions: Al-Biruni; Al-Hujwiri Regional languages and literature, Art and architecture: Evolution of regional styles.

CC IV: Social Formation and Cultural Pattern of the Medieval World

- i) Roman Republic: Significance, Constitution, Law, & Society, Agrarian economy, urbanization & trade, Economy, Growth of Slavery & slave society in ancient Rome
- ii) Religion, culture, literature and Philosophy in ancient Rome.
- iii) Crises of the Roman Empire & transition to Principate.
- iv) Economic developments in Europe (7th to 14th centuries) Feudalism, Organization of production, towns and trade, technological developments, Crisis of feudalism.
- v) Religion and culture in medieval Europe.
- vi) Societies in Central Islamic Lands: The tribal background, ummah, Caliphate state; rise of Sultanates Religious developments: the origins of shariah, Mihna, Sufism Urbanization and trade.

CCV: History of India IV (1206 CE–circa 1525 CE).

- i) Sources for studying/Interpreting the Delhi Sultanate Survey of sources: Persian tarikh tradition; vernacular histories; epigraphy.
- ii) Sultanate Political Structures: Foundation, expansion and consolidation of the Sultanate of Delhi; The Khaljis and the Tughluqs; Mongol threat and Timur's invasion; The Lodis: Conquest of Bahlul and Sikandar; Ibrahim Lodi and the battle of Panipat, Theories of kingship; Ruling elites; Sufis, ulama and the political authority; imperial monuments and coinage.
- iii) Regional Political structures: Emergence of provincial dynasties: Bahamanis, Vijayanagar and Bengal Consolidation of regional identities; regional art, architecture and literature.
- iv) Sultanate Society and Economy; Iqta and the revenue-free grants Agricultural production.
- v) Changes in rural society; revenue systems; Monetization; market regulations; growth of urban centers; trade and commerce; Indian Ocean trade.
- vi) Religion and Culture: Sufi silsilas: Chishtis and Suhrawardis; doctrines and practices; social roles Bhakti movements and monotheistic traditions in South and North India; Women Bhaktas; Nathpanthis; Kabir, Nanak and the Sant tradition.

CCVI: Rise of the Modern West – I (15th& 16th centuries)

- i) Understanding transition from feudalism to capitalism: problems and theories.
- ii) Early colonial expansion: motives, voyages and explorations; the conquests of the Americas: beginning of the era of colonization; mining and plantation; the African slaves.
- iii) Renaissance: its social roots, city-states of Italy; spread of humanism in Europe; Art.
- iv) Reformation: Origins, course and results of the European Reformation in the 16th century.

- v) Economic developments of the sixteenth century: Shift of economic balance from the Mediterranean to the Atlantic; Commercial Revolution; Influx of American silver and the Price Revolution.
- vi) Growth of European notions: Emergence of European state system: Spain; France; England.

CCVII: History of India IV (1526 – 1757 CE).

- i) Sources and Historiography: Persian literary culture; translations, Literature in regional languages.
- ii) Establishment of Mughal rule: Babur's invasion of India - Struggle for Empire in North India –significance of Babar and Humayun's reign - Significance of Afghan despotism and rise of Sher Shah to power, His administrative and revenue reforms`
- iii) Consolidation of Mughal Empire: Akbar's Conquests - his Rajput Policy & administrative and religious reforms, Reign of Jahangir, Nurjahan- her role in imperial politics; The Mughals and the North Western frontier and central Asia, Making of a new imperial system and administration, the Mughal nobility, Mansab and Jagir.
- iv) Mughal Empire Under Aurangzeb: State and religion under Aurangzeb; issues in the war of succession; policies regarding Religious groups and Institutions -Conquests and limits of expansion - Beginning of the crisis: contemporary perceptions; agrarian and Jagir crises; revolts. Inland and ocean trade network.
- v) Mughal Art, Architecture & Painting.
- vi) Patterns of Regional Politics: Rajput political culture and state formation -Rise of Maratha power under Shivaji, &expansion under the Peshwas - emergence of regional powers – case studies of Maharashtra, Awadh and Bengal; Bengal Nawabs and the rise of the English East India Company in Bengal. Debate of the 18th Century on the decline of the Mughal Empire.

CC VIII: Rise of the Modern West II (17th & 18th centuries)

- i) Understanding 17th century European crisis: economic, social and political dimensions.
- ii) The English Revolution: major issues; political and intellectual currents.
- iii) Rise of modern science in relation to European society from the Renaissance to the 17th century.
- iv) Mercantilism and European economics; 17th and 18th centuries.
- v) European politics in the 18th century: parliamentary monarchy; patterns of Absolutism in Europe.
- vi) Prelude to the Industrial Revolution.

CC IX: History of India V (c. 1757- 1857).

- i) Understanding the Foundations of Company's Rule; Early contestations between the Dutch, French and the British East India Company Bengal Nawabs and the battle of Plassey, Buxar and the grant of Dewani, Anglo Mysore; Anglo Maratha and Anglo Sikh relations. The Subsidiary alliance and the Doctrine of Lapse.

- ii) Legitimization of Company's rule in India; Regulating Act; Pitt's India Act; Charter Acts of 1813, 1833 and 1853 Administrative, Military, Police and Educational Reforms.
- iii) Understanding Rural Economy and Society; Land revenue systems; Permanent settlement, Rayatwari and Mahalwari, Commercialization of agriculture and indebtedness; rural society: change and continuity, Famines.
- iv) Understanding, Trade and Industry, De industrialization, Trade and fiscal policy, Drain of Wealth, Growth of modern industry.
- v) Renaissance and Reforms: Bengal Renaissance and Socio-religious Reforms: Rammohan Roy (Brahma Samaj), Young Bengal, Vidyasagar and Others
Educational Reforms initiated by the Company.
- vi) Popular Resistance: Santhal uprising (1856-7); Sanyasi Uprising, Kol Bhumij uprising, Wahabi Faraizi and Santhal Uprising, Revolt of 1857: causes and nature.

CC X: History of India VI (1858-1964).

- G. Understanding aftermath of 1857; Queen's Proclamation; The Indigo rebellion, The Deccan Riots, The growth of the new middle class; the age of associations, The Aligarh movement, The Arya and the Prarthana Samaj.
- ii) The early phase of Indian Freedom Movement; Historiography of Indian Nationalism; Birth of Indian National Congress, The Moderates and the Extremists, Partition of Bengal, the Swadeshi movement, Muslim League, Morle Minto Reforms; Revolutionaries in India and abroad, the Lucknow pact.
- iii) The Gandhian era: Gandhi's rise to power, Rowlatt Satyagraha, Montagu Chelmsford reforms; Khilafat and Non-co-operation movement, The Swarajya party, Poona Pact, Civil Disobedience Movement, Quit India Movement.
- iv) Understanding towards freedom; Government of India Act 1935, The rise of the leftist movements, The Peasant and Working class movements, Cripps Mission, Subhas Bose and INA, RIN mutiny; Wavell Plan, Cabinet Mission; Tebhaga and Telengana movements.
- v) Understanding Communal Politics: Demand for Pakistan; Lahore session of the Muslim League, rise of Hindu Mahasabha and the RSS; Akali Dal, Partition and its consequences.
- vi) The Nehru era; Internal policy between 1947 to 1964- movements for social justice, the new constitution, integration of the princely states, growth of parliamentary democracy, five years plan; India's foreign policy – Non alignment, India's relation with her neighbours.

CC XI: History of Modern Europe II (1789-1870).

- i) The French Revolution and its European repercussions Crisis of Ancient regime ----- Political, social, economic and intellectual background (role of Philosophers) of the French Revolution, The revolution in the

making – the Aristocratic Revolt and the consolidation of the Third Estate, The Constituent Assembly; Radicalization of the Revolution; the reign of Terror and the Thermidorian reaction; social base of the Revolution- Sans culottes, peasants and women; the directory and its achievements and failures.

ii) Napoleon Bonaparte and the French Revolution, Rise of Napoleon; Napoleonic reforms, Napoleonic Empire and Europe, Fall of Napoleon: The Continental System; The Spanish Ulcer; The Moscow campaign, Assessment of Napoleon: Character of the French Revolution; Impact of French Revolution on Europe and abroad.

iii) Restoration and Revolution (1815-1848): Vienna Congress; Concert of Europe; Metternich system Greek War of Independence, Revolution of 1830 & 1848, & their Impact.

iv) Industrialization and socio economic transformation Industrial Revolution; Definition and characteristics ; Pre Industrial society; Industrial Revolution in Britain; Impact on society, economy and politics , Industrialization in the continents, case study of France, Germany and Russia, Emergence of working class and its movements; early Utopian socialist thoughts.

v) Age of Nationalism; Unification of Italy and Germany: Specificities of economic development, political and Administrative re organization – Italy and Germany, The second Empire in France and Louis Napoleon.

vi) The Eastern Question: The Crimean War; Treaty of Paris, Balkan Nationalism

CC XII: Studying History Writing: Indian & Western

i) Time, Space & Human Agency: Notion of Time and Space in History.

ii) Importance of sources in History: Written, Oral, Visual and Archaeological Sources - Classification of Primary and Secondary sources – Source criticism and authentication.

iii) Philosophy and Theory of History: Facts and Interpretation - Philosophy of History – Hypothesis, argumentation and Problematique - Objectivity/Subjectivity in History – Historical Narrative and Generalization.

iv) Indian & Western Historiography: Pre-colonial forms of writing Indian History - Different schools of Indian historiography (Cambridge, Nationalists, Marxists, Subaltern) - Different schools of Western; historiography (Rationalist, Romantist, Positivist, Marxist and Annales.

v) Relationship between History and Science - History and Anthropology - History and Literature etc.

vi) Research Process in History: Different stages and steps involved in the process of doing research in History.

CCXIII: History of Modern Europe II (1871 – 1945).

i) Understanding Imperial Expansion: Bismarck's diplomacy and the new balance of power; Kaiser William II and Welt Politic; new course in German foreign policy; the eastern question of the late 19th century, Balkan wars.

- ii) First World War and its aftermath: Outbreak of the First World War, emergence of the two armed camps; impact of the first world; the Russian revolution, the peace settlements of 1919, the League of nations.
- iii) Consolidation and Development of power of the Soviet State, French search for security, Rise of Fascism in Italy and Nazism in Germany, World Economic depression of 1929, the Crisis of the Inter War European Order.
- iv) The Road to 2nd World War; Germany's aggressive foreign policy; the role of the war economy, Spanish civil war, Mussolini's foreign policy and Abyssinian crisis, formation of the Rome Berlin Tokyo Axis.
- v) Outbreak of Second World War: Outbreak of the 2nd World War and its impact
- vi) United Nations Organization: its origin and functions.

CCXIV: Making of the Contemporary World (1946-2000).

- i) Post War Development: a. an overview of post-war developments Social, Political and Economic; b. Cold war Politics- ideological clash & power rivalry between super powers; c. Military and Defence Alliances and Peace Pacts - Containment of Communism- Marshal Plan- Truman, Doctrine- Warsaw Pact- Military Alliances- NATO; SEATO Bagdad Pact- Cominform, Berlin after 1945- Fall of the Berlin Wall & German Re-Unification.
- ii) Decolonization and the emergence of the Third world a. National Movements in Asia & Africa; b. Emergence of the Third World; Non –alignment; c. Third World Organizations-OPEC, ASEAN, SAARC.
- iii) Cold War Escalates; a. War in Korea, Cuban missile crisis, Vietnam problem b. Palestine Problem; Suez Crisis, Iran- Iraq conflicts, Gulf War; c. Arab- Israel wars- activities of the PLO, Afghan Problem.
- iv) Perspectives on Development and under development a. Globalization & its impact on the Third World; b. Liberalization & its impact on Indian economy; Multinational Companies, World Bank, IMF; c. Information Revolution
- v) Modernity and cultural transformation; Emerging trends in culture, Media and consumption; Information Revolution.
- vi) Changing World; a. Collapse of Soviet Bloc; Process of disintegrations, Glasnost and Perestroika, b. American Uni-polarism; USA as a global policeman, c. Current threats confronting the World - Ethnic Clashses& Cross border Terrorism.

DSE-I: Life And Culture in Pre-Colonial Bengal: Prehistoric times to mid 18th century.

- i) The land environs and places; Historical Geography- ancient and medieval divisions.
- ii) People and Society; Demography and ethnology – earliest inhabitants; Aryanization of Bengal; Rise of different castes and communities of Bengal; Life of the people position of women, dress, foods, games and leisure, conveyance.

- iii) Political development of Bengal-an overview; Bengal up to Gupta period; Rise of sovereign Bengal; The Muslim invasion and rise of Islam in Bengal up to the rule of the Nawabs.
- iv) Economic life in Bengal; Agriculture, crafts and industries; Trade and commerce; Rise of Calcutta and Murshidabad; Emergence of Zamindari system.
- v) Religions and art in Bengal; Spread of Brahmanism and Brahmanic culture; Vaisnavism; Spread of Buddhism and Jainism; Islam and Bengal; Srichaitanya and Bhakti movement, Sufism; Architecture, sculpture and other forms of art; monastic and temple architecture with reference to Paharpur, Bishnupur; terracotta art.
- vi) Literature and traits of regional culture; a) Pre Bengali Sanskrit literature- kavyas, Jaydeb, UmapatiDhar, Dhoyi b) The rise and development of Bengali language and literature- Charyapada; Kirtivasa and Kasiram Das, the Mangalkavyas.
- c) Origin of Folk traditions of Bengal.

DSE-II: Life and Culture in Colonial Bengal (1757-1947) 6 Credits, Total 75 marks

- i) Establishment of East India Company's rule in Bengal: a) Relation between the East India Company and Bengal Nawabs- especially Sirajudaullah, b) Battle of Plassy to grant of Diwani, Dual Government, Famine of 1770 c) Experiment s in Revenue Administration and Establishment Permanent Settlement-Social and Economic impact of the Permanent Settlement.
- ii) Changes in Social and Economic life up to 19th Century: a) The Village community, so called self sufficient Village breaking the said society; Introduction of money index in place of cast system in social status. b) Rise and growth of Calcutta and decline of the old urban centers. c) Popular protests in the 19th Century- Sannyasi, Wababi, Faraiji, Indigo Revolts & Pabna uprising.
- iii) Impact of company's Rule: a) Western Education- Role of Missionaries; Women's Education- Medical Education –Emergence of educated middle class, b) The Bengal Renaissance –Religious and social Reforms Movements Rammohan Roy, Vidyasagar, Young Bengal, Brahma Samaj, Bankim Chandra Chattopadhyay, Vivekananda; The Muslim and Non- Bengalis in Bengal, c) De -industrialization and emergence of Labour Force; Impact of Railways.
- iv) Cultural Scenario in 19th Century: a) Bengali Language and Literature; Printing and Press, b) Visual & performing arts , painting ,Music , Theatre, c) Popular religions –(Sahebhdhani, Kartabhaja, Lalansahi,), Culture- (Yatra, Kabigan), d) Science , Technology and Medicine.
- v) Emergence of Nationalism: a) Swadeshi Movement and impact, b) Rise of Extremism; Foundation of Muslim League; c) Gandhian ideology in Bengal, d) Non- co operation, Civil Disobediences and Quit India Movement in Bengal.
- vi) Changes in the 20th Century: a) Influence of Nationalism on Literature;

Introduction of popular Utsab and Melas, b) Evolution Theatres in the 20th Century, c) Visions of integration and humanity – Rabindranath, KaziNazrul and Sarat Chandra Chattopadhyay, d) Social and cultural impact of the Partition; changing role of Women in Society.

DSE -III: History of Modern East Asia-1 (1840-1919).

I) Pre-colonial China: a) Nature and structure of the traditional Chinese society, b) The peasantry and gentry; Government bureaucracy and central control. c) The Confucian value system. d) China's pre-modern economy.

ii) Anglo Chinese relations till the Opium War: [a] The Tribute system; the Canton trade and its collapse, [b] First & Second Opium Wars—the unequal treaties, [c] Financial Imperialism: Open Door policy.

iii) Rebellion, Restoration and Nationalism: [a] The Taiping Rebellion: causes, nature and failure, [b] Tung- Chih Restoration; the Hundred Days' Reform and the Self –Strengthening Movement, [c] Boxer Uprising : causes, nature and failure, [d] The Revolution of 1911: background and causes, nature and significance; role of Dr Sun Yat- Sen; principles and politics, formation of the Republic; Yuan Shih-kai and warlordism; the rise of the Kuomintang.

iv) Pre-Meiji Japan: [a] Tokugawa Shogunate: the feudal society and the government; Shintoism. [b] Economic condition, c) Encounter with the West: the Perry Mission; the opening of the Japan to the west. [d] The crisis and fall of the Shogunate.

v) Meiji Restoration: [a] Causes and nature of Restoration; [b] Transformation of Japan: process of modernization, [c] Meiji Constitution.

vi) Expansion of Japan up to the First World War: [a] Sino–Japanese war (1894-95), [b] The Anglo-Japanese Alliance (1902), [c] Contest for Korea and the Russo-Japanese war (1904-05), [d] Japan and the First World War.

DSE-IV: History of China and Japan (1919-1939).

i) Nationalism in China: [a] Emergence of the Republic and Yuan Shih Kai: Warlordism. [b] May 4th Movement: origin, nature and significance.

ii) The Kuomintang and the Nationalist government: [a] The rise of the Kuomintang Party: Political crisis in the 1920s; The First United Front [b] Chiang Kai-shek: the KMT-CCP conflict, [c] Ten Years of Nanking Government.

iii) The Communist Victory in China: [a] Background of the foundation of the Communist Party, [b] CCP under Mao Tse-tung: the making of the Red Army; the Second United Front; Long March, [c] The Yen-an experiment, [d] The Chinese Revolution (1949): Ideology, causes and significance; the establishment of the Peoples' Republic of China.

- iv) Rise of modern Japan: [a] Process of modernization: social, military, political and educational; popular and democratic movement, [b] Rise of Political Parties, abolition of feudalism and economic growth. [c] Industrialization and the role of the state; the Zaibatsu.
- v) Imperial Japan: [a] Japan and World war I: Twenty-one Demands, [b] Washington Conference, [c] Manchurian crisis: role of the League of Nations.
- [d] Failure of the Democratic system and the rise of militarism in the 1930s and the 1940s.
- vi) Japan and World War II : [a] Japan's bid for supremacy and defeat, [b] Post war Japan under General Douglas MacArthur.

Skill Enhancement Courses

Paper I- Archives and museums in India

This course introduces students to the institutions that house and maintain documentary, visual and material remains of the past. Museums and archives are among the most important such repositories and this course explains their significance and how they work. Students will be encouraged to undertake collection, documentation and exhibition of such materials in their localities and colleges. Visit to National Archives and National Museum are an integral part of the course.

- i) Definition and history of development (with special reference to India)
- ii) Types of archives and museums: Understanding the traditions of preservation in India Collection policies, ethics and procedures Collection: field exploration, excavation, purchase, gift and bequests, loans and deposits, exchanges, treasure trove, confiscation and others Documentation: accessioning, indexing, cataloguing, digital documentation and de-accessioning, Preservation: curatorial care, preventive conservation, chemical preservation and restoration.
- iii) Museum Presentation and Exhibition
- iv) Museums, Archives and Society: (Education and communication Outreach activities.

/Paper I- Understanding Heritage

This course will enable students to understand the different facets of heritage and their significance. It highlights the legal and institutional frameworks for heritage protection in India as also the challenges facing it. The implications of the rapidly changing interface between heritage and history will also be examined. The course will be strongly project-based and will require visits to sites and monuments. At least two Projects will be based on visits to Museums/Heritage Sites.

- i) Defining Heritage: Meaning of 'antiquity', 'archaeological site', 'tangible heritage', 'intangible heritage' and 'art treasure'.

ii) Evolution of Heritage Legislation and the Institutional Framework: Conventions and Acts— national and international_Heritage-related government departments, museums, regulatory bodies etc., Conservation Initiatives.

iii) Challenges facing Tangible and Intangible Heritage: Development, antiquity smuggling, conflict (to be examined through specific case studies)

iv) Evolution of Heritage Legislation and the Institutional Framework: Conventions and Acts— national and international_Heritage-related government departments, museums, regulatory bodies etc., Conservation Initiatives.

v) Challenges facing Tangible and Intangible Heritage:

Development, antiquity smuggling, conflict (to be examined through specific case studies)

vi) Heritage and Travel: Viewing Heritage Sites, The relationship between cultural heritage, landscape and travel recent trends.

Paper II- Understanding Popular Culture

I. Introduction: a. Defining elite and popular culture, b. Differences in their forms, contents and patterns of presentations, c. Changing traditions of Folk songs, music, literature and dances.

II. Visual Expressions: a. Folk Art, Calendar Art, Photography, b. Audio-visual mode of presentation cinema & television c. Expressions of popular culture in dance , drama, films and painting.

III. Performance and Participations: a. Theatre, music, folk songs and jatra, b. Identifying themes, functionality, anxieties, c. Fairs, Festivals and Rituals, Disentangling mythological stories, patronage, regional variations.

IV. Popular Culture in a globalized world: The impact of the internet and audio-visual media on popular culture.

/Paper II- Art Appreciation: An Understanding to Indian Art

The purpose of this course is to introduce students to Indian art, from ancient to contemporary times, in order to understand and appreciate its diversity and its aesthetic richness. The course will equip students with the abilities to understand art as a medium of cultural expression. It will give students direct exposure to Indian art through visuals, and visits to sites and museums.

I. Prehistoric and proto-historic art: _Rock art; Harappan arts and crafts

I. Indian art (c. 600 BCE – 600 CE): World Heritage Site Managers, UNESCO World Heritage Manuals Notions of art and craft_Canons of Indian paintings, Major developments in stupa, cave, and temple art and architecture

II. Early Indian sculpture: style and iconography_Numismatic art

III. Indian Art (c. 600 CE – 1200 CE):_Temple forms and their architectural features; early illustrated manuscripts and mural painting traditions Early medieval sculpture: style and iconography Indian bronzes or metal icons.

IV. Indian art and architecture (c. 1200 CE – 1800 CE): _Sultanate and Mughal architecture_Miniature painting traditions: Mughal, Rajasthani,Pahari Introduction to fort, palace and haveli Architecture.

V. Modern and Contemporary Indian art and Architecture: The Colonial Period; Art movements; Bengal School of Art, Progressive Artists Group, etc. Major artists and their artworks popular art form (folk art traditions).



DR. BHUPENDRA NATH DUTTA SMRITI MAHAVIDYALAYA

Department of Sanskrit

Honours Course

PROGRAMME OUTCOMES & COURSE OUTCOMES

Sanskrit nominally संस्कृतम्, saṃskṛtam, is a classical language of South Asia that belongs to the Indo-Aryan branch of the Indo-European languages. It arose in South Asia after its predecessor languages had diffused there from the northwest in the late Bronze Age. Sanskrit is the sacred language of Hinduism, the language of classical Hindu philosophy, and of historical texts of Buddhism and Jainism. It was a link language in ancient and medieval South Asia, and upon transmission of Hindu and Buddhist culture to Southeast Asia, East Asia and Central Asia in the early medieval era, it became a language of religion and high culture, and of the political elites in some of these regions. As a result, Sanskrit had a lasting impact on the languages of South Asia, Southeast Asia and East Asia, especially in their formal and learned vocabularies.

Sanskrit generally connotes several Old Indo-Aryan language varieties. The most archaic of these is the Vedic Sanskrit found in the Rig Veda, a collection of 1,028 hymns composed between 1500 BCE and 1200 BCE by Indo-Aryan tribes migrating east from what today is Afghanistan across northern Pakistan and into northern India. Vedic Sanskrit interacted with the preexisting ancient languages of the subcontinent, absorbing names of newly encountered plants and animals; in addition, the ancient Dravidian languages influenced Sanskrit's phonology and syntax. *Sanskrit* can also more narrowly refer to Classical Sanskrit, a refined and standardized grammatical form that emerged in the mid-1st millennium BCE and was codified in the most comprehensive of ancient grammars, the Aṣṭādhyāyī ('Eight chapters') of Pāṇini. The greatest dramatist in Sanskrit, Kālidāsa, wrote in classical Sanskrit, and the foundations of modern

arithmetic were first described in classical Sanskrit. The two major Sanskrit epics, the Mahābhārata and the Rāmāyaṇa, however, were composed in a range of oral storytelling registers called Epic Sanskrit which was used in northern India between 400 BCE and 300 CE, and roughly contemporary with classical Sanskrit. In the following centuries, Sanskrit

became tradition-bound, stopped being learned as a first language, and ultimately stopped developing as a living language.

Our academic programme of both (Honours +General) degree course are designed to cater the needs of the modern era i.e. professional outlook as well as deep understanding of the subject.

PROGRAMME OUTCOMES(HONOURS)

1		To develop intensive understanding about our rich heritage & culture.
2		Students can able to understand & share their idea through this language
3		The programme can help the learners to comprehend different types of ancient scripts i.e. Brahmi ,kharosthi,Sarada etc.
4		Students will able to compare the Modern literature and ancient literature
5		Students can understand the tradition of ancient Ayurveda ,medical science of ancient India.
6		Scientific literature basically the book of Astronomy,Geometry, Architecture are the golden assets in which students can developed project etc which will be helpful for the society.

Course outcomes (Honours)

After successful completion of the course learners can achieve various skills & intensive knowledge in the subject concerned. Course specific outcomes are here under

SEM-1

Course Title: Classical Sanskrit Literature (Poetry)

CO-1. Students can know about the classical age of Sanskrit literature.

CO-2 They can acquainted with some classic poetry of the legendary poets.

Co-3 This course provides the students a descriptive information about the History of Sanskrit literature, especially the development of Sanskrit literature.

Course Title: Critical Survey of Sanskrit Literature

CO-1 This course is designed to developed the vivid knowledge from the Vedic age to classical age.

Co-2 They can get acquainted with the rich tradition of Sanskrit literatrure.

Co-3 It develops the knowledge about the dynamic tradition of grammar.

SEM-2

Course Title: Classical Sanskrit Literature(Prose)

CO-1 This course aims to acquaint students with comprehensive information of Classical Sanskrit Prose literature, Origin and development of prose, Important prose romances and fables literature of Sanskrit.

CO-2 Besides the information of history this course also seeks to help students to select the Sanskrit texts for independent literary study.

Course Title: Self-Management in the Gītā

CO-1. Through the study of Gita the students have to know Spiritual Power ,emancipation of the soul ,features of pure knowledge ,the power of Knowledge, tradition of knowledge etc.

CO-2 The objective of this course is to study the philosophy of self-management in the Śrīmadbhagavadgītā.

CO-4 This also guides the students to find out the relevance of Śrīmadbhagavadgītā in present context.

CO-5 Meditation is now a very popular in entire globe. Through the course learners can learn meditation, value of meditation in present perspective.

SEM-3

Course Title: Classical Sanskrit Literature (Drāmā)

CO-1 They can know about the dramatic literature.

CO-2 They can read & acquainted with the famous Drama “Abhijananashakuntalam”.

CO-3 The structure of sanskrit theatre and its variations.

Course Title: Poetics and Literary Criticism

CO-1 The study of Sāhityadarpana (Sanskrit Poetics) embraces all poetic arts and includes concepts like alaṅkāra, rasa, rīti, vakrokti, dhvani, aucitya etc. The entire domain of Sanskrit poetic has flourished with the topics such as definition of poetry and divisions, functions of word and meaning, theory of rasa and alaṅkāra (figures of speech) and chandas (metre), etc. All these familiarize the students with the fundamental technical structures of Sanskrit literature.

CO-2 This develops capacity for creative writing and literary appreciation.

CO-3 Students can gain knowledge about the basic concept of kavya's and their parts.

Course Title: Indian Social Institution and Polity

CO-1 Social institutions and Indian Polity have been highlighted in Dharma-śāstra literature.

CO-2 The aim of this course is to make the students acquainted with various aspects of social institutions and Indian polity as propounded in the ancient Sanskrit texts such as Samhitās, Mahābhārata, Purāṇa, Kauṭilya's Arthaśāstra and other works known as Nītiśāstra.

Course Title: Basic Sanskrit

CO-1 Students can learn the Brahmi script.

CO-2 Students can learn the moral value of human life from fable Brahmadatta-karkaṭa-kathā- (Aparīkṣitakāraka)

SEM-4

Course Title: Indian Epigraphy and Chronology

CO-1 This course aims to acquaint the students with the epigraphical journey in Sanskrit, the only source which directly reflects the society, politics, geography and economy of the time.

CO-2 The course also seeks to help students to know the different types of inscriptions & their values.

Course Title: Modern Sanskrit Literature

CO-1 The purpose of this course is to expose students to the rich & profound tradition of modern creative writing in Sanskrit, enriched by new genres of writing.

CO-2 Students will be able to know not only ancient literature and their classification but also modern Sanskrit literature.

Course Title: Sanskrit and World Literature

CO-1 This course is aimed to provide information to students about the spread & influence of Sanskrit literature and culture through the ages in various parts of the world in medieval & modern times.

CO-2 Students can know about the various eminent Indologist of the east & west.

CO-4 Different styles of the eastern & western scholars are clearly explained in this course.

SEM-5

Course Title: Vedic Literature

CO-1 This course on Vedic literature aims to introduce various types of Vedic texts. Students will also be able to read one Upaniṣad namely Isopaniṣad, where primary view of Vedānta is propounded.

CO-2 Learners can acquainted with the vedic Sanskrit & its grammatical application.

CO-3 The comprehension of the selected portions of Yaska's Nirukta.

CO-4 The understanding of the basics of Vedic etymology.

Course Title: Sanskrit Grammar

CO-1 To acquaint the students with general Sanskrit Grammar

CO-2 Acquaintanceship with the basic structure of Sanskrit Compounds.

CO-3 Training with the theories of Compound formation.

CO-4 The ability to understand the syntax and semantics of Sanskrit compounds.

CO-5 The ability to apply grammatical rules in languages.

Course Title: Dramaturgy -- Sāhityadarpaṇa

CO-1 The theories of Sanskrit Aesthetics and Literary Criticism as embodied in the selected portions of Sahityadarpana.

CO-2 The basic doctrines of different schools of aesthetics and literary criticism in Sanskrit.

Course Title: Elements of Linguistics

CO-1 Basics of Linguistics.

CO-2 Acquainted with the comparative linguistics.

CO-3 Learners can know the various laws of eminent linguists.

SEM-6

Course Title: Indian Ontology and Epistemology

CO-1 This course aims to get the students acquainted with the cardinal principles of the Nyāya-Vaiśeṣika philosophy through the Tarkasaṃgraha and to enable students to handle philosophical texts in Sanskrit.

CO-2 It also intends to give them an understanding of essential aspects of Indian Philosophy.

CO-3 The basics of Advaita Vedanta.

CO-4 A popular form of Vedantic methodology which in turn will enable the learner to have further pursuits into the higher realms of Indian Philosophy.

Course Title: Sanskrit Composition and Communication

CO-1 Acquaintanceship with the basic structure of Sanskrit Sentences.

CO-2 Know the theories of karaka.

CO-3 The ability to understand the syntax and semantics of Sanskrit.

CO-4 The ability to apply grammatical rules in languages.

Course Title: Fundamentals of Āyurveda

CO-1 know the basic elements of Ayurveda.

CO-2 General acquaintance with the ancient texts of Ayurveda.

Course Title: Art of Balanced Living

CO-1 Comprehension of the selected portion of Yoga Sutras of Patanjali.

CO-2 Understanding the correlation between the Sankhya and Yoga systems of philosophy.

CO-3 Know about the law of karma & its application in human life.

CO-4 Yoga & its application in modern society.



General Course

Programme Outcomes

Course Name: B.A GENERAL

Upon completion of this course

PO1	Students will develop social, political, historic, economic and literary consciousness and will be better able to appreciate different culture
PO2	This course will help the students to put emphasis on human values
PO3	Students will understand the importance of literacy and cultural diversity
PO4	This will develop the power of critical thinking among the students
PO5	Students will be more responsible towards the mother nature and as well as society
PO6	Students will get employment opportunity in education, tourism, hospitality, finance, media sector

Program specific outcomes

Name of the program: ECONOMICS (GENERAL)

PSO1	Gain the basic knowledge of economics
PSO2	Know the process of how an economy works

PSO3	Understand the basic assumptions in various economic theories and enhance capabilities of developing ideas based on them
PSO4	Learn to prepare a questionnaire and process of conducting survey
PSO5	Acquire knowledge about various statistical knowledge
PSO6	Understand various economic policies and can criticise
PSO7	Capable enough to face the competitive examinations
PSO8	Adapt the economic history

Course outcomes

Semester: 1

Course code: CC-1A

Course name: Microeconomics

CO1	Learn the mechanism behind price determination
CO2	Know the process of achieving equilibrium in consumption
CO3	Acquire knowledge about what to produce, how to produce and for whom to produce.
CO4	Understand different market structure
CO5	Know the theory of factor price
CO6	Can understand the logic behind welfare economics

Semester: 2

Course code: CC-1B

Course name: Macroeconomics

CO1	Understand the basics of macroeconomics
CO2	Know how the national income is calculated and its importance
CO3	Illustrate the concept of money, its functions and components of money supply
CO4	Understand the Keynesian economics and theory of interest rate.
CO5	Describe the quantity theory of money and classical economics
CO6	Establish the reason behind inflation
CO7	Capable to describe the banking system

Semester: 3

Course code: CC-IC

Course name: Development Economics

CO1	Learn the basic difference between growth and development
CO2	Understand the basic theories of growth
CO3	Describe basic reasons behind poverty and unemployment and way out
CO4	Know the contribution of political institutions
CO5	Gain facts about importance of foreign investment

Semester: 3

Course code: SEC-1

Course name: Basic Computer Applications

CO1	Learn to create file
CO2	Know to operate MS word
CO3	Learn about MS Excel
CO4	Expertise in handling PDF documents

Semester: 3

Course code: SEC-1

Course name: Indian Financial System

CO1	Know the components of money markets
CO2	Describe the functions of RBI and commercial banks
CO3	Gain facts about capital market
CO4	be acquainted with the corrigendum of stock market
CO5	Understand various SEBI

Semester: 4

Course code: CC-ID

Course name: Features Of Indian Economy

CO1	Understand the pillars of indian economy
CO2	Knowledge about the population
CO3	Learn the facts about Indian agriculture

CO4	Briefing the concept of industry
CO5	Understand the impact of public sector and banking sector on Indian economy

Semester: 4

Course code: SEC-2

Course name: Indian Official Statistics

CO1	Describe official statistics and methods and functions
CO2	Know how to do economic census
CO3	Acquire the process of doing economic survey
CO4	Describe the demographic data
CO5	Understand International statistical system

Semester: 4

Course code: SEC-2

Course name: Entrepreneurship Development

CO1	Evaluate the concept of Entrepreneurship
CO2	Learn about motivation theory
CO3	Understand the development of a project
CO4	Know strategies of successful small business
CO5	increase facts about financial resources for new venture

Semester: 5

Course code: DSE-1A

Course name: Basic Statistics

CO1	Describe concept of statistics
CO2	Learn about frequency distribution
CO3	create charts and diagrams
CO4	Knowledge about central tendency
CO5	Acquire facts about dispersion

Semester: 5

Course code: DSE-1A

Course name: Economic History Of India

CO1	Understand the colonial background of india
CO2	Know the agricultural structure
CO3	Learn the railways and industry history

Semester: 5

Course code: SEC-3

Course name: Money & Banking

CO1	Study the relevance of money and banking
CO2	Learn the financial institutions and financial markets
CO3	Understand the banking system

CO4	Know the central banking system and monetary policy
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Semester: 5

Course code: SEC-3

Course name: Insurance Market And Its Product

CO1	Capable to evaluate the insurance system
CO2	Describe the principles of insurance
CO3	Know how to claim management in insurance

Semester: 6

Course code: DSE-1B

Course name: Environmental Economics

CO1	Know the environmental issues and problems
CO2	Understand the externality theory
CO3	Learn the property rights
CO4	Learn about international environmental problems
CO5	Gain knowledge about sustainable development

Semester: 6

Course code: DSE-1B

Course name: Public Finance

CO1	Learn about the fiscal functions of an economy
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CO2	Know the public goods
CO3	Understand the principles of taxation
CO4	Learn various issues of Indian public finance

Semester: 6

Course code: SEC-4

Course name: Indian Stock Market Trading

CO1	Know the working management of share market
CO2	Learn the process of stock trading
CO3	Understand the clearing and settlement process

Semester: 6

Course code: SEC-4

Course name: Business Project Proposal

- Students will learn to choose the profitable business proposal and evaluate the right process of doing business and to make it successful



General Course

Aims of bachelor's degree in music:-

The aims and objectives of teaching music at this level.

- 1) Facilitate and promote the overall development of the personality of the students.
- 2) Sensitise the youth the culture diversity and rich heritage of the country and thus inculcate respect for the pride in it.
- 3) Awareness and recognitions of the local art forms.
- 4) Know the main music and dance forms in India.
- 5) Promote nationalism and national integration through celebration of important days, national social and religious festivals and occasions.

Program learning out comes:-

It out comes-

- 1) Promote interest in and motivation for music and music related activities .
- 2) Foster a sense of rhythm and melody.
- 3) Integrate music with the scholastic and co-scholastic subject of study.
- 4) Identify and nurture talent in music.
- 5) After the completion of the course in music a student can get a job in the music industry, films, production house, tv channels, All india radio and advertisement companies.

- 6) One can also work as a music teacher in school, college and universities.
- 7) The entespsising students can also open there won music learning center.

COURSE OUTCOMES:-

CC-1 (Elementary knowledge of music) Theoritical

- 1) Music education requircs students to recognize and repeat pitch, quality timber, tone or enunciation of words specially in students.
- 2) Music directly benefits the ability to tearn words, speak them correctly and process the many new sounds they hear form others.

CC-2(practical) Thata-Raga-Swarnamalika Laksman git indifferent tatas

- 1) The tanpura gives the essentith base note “Sa” or shadja, on besis of which all other instruments are tuned up.
- 2) The tanpura also gives the 5 th note (Pa) which provide the aditional support along with “Sa”.
- 3) A “thaat” is a parent scale in north indian or hindustani music. Primary function of a ‘thaat’ is not a tool for music composition but sather as a besis for classiffication of Ragors.

CC-3 Introduction of Rabindra sangeet and theoritical knowledge of Raga, talas, and notations:-(Theoritical)

A. INTRODUCTION OF RABINDRA SANGEET

- 1) Developing of committed practitioner.
- 2) Medium of self realisation
- 3) Understanding of humanism.
- 4) Concept of own language culture.

CC-4

B. RABINDRA SANGEET: THEMATIC VARIATION

- 1) Students get knowledge about the different variations of Rabindra Sangeet of different themes.
- 2) Developing the spirit of nationalism and internationalism
- 3) Understanding of spiritualism.
- 4) Influence of folk tune and western tune.
- 5) Music notation systems are one of the most important elements in music, they are as important to music as writing systems are to speech or to the written word.
- 6) Without music systems, music could be composed or played only in the most primitive manner if at all.

CC-5 History of Indian music Ancient Period and Medieval Period (Theoretical)

- 1) As part of classical music learning you get to practice and develop outstanding analytical skills.
- 2) Indian classical music expresses the deepest thoughts of our civilization.
- 3) Among the four vedas, samaveda is considered as the origin of Indian music.
- 4) Hindustani music was not only influenced by ancient Hindu musical traditions, historical Vedic philosophy and native Indian sound but also enriched by the Persian performance practices of the Mughals.

CC-6 Khayal Vilambit and Drut (Practical)

- 1) Khayal sets a great perimeter of benefits for students as it helps them in improving their communication skills mainly as well as students will also get a chance to enhance their personality.

- 2) Laya is process where sound are shparedted by time if you ware ask to clap for a duration of ten secounds one can observe the each clap would be spaced out by some amount of time. So this nature of repeties of event which are spaced out by some times is called laya.

CC-7

C. BANGAL GAN (PRACTICAL)

- 1) Developing of committed practioner
- 2) Evolving the idea of traditional culture
- 3) Students get the knowledge about the history and influence of the classical music on contemporary Bengali songs and culture.
- 4) Ideas of different Talas and styles

CC-8 History of indian Music – Modern Period (Theoretical)

- 1) In the 20st century the Gharana system remains a vital force in the validation of north indian classical musiciens, A 'distinctive musical style' in hindustani tradition includes not only peculiarities of performance and repertoire but also a broader idcologg of music, aesthetics and pedagogy.
- 2) Student will be able to learn reading cotribution about the real life story of a succesful or remark able person often influences, motivates, or provides encouragement. Student learn about the challenges that other have over me.

CC-9 Dhrupad and Dhamar (Practical)

- 1) Dhrupad claims the distinction of being the oldest form indian classical music heard today. Its origin can be traced back to the chanting of vedic hymns.
- 2) Students will be able to learn the dhrupad form is set to talas such as choutala, Sultala, bramata etc.
- 3) Students will also able to learn Dhamar form is set to dhamar tala sung to the accompaniment of pakhawa

CC-10 Thumri and Bhajan (practical)

- 1) Student will able to learn thumri which has more elaborate lengthy structur of improvisation than crisp compact dadra.
- 2) Student will able to learn devotional song with a religious them or spiritual idaas. Specifically among indian religons in any language.
- 3) The term bhajan means reverence and originates from the roote word bhajan. Which means to nevere as in Bhaja gobindam.

CC-11

D.THEORETICAL ASPECTS AND MUSICAL DISTINCTIVENESS OF RABINDRA SANGEET

- 1)Acquisition of knowledge of theoretical idea about the musical environment of Thakurbari and 19 century's Contemporary culture.
- 2)Concept of different talas created by Tagore.
- 3)The history of the notation system in Bengal.

CC-12

E.DIFFERENT FORMS AND STYLES OF RABINDRA SANGEET

- 1) Influence of Hindustani Ragas on Rabindra Sangeet.

2) Influence of western and folk tunes on Rabindra Sangeet.

3) The development of moral and spiritual aspects of individual's personality

CC-13: Khayal(Practical)

1) Raga practice under the guidance of a guru will increase student's vocal abilities to certain extent so that student can easily jump to any notes and that too in a very melodious.

2) In Indian music it is very important to understand tal as a cycle technically all rhythm is cyclical because it is repeated over and over again.

3) Tal (Bilambit, madhya, Drut) plays a very important role in performing Hindustani classical music.

CC-14

F. RABINDRANATH'S GITINATYA AND NRITYANATYA

1) Outline of the history Gitanatya and Nrityonaty created by Rabindranath Tagore.

2) Students will learn various songs from Shyama, Kalmrigaya, Chintranga

3) Preservation of root culture

DSE-1 Knowledge of Raga (Practical)

1) Knowledge of ragas help set the mood for a piece of music but in much greater detail traditionally in Indian music each raga was itself associated with a very specific emotion.

2) In modern times the ragas are often still associated with a particular time or season.

3) Both tempo and rhythmic regularity of a raga modulate emotional response and high arousal emotions (happy and tense) associated with faster rhythm.

DSE -2 Knowledge of Tala and notation reading Hindustani and Akar matrik (Both) (practical)

1) Music notation systems are one of the most important elements in music.

2) Akar matrik notation system was developed in 1905 by Rabindranath Tagore's elder brother Jyotirindranath Tagore, which fused the tools of Western staff notation with features of Indian classical music system into a unique and very effective and compact scoring system for the vocalist.

DSE -3 Stage Demonstration Khayal

- 1) Performing of Indian classical music takes away any jitters or nervousness and can help decrease your heart rate and anxiety.
- 2) Students can also be able to know the therapeutic effect of Ragas in Hindustani classical music.

DSE:4

STAGE DEMONSTRATION RABINDRA SANGEET AND BENGALI SONG

This is a stage performance paper in which students will be benefited through the idea of performance training.

Programme outcomes:

Name of the programme: B. Sc. Hons.

After completing this programme students -

PO1	Find themselves in comfort zone to appear in different competitive examinations.
PO2	Get the idea of scientific phenomenon along with different mathematical tools and techniques.
PO3	Find the geometrical idea and apply the same in understanding critical equations involving real life incidents.
PO4	Will be able to develop scientific and mathematical models to solve different types of problems arising from real life situations.
PO5	Can enhance the idea of practical experiments and correlate with different subjects of Science and Mathematical Sciences.
PO6	Develop their independent thinking while writing some projects.
PO7	Get the idea from teachers how to approach different companies, industries, sectors for collaborating works.

Programme specific outcomes

Name of the programme: Mathematics Honours

After completing this programme students

PSO1	Are able to think geometrically many real life problems involving in sciences, economics, physics etc.
PSO2	Enhance the idea of continuity and differentiability to apply the concept of the same in blood circulation in body, rate measure, maxima and minima for geometrical objects.
PSO3	Can inter-relate different branches of Mathematics, apply different results in other concepts of mathematics and natural sciences.
PSO4	Come across with the recent applications of number theory to bar coding theory, security in different economic and social sectors.
PSO5	Can opt for different research area in their desired topics, and contribute some new idea for the development of our nation through education.
PSO6	Are made confident enough to go for higher studies and meet competitive examinations with good calculative, logical and with sound mind set up.
PSO7	Inculcate some pure and sincere characteristics which make them good human being.
PSO8	Learn programming language to enrich them and apply them higher studies and in research works.

Course outcomes

Semester I

Course code: BMH1CC01

Course Name: Calculus, Geometry, and Differential equations

SL No.	Course outcomes	PSO addressed
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CO1	The knowledge of higher order derivatives, different types of curves having concavity, convexity properties, new notions such as envelopes of a family of lines, asymptotes of a curve, students learn to trace different types of curves, enhancing the visual knowledge. Important applications of limits of functions in business, economics, life science can be gained by students.	PSO1, PSO2
CO2	Length of different types of standard curves and the surface area of revolution of standard curves, which are applicable in steel plants, factories can be learned.	PSO1, PSO3, PSO6
CO3	Grasping the idea of different types of 3-dimensional geometric structures, and trace them. Learn to transfer axes and classify different conics, to apply in other fields such as classical algebra,, specially, when solving problems of polynomial equations,	PSO1
CO4	Learns to create the models from real life problems in terms of differential equations, and solve them in different ways.	PSO1, PSO3

Semester I

Course code: BMH1CC02

Course Name: Algebra

SL. No.	Course outcomes	PSO addressed
CO1	Applying polynomial equations in complex number, utilize De' Moivre's theorem in different types of problem solving, come to know how to solve different types of polynomial equations. Learn to relate 2-dimensional geometry with transformation of equations. Important inequalities are to be grasped.	PSO1, PSO3
CO2	Recall the equivalence relations and to get the idea of partitions. Different types of functions are to be learned. The well-ordering property of the set of all natural numbers is treated, in number theory, the notion of division algorithm, divisibility and Euclidean algorithm have been treated which are applicable in cryptography, and for further study in Abstract algebra.	PSO1, PSO3, PSO4
CO3	Theory of systems of linear equations, matrix representations, application in linear algebra are treated.	PSO1, PSO3
CO4	n-dimensional real vector spaces, linear independent and dependent vectors, and their bases are discussed. The notion of eigen value, eigen vector and relation with system of linear equations while finding eigen vectors. Get the idea of application of Cayley-Hamilton theorem in finding inverse of a matrix.	PSO1, PSO3

Semester II

Course code: BMH2CC03

Course Name: Real Analysis

SL. No.	Course outcomes	PSO addressed
CO1	Recalling the algebraic and order properties of the set of all real numbers \mathbb{R} , Countable and uncountable subsets of \mathbb{R} , density property of rationals and irrationals.	PSO1, PSO3

CO2	Come to know the important properties, that are supremum property, infimum property, density property.	PSO1
CO3	Come across some new notions in R, namely neighbourhood of a point, intervals, interior point of a set, limit point/points of a set, open set, closed set, and dense set.	PSO1, PSO3
CO4	Learn the notion of sequences of reals, convergence of sequences, divergence of sequences, different types of tests for convergence of sequences.	PSO1, PSO3
CO5	Know the importance of study of series of reals, tests for convergence of different series, series of positive terms as well as alternating series.	PSO1, PSO3
CO6	Learn the concept of absolutely convergent series and conditionally convergent series.	PSO1, PSO3

Semester II

Course code: BMH2CC04

Course Name:

SL. No.	Course outcomes	PSO addressed
CO1	Gain efficiency to solve different types of differential equations.	PSO1, PSO3
CO2	Introduced with equilibrium points and interpretation of the phase plane for the first time.	PSO1, PSO3, PSO4
CO3	Solve various problems regarding vector triple product, vector differentiation and integration of vector functions.	PSO1, PSO3, PSO4
CO4	Get a clear idea to plot family of curves which are solutions of different differential equations.	PSO1, PSO3

Semester – III

Course code: BMH3CC05

Course name: Theory of real functions and introduction to metric space

SL. No.	Course outcomes	PSO addressed
CO1	Learn a new idea of epsilon-delta approach of limit of functions, sequential criterion of limits.	PSO1
CO2	Gain an interesting idea to find out the location of roots of algebraic continuous functions.	PSO1, PSO3
CO3	Can solve any type of problems regarding Rolle's theorem, mean value theorem, intermediate value property of derivatives, Darboux theorem.	PSO1, PSO2, PSO3
CO4	Cauchy's mean value theorem, Taylor's theorem and Lagrange's theorem have been thoroughly discussed that helps the students to solve any type of problems involving in them.	PSO1, PSO2, PSO3
CO5	Can easily do series expansion of exponential and trigonometric functions.	PSO1, PSO3
CO6	Get the introduction to metric spaces, know some topological ideas such as, interior point, open set, neighbourhood of a point, limit point of a set, closed set and their set theoretical properties.	PSO1, PSO3, PSO5, PSO6

Semester – III

Course code: BMH3CC06

Course name: Group Theory – I

SL. No.	Course outcomes	PSO addressed
CO1	Understand a new notion called Group.	PSO1, PSO3, PSO6
CO2	Can express symmetries of different polygons by mathematical structure-group.	PSO1, PSO3, PSO6
CO3	Can construct Cayley table.	PSO1, PSO3, PSO6
CO4	Can determine possible subgroups of a group.	PSO1, PSO3, PSO6
CO5	Understand and construct permutation groups.	PSO1, PSO6
CO6	Identify cyclic subgroups, cyclic groups, and their generators.	PSO1, PSO6
CO7	Learn the concept of cosets, normal subgroups, and Lagrange's theorem on finite groups with its applications.	PSO1, PSO6
CO8	Learn to construct new groups from given groups in terms of External direct product of groups.	PSO1, PSO6
CO9	Understand the concept of group homomorphism and its consequences.	PSO1, PSO3, PSO6
CO10	Learn to construct new groups from a given group and its normal subgroup in terms of Quotient group.	PSO1, PSO6

Semester – III

Course code: BMH3CC07

Course name: Numerical Methods and Lab

SL. No.	Course outcomes	PSO addressed
CO1	Understand the requirement of numerical methods to solve various problems.	PSO1, PSO3, PSO6
CO2	Understand the concept of errors occurs in numerical approximation.	PSO1, PSO3, PSO6
CO3	Find roots of transcendental and polynomial equations using numerical methods.	PSO1, PSO2, PSO3, PSO6
CO4	Solve system of linear algebraic equations using numerical methods.	PSO1, PSO2, PSO3, PSO6
CO5	Know the concept of interpolation.	PSO1, PSO2, PSO3, PSO6
CO6	Understand numerical differentiation and integration.	PSO1, PSO2, PSO3, PSO6
CO7	Can solve problems using C-programming software.	PSO8

Semester – III

Course code: BMH3SEC11

Course name: Logic and Sets

SL. No.	Course outcomes	PSO addressed
CO1	Able to apply the principles of logic to tell sound from unsound reasoning in everyday discourse.	PSO1, PSO3, PSO6
CO2	Construct truth tables for logical expressions.	PSO1, PSO6
CO3	Test statements for logical equivalence and represent mathematical statements in the language of predicate language.	PSO1, PSO3, PSO6
CO4	Learn the operations of sets.	PSO1, PSO3, PSO6
CO5	Learn the concept of different relations, equivalence relation, partial order relation, minimal and maximal elements in a partially ordered set.	PSO1, PSO3, PSO6

Semester – IV

Course code: BMH4CC08

Course name: Riemann Integration and Series of Functions

SL No.	Course outcomes	PSO addressed
CO1	Learn the basic concepts of Riemann integration, Darboux integration, Intermediate value theorem for integrals, Fundamental theorem of integral calculus.	PSO1, PSO2, PSO3, PSO6
CO2	Understand the techniques of integral calculus, Beta and Gamma functions which plays a major role in integral calculus.	PSO1, PSO2, PSO3, PSO6
CO3	Acquire the knowledge of sequence and series of functions and their properties. Also concept of uniform convergence and Weierstrass M- test.	PSO1, PSO2, PSO3, PSO6
CO4	Gaining knowledge on Fourier series, Riemann – Lebesgue lemma, Bessel's inequality and Dirichlet condition, which are the vital key points in applied mathematics.	PSO1, PSO2, PSO3, PSO6
CO5	Knowing about the power series, Abel's theorem and Weierstrass approximate theorem and techniques of differentiate and integrate the power series.	PSO1, PSO2, PSO3, PSO6

Semester – IV

Course code: BMH4CC09

Course name: Multivariate Calculus

SL No.	Course outcomes	PSO addressed
CO1	Basic concepts on functions of several variables; limit, continuity and differentiability for the functions of n- variables, and learning the techniques of finding extreme value for these functions.	PSO1, PSO2, PSO3, PSO6

CO2	Understand the techniques to find the area using double integral and to find the volume by triple integrals.	PSO1, PSO2, PSO3, PSO6
CO3	Learn the vector operations, gradient, divergence and curl. Fundamental theorem on line integrals and its application to work done.	PSO1, PSO2, PSO3, PSO6
CO4	Familiar with the Green's, Divergence and Stoke's theorem and their applications.	PSO1, PSO2, PSO3, PSO6

Semester – IV

Course code: BMH4CC10

Course name: Ring Theory and Linear Algebra I

SL No.	Course outcomes	PSO addressed
CO1	Learn the basic concepts of rings, sub-rings, integral domain, ideals etc and their properties.	PSO1, PSO3, PSO6, PSO7
CO2	Understand the ring homomorphism and their properties. Also familiar with the isomorphism theorems.	PSO1, PSO2, PSO3, PSO6
CO3	Fundamental concepts of vector spaces, basis and dimension with their properties. Extension, Deletion and Replacement theorems and their applications.	PSO1, PSO2, PSO3, PSO6
CO4	Acquire the knowledge of linear transformation and its matrix representation also knowing about the invertability and isomorphism of linear transformations.	PSO1, PSO2, PSO3, PSO6

Semester – IV

Course code: BMH4SEC21

Course name: Graph Theory

SL No.	Course outcomes	PSO addressed
CO1	Learn basic concept of Graph theory including complete, bi-partite graphs.	PSO1, PSO3, PSO6
CO2	Familiar with the Eulerian and Hamiltonian graph and techniques to find adjacency and incidence matrix.	PSO1, PSO6
CO3	Understand the technique to solve the travelling salesman problem. Also familiar with Dijkstra's and Warshell algorithm.	PSO1, PSO3, PSO6

Semester – V

Course code: BMH5CC11

Course name: Partial Differential Equation and Applications

SL No.	Course outcomes	PSO addressed
CO1	Learn the basic concept of Partial differential equation – formation and geometrical representation of partial differential equation. Also learn the methods of solving partial differential equation of first degree.	PSO1, PSO3, PSO6

CO2	Understand the techniques to derive Heat, Wave and Laplace equation. Also learns to reduce second order linear partial differential equation to its canonical form.	PSO1, PSO3, PSO6
CO3	Acquire the knowledge of Cauchy problem of second order partial differential equation. Also learn the Initial and Boundary value problems. Understand the techniques of solving Vibrating String problem and Heat conduction equation.	PSO1, PSO2, PSO3, PSO5, PSO6

Semester – V

Course code: BMH5CC12

Course name: Mechanics I

SL. No.	Course outcomes	PSO addressed
CO1	Improves the knowledge about a static equilibrium, friction, equilibrium of a particle on a rough curve, virtual work .	PSO1, PSO3, PSO6
CO2	Can easily solve the problem like simple harmonic motion, damped and forced vibrations .	PSO1, PSO3, PSO6
CO3	Get some basic idea of Kepler's laws of motion, Motion under the inverse square law, motion of artificial satellites.	PSO1, PSO3, PSO6
CO4	Are introduced with degrees of freedom, moments and products of inertia, momental ellipsoid, principal axes.	PSO1, PSO3, PSO6
CO5	D'Alembert's principle, moment about a fixed axes, compound pendulum's idea .	PSO1, PSO3, PSO6

Semester – V

Course code: BMH5DSE11

Course name: Linear programming

SL. No.	Course outcomes	PSO addressed
CO1	Are able to formulate linear programming problems, can solve such problems by graphical method as well as by simplex method .	PSO1, PSO3, PSO6
CO2	Use the simplex method to solve small linear programming models by hand, given a basic feasible point .	PSO1, PSO3, PSO6
CO3	Can solve various physical problems(Transportation problems) by Northwest-corner method, least cost method and Vogel's approximation method.	PSO1, PSO3, PSO6
CO4	Are able to solve different types of two person zero sum games, learn about mixed strategies and by graphical solution method.	PSO1, PSO3, PSO6

Semester – V

Course code: BMH5DSE21

Course name: Probability and statistics

SL. No.	Course outcomes	PSO addressed
CO1	Are capable to solve different types of problems regarding probability density functions, mathematical expectation, moment generating function.	PSO1, PSO2, PSO3, PSO6
CO2	Understand uniform, binomial, poisson, geometric, negative binomial and continuous distributions .	PSO1, PSO2, PSO3, PSO6
CO3	Are given idea about Chebyshev's inequality, Markov's chains, Chapman-Kolmogorov equations.	PSO1, PSO2, PSO3, PSO5, PSO6
CO4	Are introduced about Random samples, sampling distribution, estimation of parameters, testing of hypothesis.	PSO1, PSO2, PSO3, PSO6

Semester – VI

Course code: BMH6CC13

Course name: Metric spaces and complex analysis

SL. No.	Course outcomes	PSO addressed
CO1	Understand the Euclidean distance function on \mathbb{R}^n and appreciate its properties, and state and use of triangle inequalities .	PSO1, PSO3, PSO6
CO2	Can explain definition of continuity for functions from \mathbb{R}^n to \mathbb{R}^m and determine whether a given function is continuous .	PSO1, PSO2, PSO3, PSO6
CO3	Can explain the geometric meaning of the metric space conditions/properties .	PSO1, PSO3, PSO6
CO4	Can distinguish between open and closed balls and determine them for given metric spaces.	PSO1, PSO3, PSO6
CO5	Introduced with the notion of limit, continuity of complex valued functions, understand complex derivatives, come across Cauchy-Riemann equations.	PSO1, PSO2, PSO3, PSO6
CO6	Learn about analytic functions, and their properties, contour integration, Cauchy-Goursat theorem, and famous Cauchy integral formula.	PSO1, PSO2, PSO3, PSO5, PSO6
CO7	Can develop their ideas about Liouville's theorem, Taylors's theorem and Lauren's theorem.	PSO1, PSO2, PSO3, PSO5, PSO6

Semester – VI

Course code: BMH6CC14

Course name: Ring theory and Linear Algebra II

SL. No.	Course outcomes	PSO addressed
CO1	Get the idea of different types of polynomial rings over commutative rings, extension of division algorithm from the set of all integers to polynomials, principal ideal domains, factorization of polynomials, Eisentein's criterion for irreducibility test for polynomials. .	PSO1, PSO3, PSO6
CO2	Learn the extended notion of prime elements in arbitrary integral domains, and the concepts of Euclidean domains. .	PSO1, PSO3, PSO4, PSO6

CO3	Get to know the ideal dual space, dual basis, double dual, transpose of a linear transformation and its matrix in the dual basis, and annihilators .	PSO1, PSO3, PSO6
CO4	Enrich with eigen space of a linear operator, diagonalizability of linear transformation, come across to analyze Cayley-Hamilton theorem, learn to find the minimal polynomial of a linear operator, canonical forms of linear operators.	PSO1, PSO3, PSO6
CO5	Get the important concept of Inner Product Space, norm of a vector, orthogonalisation process given by Gram-Schmidt.	PSO1, PSO3, PSO6
CO6	Interact with the notion of adjoint of a linear operator, least squares approximation, normal and self-adjoint operators, orthogonal projections and spectral theorem.	PSO1, PSO2, PSO3, PSO6

Semester – VI

Course code: BMH6DSE33

Course name: Group theory II

SL. No.	Course outcomes	PSO addressed
CO1	Studies and learn the particular case of isomorphism of groups, which is Automorphism of groups, and automorphism groups, also the notion of characteristic subgroups and commutator subgroup.	PSO1, PSO3, PSO6
CO2	Learn some properties of direct products, the group of units modulo n as an external direct product, and internal direct products. Apply the Fundamental theorem of finite abelian groups.	PSO1, PSO4, PSO6
CO3	Develop the idea of Group actions, stabilizer and kernel, know how to apply group actions .	PSO1, PSO4, PSO5, PSO6
CO4	Get the idea of group action by conjugation, class equation, p -groups, Sylow's theorems, Cauchy's theorem, simplicity of the alternating group A_n for n greater than or equal to n .	PSO1, PSO4, PSO5, PSO6

Programmes outcomes

Name of the programme: B. Sc. General

After completing this programme, students

PO1	Find themselves ready to appear in different competitive examinations.
PO2	Get the idea of scientific phenomenon along with different types of Mathematical tools and techniques.
PO3	Develop scientific and mathematical models to solve different types of real life problems .
PO4	Enhance the idea of practical experiments and get opportunity to find practical based works.

Programme specific outcomes

Name of the programme: Mathematics General

After completing this programme students

PSO1	Are made confident enough to meet competitive examinations with good calculative, logical mind set up.
PSO2	Come across with the recent applications of mathematics to bar coding theory, security in different economic and social sectors, and mathematical biology.
PSO3	Can think geometrically many real life problems involving in sciences, economics, physics etc.
PSO4	Get a vast idea about different types of solutions of different differential equations and understand the geometrical interpretations.

Course outcomes

Semester I

Course code: BMG1CC1A

Course Name: Differential Calculus

SL No.	Course Outcomes	PSO addressed
CO1	Recall the idea of limit and continuity and derivative of real valued functions as well as the mathematical definition of those notions.	PSO3
CO2	Gives the idea of partial derivative arising from real field problems.	PSO4
CO3	Use these ideas to explain the characteristics of different types of curves as well as to trace them.	PSO3
CO4	Describe the idea of Mean value theorems and apply them to the problems of inequalities and monotone functions.	PSO3
CO5	Determining maxima and minima of different functions and their application in geometry.	PSO1, PSO3

Semester II

Course code: BMG2CC1B

Course Name: Differential Equations

SL No.	Course outcomes	PSO addressed
CO1	Formulate differential equation representing real life problems	PSO4
CO2	Check the existence and uniqueness of solution of a differential equation.	PSO4
CO3	Solve these differential equations from real life problems.	PSO1, PSO3
CO4	Formulate partial differential equations which represent real life situations.	PSO4
CO5	Classification of partial differential equations into elliptic, parabolic and hyperbolic classes.	PSO3, PSO4

Semester III

Course code: BMG3CC1C

Course Name: Real Analysis

SL No.	Course outcomes	PSO addressed
CO1	Learn the basic concepts of sets.	PSO1
CO2	Learn various property of real numbers like Archimedean property, completeness property, density property etc.	PSO1
CO3	Understand the concepts of sequences of real numbers.	PSO1
CO4	Learn the concepts of series and various types of test for their convergences.	PSO3, PSO4
CO5	Learn the concept of sequence and series of functions.	PSO1, PSO4
CO6	Understand the concept of point-wise and uniform convergence of sequence and series of functions.	PSO1, PSO3

Semester IV

Course code: BMG4CC1D

Course Name: Algebra

SL No.	Course outcomes	PSO addressed	
CO1	Understand the notion of an algebraic structure, that is, Group.	PSO1	
CO2	Identify subgroups, cyclic groups and their properties, generators of cyclic groups.	PSO1, PSO2	
CO3	Can express the symmetries of different polygons by mathematical structure-group.	PSO1, PSO2	
CO4	Understand the properties of cosets, normal subgroups, Lagrange's theorem and its applications.	PSO3	
CO5	Understand the notion of $(2, 2)$ Algebra, that is, Ring, and their properties.	PSO1	
CO6	Come across the notion of Integral Domain, Field and ideal.	PSO1	

Semester V

Course code: BMG5DSE1A3

Course Name: Linea Algebra

SL No.	Course Cutcomes	PSO addressed	
CO1	Learn the concept of Vector spaces and its property.	PSO1	
CO2	Understand the concept of basic and dimension of Vector space and its subspaces.	PSO1, PSO3	
CO3	Understand the concept of Linear transformation and the application of rank-nullity theorem.	PSO1, PSO3	
CO4	Learn the concept of Dual space.	PSO1, PSO3	
CO5	Learn the concept of isomorphism in Vector space.	PSO1, PSO3	
CO6	Improve the concept of invertibility and change of coordinate matrix.	PSO1, PSO3	

Semester VI

Course code: BMG6DSE1B3

Course Name: Linear Programming

SL No.	Course outcomes	PSO addressed	
CO1	Learn the concept of L.P.P and how to solve a L.P.P problem with graphical method.	PSO1, PSO3	
CO2	Understand the concept of Convex set, Hyperplanes.	PSO1, PSO3	
CO3	Learn the concept of simplex method to solve L.P.P.	PSO1, PSO2	
CO4	Understand the concept of optimality and unboundedness of a problem in L.P.P.	PSO1, PSO2	
CO5	Learn the concept of Two-phase and Big-M method.	PSO1, PSO2	
CO6	Understand the concept of Duality and the comparison between Dual and Primal problem.	PSO1, PSO2	