

### Government of West Bengal OFFICE OF THE PRINCIPAL Maulana Azad College



**8, RAFI AHMED KIDWAI ROAD, KOLKATA 700013, INDIA** Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

### **CRITERION 1 - CURRICULAR ASPECTS**

#### **1.3 CURRICULUM ENRICHMENT**

1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum

> CROSSCUTTING ISSUES RELEVANT TO PROFESSIONAL ETHICS, GENDER, HUMAN VALUES, ENVIRONMENT AND SUSTAINABILITY IN TRANSACTING THE CURRICULUM









8, KAFI AHMED KIDWAI KOAD, KOLKATA 700013, INDIA Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

#### \* <u>Department of Arabic</u>: Undergraduate Course in Arabic (B.A.)

#### UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.ac.in/pdf/UG-Arabic-Syllabus.pdf</u>

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC - 1	History of Arabic Literature Pre-Islamic Period	History of Arabic Literature Pre- Islamic Period	Human Values	The course explores the ethical and moral values prevalent in pre- Islamic Arabic society.
CC - 3	History of Arabic Literature in India	History of Arabic Literature in India	Human Values	Focuses on the transmission of cultural and ethical values through Arabic literature in India.
CC - 6	History of Arabic Literature (Spain)	History of Arabic Literature (Spain)	Human Values	Discusses the rich cultural and humanistic values reflected in Arabic literature from Spain.
CC - 7	History of Arabic Literature (Egypt)	History of Arabic Literature (Egypt)	Human Values	Analyzes the cultural significance and ethical values within Egyptian Arabic literature.
CC - 10	Development of Modern Arabic Novel, Short Story, Drama, Formation of Literary Groups	Development of Modern Arabic Novel, Short Story, Drama, Formation of Literary Groups	Human Values & Gender	The course examines the portrayal of human values and gender roles in modern Arabic literature.
SEC - A1	Translation and Composition	Translation and Composition	Professional Ethics & Human Values	Emphasizes ethical translation practices and the accurate conveyance of cultural and humanistic values.
GE - 3	Prose Islamic and Modern Period	Prose Islamic and Modern Period	Human Values	Discusses the ethical and moral values conveyed through prose in both Islamic and modern contexts.
CC - 11	Prose Modern Period	Prose Modern Period	Human Values & Professional Ethics	Explores modern prose works that address ethical dilemmas and human relationships.
DSE - A1	History of Islam	History of Islam	Human Values & Environment	The course explores Islamic teachings related to human values and environmental stewardship.
<u>DSE -</u> <u>B1</u>	<u>Translation, Essay</u> <u>Writing, Terminology</u> <u>&amp; Vocabulary</u>	<u>Translation, Essay</u> <u>Writing.</u> <u>Terminology &amp;</u> <u>Vocabulary</u>	Professional Ethics	Focuses on ethical practices in translation and writing, ensuring respect for cultural nuances.









8, KAFI AHMED KIDWAI KOAD, KOLKATA 700013, INDIA Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

#### \* <u>DEPARTMENT OF BENGALI:</u> UNDERGRADUATE COURSE IN BENGALI (B.A.)

#### UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.ac.in/pdf/UG-Bengali-8-8-18.pdf</u>

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC - 1 (TH+TU)	History of Bengali Literature up to 1800 AD	The development and divisions of Bengali literature, translated literature, Charyapada, Shrikrishna Kirtan, Chaitanya Charita Literature, Mangalkavya, Shakta Padavali, Vaishnav Padavali	Human Values	Explores the cultural and moral values embedded in early Bengali literature, emphasizing the ethical narratives of the period.
CC - 2 (TH+TU)	Linguistics	Bengali vowels and consonants, fundamental vowels, word evolution, phonemes, vocabulary, dialects, morphological discussions, phonetic changes, semantic changes	Professional Ethics	Discusses ethical considerations in the study and application of linguistic principles, focusing on the integrity of language evolution and usage.
GE - 1 (TH+TU)	History of Bengali Literature - Modern Era	Prose and essays, poetry, drama, novels, and short stories	Human Values	Examines how modern Bengali literature reflects and challenges human values, including social and cultural norms.
CC - 3 (TH+TU)	History of Bengali Literature - 19th Century	Poetry by Ishwar Gupta, Rangalal, Madhusudan, Hemchandra, Nabin Sen, the role of Fort William College, Serampore Mission in Bengali prose, the emergence of short stories, and contributions by Rabindranath Tagore	Human Values	Highlights the ethical and cultural transformations during the 19th century, as seen in the evolution of Bengali literature.
CC - 4 (TH+TU)	Introduction to Bengali Literature	Novels like Kapalkundala, plays like Nil Darpan, essays, and poetry by various authors, including discussions on the 19th-century women's movement	Gender & Human Values	Discusses the portrayal of gender roles and the exploration of human values in significant literary works.
GE - 2 (TH+TU)	Historical Linguistics and Metrics	The evolution of the Bengali language, linguistic features of early and medieval Bengali, figures of speech, metrics	Environment & Sustainability	Investigates the historical development of the Bengali language, emphasizing the sustainability of linguistic heritage.









Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC- 5 (TH+TU)	History of Bengali Literature - 20th Century	Short stories by Bibhutibhushan, Subodh Ghosh, essays by Mohitlal, Mujtaba Ali, and the history of drama, poetry, and prose	Human Values & Gender	Analyzes how 20th-century Bengali literature addresses human values and gender dynamics in changing societal contexts.
CC-6 (TH+TU)	Historical Linguistics	Linguistic features of the Bengali language, with reference to Charyapada, Shrikrishna Kirtan, and Annadamangal	Human Values & Environment	Explores the cultural and environmental context of early Bengali literature, emphasizing the sustainability of linguistic and literary traditions.
CC- 7 (TH+TU)	Fiction	Novels like Aranyer Adhikar, Denapaona, Padmanadir Majhi, short stories by Rabindranath Tagore, and others	Human Values	Discusses the representation of human values in Bengali fiction, particularly in the context of social and environmental issues.
SEC- A-3- 2 (TH)	Practical Bengali	The relationship between literature and cinema, correct pronunciation, metrics, recitation, and screenplay writing	Professional Ethics	Emphasizes ethical practices in adapting literature for cinema and the importance of maintaining the integrity of the original text.
GE-3 (TH+TU)	Bengali Poetry and Drama	Contemporary poetry, Vaishnav Padavali, plays like Raja O Rani, Punashcha	Human Values & Gender	Examines the depiction of gender roles and the exploration of human values in Bengali poetry and drama.
CC-8 (TH+TU)	Pre-modern Bengali Literature	Vaishnav Padavali, Shakta Padavali, and the first part of Chandi Mangal	Human Values	Discusses the ethical and spiritual dimensions of pre- modern Bengali literature, focusing on devotional poetry.
CC-9 (TH+TU)	Metrics, Figures of Speech, and Poetics	Poetics, figures of speech, metrics	Professional Ethics	Focuses on the ethical considerations in the analysis and composition of poetry, including the responsible use of literary devices.

d College Maula







Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC-10 (TH+TU)	Essays and Miscellaneous Writings	Essays on cultural and social distance, education, science, religion, politics, Rabindranath Tagore's writings, and critical literature	Human Values & Professional Ethics	Discusses the ethical implications of literary criticism and the role of literature in shaping societal values.
SEC-B-4-2 (TH)	Practical Bengali	Story writing, evolution of Bengali spelling and rules, essay writing, international phonetic alphabet, Roman script	Professional Ethics	Emphasizes ethical practices in creative writing and the importance of adhering to standardized language rules.
GE-4 (TH+TU)	Bengali Fiction and Essays	Short stories, novels like Pallisamaj, essays by Rabindranath Tagore	Human Values	Explores the ethical and moral themes in Bengali fiction and essays, particularly in the context of social reform and cultural identity.
CC-11 (TH+TU)	Forms of Literature	Forms of short stories, essays, poetry, novels, and plays	Human Values & Professional Ethics	Discusses the ethical considerations in different literary forms, focusing on the representation of human experiences and values.
CC-12 (TH+TU)	Drama and Stage	Plays like Tiner Talwar, Bur Saliker Ghare Ron, Karagar, and the history of theater	Human Values	Analyzes the portrayal of human values and social issues in Bengali drama, with a focus on the history of theater.
DSE-A-5-2 (TH+TU)	Bengali Literature of Bangladesh	Plays, short stories, novels, and poetry from Bangladesh	Human Values & Environment	Explores the environmental and social themes in Bangladeshi literature, focusing on the representation of human values.
DSE-B-5-1 (TH+TU)	Bengali Children's Literature	Books like Sabuj Dweep-er Raja, Khirer Putul, Badshahi Angti, Thakumar Jhuli, and poetry by Sukumar Ray and Annadasankar	Gender & Human Values	Discusses the role of children's literature in shaping gender roles and moral values from a young age.









Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC -13 (TH+U)	Modern Bengali Poetry	Works like Birangana, Sonar Tori, Sanchita, and modern poetry exploring themes of nationalism and social justice	Human Values & Gender	Analyzes the exploration of human values, gender roles, and social justice in modern Bengali poetry.
CC - 14 (TH+TU)	History of Sanskrit, English, and Neighboring Literatures	History of English literature, Sanskrit literature, and neighboring literatures	Human Values	Discusses the influence of neighboring literary traditions on Bengali literature, focusing on the exchange of cultural and ethical values.
DSE-A-6-3 (TH+TU)	Bengali Detective Literature	Works like Shonku Samagra by Satyajit Ray, Shojarur Kanta, and Sab Bhuture	Professional Ethics	Explores the ethical dilemmas in detective literature and the portrayal of moral justice.
DSE-B-6-3 (TH+TU)	Biographical, Autobiographical, and Travel Literature	Works like Chaitanya Bhagavata, Deshe Bideshe by Mujtaba Ali, and Jibansmriti	Human Values	Discusses the representation of personal and cultural values in biographical and autobiographical writings.







### Government of West Bengal OFFICE OF THE PRINCIPAL AUGANA Azad College

**Maulana Azad College** 8, RAFI AHMED KIDWAI ROAD, KOLKATA 700013, INDIA



Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

#### **DEPARTMENT OF BOTANY:** UNDERGRADUATE COURSE IN BOTANY (B.Sc.)

#### UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.ac.in/pdf/UG-Botany-CBCS-Syllabus.pdf</u>

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC-1	PHYCOLOGY AND MICROBIOLOGY	PHYCOLOGY: General account, Classification, Cyanobacteria, Bacillariophyta, Life History. MICROBIOLOGY: Details about the various aspects of Viruses and Bacteria	Environment & Sustainability	The study of phycology and microbiology focuses on understanding the role of algae and microorganisms in ecosystems, emphasizing their importance in maintaining environmental balance and contributing to sustainability.
CC-2	MYCOLOGY AND PHYTOPATHOLOGY	MYCOLOGY: General Account, Classification of Fungi, Life History of some genera, Mycorrhiza, Lichen. PHYTOPATHOLOGY: Terms and Definitions, Host-Parasite Interaction, Study of plant diseases & Disease Management	Environment & Sustainability	This course covers the ecological roles of fungi and plant diseases, highlighting the importance of fungi in ecosystems and the sustainable management of plant health.
CC-3	PLANT ANATOMY	Anatomy: Cell wall, Stomata, Stele, Primary structure of stem and root, Secondary growth, Mechanical tissues, Developmental Anatomy, Ecological Anatomy, Scope of plant anatomy	Environment & Sustainability	The course explores plant anatomy with a focus on ecological anatomy, emphasizing the structural adaptations of plants to their environments, which are crucial for sustainable agriculture and environmental conservation.
CC-4	ARCHAEGONIATE	BRYOPHYTES: General Account, Life History, Phylogeny & Importance. PTERIDOPHYTES: General Account, Life History, Telome Concept, Heterospory & Economic Importance. Gymnosperms: Classification, Progymnosperms, Life History & Economic Importance	Environment & Sustainability	The course discusses the ecological significance of bryophytes, pteridophytes, and gymnosperms, underscoring their roles in maintaining biodiversity and their contributions to sustainable forestry and agriculture.
CC-5	PALAEOBOTANY & PALYNOLOGY	PALAEOBOTANY & PALYNOLOGY: Introduction, Plant Fossil, Fossil Pteridophytes, Fossil Gymnosperms, Indian Gondwana System, Palynology, Applied Palynology	Environment & Sustainability	This course examines plant fossils and pollen, providing insights into the history of plant life and environmental changes, which are essential for understanding past climates and

College Mau





# *Government of West Bengal* OFFICE OF THE PRINCIPAL Maulana Azad College 8, rafi ahmed kidwai road, kolkata 700013, india



Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
				guiding sustainable practices today.
CC-6	REPRODUCTIVE BIOLOGY OF ANGIOSPERMS	Morphology of Angiosperms, Embryology: Pre-fertilisation changes, Fertilisation, Post- fertilization changes, Apomixis & Polyembryony	Environment & Sustainability	The course covers the reproductive biology of flowering plants, emphasizing the processes that contribute to plant diversity and sustainability in ecosystems.
CC-7	PLANT SYSTEMATICS	Introduction, Nomenclature, Systems of classification, Phenetics and Cladistics, Data sources in Taxonomy, Diagnostic features, Systematic position (Bentham & Hooker and Cronquist), Economically important plants (parts used and uses)	Environment & Sustainability	The course emphasizes the classification and systematic study of plants, focusing on economically important species and their sustainable use in agriculture and industry.
CC-8	PLANT GEOGRAPHY, ECOLOGY AND EVOLUTION	Phytogeographical regions, Endemism, ECOLOGY: Preliminary idea, Community ecology, Conservation of Biodiversity, Evolution	Environment & Sustainability	This course explores plant distribution, ecological interactions, and evolutionary processes, highlighting the importance of biodiversity conservation and sustainable management of ecosystems.
CC-9	ECONOMIC BOTANY	Origin of cultivated crops, rice and wheat, Legumes, Sugar and starches, Spices, Beverages, Oil and fats, Drug- yielding plants, Timber, Fibers	Environment & Sustainability	The course discusses the sustainable use of plant resources, emphasizing the need for responsible management of agricultural and economic plants to ensure long-term environmental health.
CC-10	GENETICS	Introduction, Linkage, Crossing over and Gene Mapping, Epistasis and Polygenic inheritance in plants, Aneuploidy and Polyploidy, Chromosomal aberration, Mutation, Structural organization of Gene	Environment & Sustainability	This course explores genetic principles and their applications, focusing on the implications of genetic diversity and modification for sustainable agriculture and environmental conservation.
SEC B	Mushroom Culture Technology	Introduction, Cultivation technology, Storage and nutrition, Food preparation	Environment & Sustainability	The course promotes sustainable agricultural practices through the cultivation of mushrooms, emphasizing the importance of food security and environmental stewardship.







# *Government of West Bengal* OFFICE OF THE PRINCIPAL Maulana Azad College 8, rafi ahmed kidwai road, kolkata 700013, india



Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC-11	CELL AND MOLECULAR BIOLOGY	Origin and Evolution of Cells, Nucleus and Chromosome, Cell cycle and its regulation, MOLECULAR BIOLOGY: DNA Replication, Transcription and Translation (Prokaryotes & Eukaryotes), Gene Regulation, Genetic Code, Recombinant DNA Technology, Restriction endonuclease, Development and causes of Cancer	Environment & Sustainability	The course examines cellular and molecular processes, highlighting the importance of genetic and cellular research in understanding and addressing environmental challenges and sustainability.
CC-12	BIOCHEMISTRY	Biochemical Foundations, Molecules of life, Energy flow and enzymology, Cell membrane, Phosphorylation	Environment & Sustainability	The course focuses on the biochemical processes that sustain life, emphasizing the role of biochemistry in understanding and promoting sustainable environmental practices.
DSE A	INDUSTRIAL AND ENVIRONMENTAL MICROBIOLOGY	Scope of microbes, Bioreactors/ Fermenters, Microbial production of industrial products, Microbial enzymes, Microbes and quality of environment, Microbial flora of water, Microbes in agriculture	Environment & Sustainability	The course discusses the role of microbes in environmental management and sustainable agriculture, emphasizing the importance of microbial processes in maintaining environmental quality and supporting sustainable industrial practices.
DSE B	PLANT BIOTECHNOLOGY	Plant tissue culture, Callus culture, Plant regeneration, Haploid Culture, Protoplast Culture, Plant Genetic Engineering	Environment & Sustainability	The course addresses the ethical implications of genetic engineering in plants, highlighting the need for responsible biotechnological practices that contribute to sustainable agricultural development while considering the potential risks and benefits.
CC-13	PLANT PHYSIOLOGY	Plant-water relations, Mineral nutrition, Organic Translocation, Plant Growth Regulators, Photomorphogenesis, Seed dormancy, Physiology of Senescence and Ageing	Environment & Sustainability	The course explores the physiological processes in plants, emphasizing their adaptation to environmental conditions and their significance in promoting sustainable agricultural practices.









Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC-14	PLANT METABOLISM	Concept of metabolism, Photosynthesis, Respiration, Nitrogen Metabolism, Lipid metabolism, Signal transduction	Environment & Sustainability	This course focuses on the metabolic processes in plants, highlighting their role in sustaining life and contributing to environmental sustainability.
DSE A	MEDICINAL AND ETHNOBOTANY	Medicinal botany, Pharmacognosy, Secondary metabolites, Pharmacologically active constituents, Ethnobotany and folk medicine	Environment & Sustainability	The course explores traditional and modern uses of medicinal plants, emphasizing the need for sustainable harvesting practices and the conservation of medicinal plant biodiversity.
DSE B3	RESEARCH METHODOLOGY	Basic concepts of research, Overview of biological problems, Methods to study plant cells/ tissue structure, Plant micro-techniques, The art of scientific writing and its presentation	Professional Ethics	The course teaches the fundamentals of research methodology, emphasizing the importance of ethical conduct in scientific research and the responsible communication of scientific findings.
DSE B	Natural resource management	Natural resources, Sustainable utilization, Land, Water, Biological Resources, Forests, Contemporary practices in resource management, National and international efforts in resource management and conservation	Environment & Sustainability	The course focuses on the sustainable management of natural resources, stressing the importance of ethical stewardship of the environment. It promotes human values by advocating for the conservation and equitable distribution of resources.









8, KAFI AHMED KIDWAI KOAD, KOLKATA 700013, INDIA Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

#### ★ <u>DEPARTMENT OF CHEMISTRY:</u> UNDERGRADUATE COURSE IN CHEMISTRY (B.Sc.)

#### UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.ac.in/pdf/UG-Chemistry\_syl.pdf</u>

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC-1	Inorganic Chemistry-1	Redox reactions, Acid-Base reactions, Extra nuclear structure of the atom	Environment & Sustainability	Understanding redox and acid-base reactions helps in addressing environmental issues such as pollution and waste management.
	Organic Chemistry-1A	Bonding and Physical Properties, Reaction Mechanism	Human Values	The study of bonding and reactions emphasizes the importance of chemical safety and ethical practices in the laboratory.
CC-2	Physical Chemistry-1	Kinetic Theory and Gaseous State, Transport processes, Chemical Kinetics	Environment & Sustainability	The concepts help in understanding environmental processes such as gas emissions and the kinetics of pollutants in the atmosphere.
CC-3	Organic Chemistry-2	Nucleophilic Substitution Reactions, Elimination Reactions, Stereochemistry	Environment & Sustainability	Understanding chemical reactions and stereochemistry aids in developing sustainable synthetic methods in chemistry.
CC-5	Physical Chemistry-2	Chemical Thermodynamics, Chemical Equilibrium, Electrochemistry	Environment & Sustainability	The principles of thermodynamics and electrochemistry are essential for energy conservation and the development of sustainable energy sources.
CC-6	Inorganic Chemistry-3	Chemistry of s and p block elements, Coordination Chemistry, Noble Gases	Environment & Sustainability	Knowledge of inorganic chemistry helps in developing materials and processes that are environmentally friendly and sustainable.
CC-8	Organic Chemistry-4	Organic Spectroscopy, Logic of Organic Synthesis	Environment & Sustainability	Spectroscopic techniques are crucial for environmental analysis and monitoring of pollutants.
SEC-A2	Analytical Clinical Biochemistry	Proteins, Enzymes, DNA and RNA, Biochemistry of Disease	Human Values	Understanding biochemical processes and disease mechanisms emphasizes the ethical considerations in clinical research and healthcare.









Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
SEC-B2	Pesticide Chemistry	General Introduction to Pesticides, Organophosphates, Carbamates	Environment & Sustainability	Study of pesticides is vital for addressing environmental issues related to agriculture and the impact of chemicals on ecosystems.
DSE-A3	Green Chemistry and Chemistry of Natural Products	Principles of Green Chemistry, Designing Chemical Synthesis, Green Synthesis, Future Trends in Green Chemistry	Environment & Sustainability	Green chemistry principles are crucial for promoting sustainable chemical practices and reducing environmental impact through eco- friendly processes.
DSE-B4	Dissertation	Research/Review on a topic related to chemistry.	Professional Ethics	The dissertation emphasizes the importance of academic integrity, ethics in research, and responsible conduct in scientific inquiry.







### Government of West Bengal OFFICE OF THE PRINCIPAL Maulana Azad College

HAAAA COLLEGE \*

**8, RAFI AHMED KIDWAI ROAD, KOLKATA 700013, INDIA** Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

#### ★ <u>DEPARTMENT OF COMMERCE:</u> UNDERGRADUATE COURSE IN COMMERCE (B.COM.)

#### UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.ac.in/pdf/Course-Structure-Syllabi-BCom.pdf</u>

Paper	Paper Name	Brief Description of the Topics	Crosscutting	Descriptions about the
Code	•		Issues	Crosscutting Issues
CC 1.2	Principles of Management	Introduction, Planning, Motivation and Control, Organizing, Directing and Staffing, Coordination	Professional Ethics, Human Values	Discusses ethical leadership, responsible management practices, and the importance of human values in organizational settings.
CC 1.1	Financial Accounting	Depreciation, Inventory Valuation, Financial Accounts, Adjusting Entries, Final Accounts of Non-Profit Concerns	Professional Ethics, Human Values	Emphasizes ethical considerations in financial reporting and the impact of accounting practices on stakeholders.
CC 1.1	Business Laws	The Indian Contract Act 1872, Sale of Goods Act 1930, Partnership Laws, Consumer Protection Act 1986	Professional Ethics, Gender	Covers legal frameworks that promote ethical business practices and consumer rights, including gender considerations in law.
CC 2.1	Company Law	Formation of Company, Corporate Meeting, Share and Debenture, Introduction to Company Law	Professional Ethics, Human Values	Focuses on ethical governance, transparency, and accountability in corporate settings.
CC 2.2	Marketing Management & Human Resource Management	Consumer Behaviour, Recruitment & Selection, Training & Development, Job Evaluation & Performance Appraisal	Gender, Human Values	Addresses gender inclusivity in recruitment and HR practices, and the role of human values in employee development.
CC 3.2	Indian Financial System	Capital Market, Money Market, Financial Institutions, Financial Services, Investor Protection	Professional Ethics, Environment & Sustainability	Highlights ethical investment practices and the importance of investor protection in a sustainable financial system.
CC 4.3	Entrepreneurship Development and Business Ethics	Business Ethics, Corporate Governance, Ethics in Management, Modernization of Business Startups	Professional Ethics, Human Values	Focuses on ethical decision- making and corporate governance in entrepreneurship, fostering a culture of integrity and respect.
GE 4.1	Microeconomics II & Indian Economy	Microeconomics concepts, Indian Economy overview	Environment & Sustainability, Gender	Examines the economic implications of gender issues and sustainability practices in the Indian context.







# *Government of West Bengal* OFFICE OF THE PRINCIPAL Maulana Azad College 8, rafi ahmed kidwai road, kolkata 700013, india



Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
DSE 5.1	Economics II & Advance Business Mathematics	Advanced economic theories, business mathematics	Environment & Sustainability	Analyzes the impact of economic practices on environmental sustainability and the role of advanced mathematics in business decisions.
DSE 6.1	Financial Reporting & Financial Statement Analysis	Holding Company Accounts, Fund Flow Statement, Accounting Standards, Financial Statement Analysis	Professional Ethics, Human Values	Emphasizes ethical financial reporting and analysis practices, ensuring transparency and accountability.
DSE 6.2	Financial Management	Leverage and Capital Structure Theories, Dividend Decisions, Working Capital Management, Capital Expenditure Decision	Professional Ethics, Environment & Sustainability	Discusses ethical financial management practices and their role in sustainable business strategies.









8, KAFI AHMED KIDWAI KOAD, KOLKATA 700013, INDIA Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

#### ★ <u>DEPARTMENT OF ECONOMICS</u>: UNDERGRADUATE COURSE IN ECONOMICS (B.Sc.)

#### UG CBCS syllabus: https://maulanaazadcollegekolkata.ac.in/pdf/UG-Economics.pdf

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC - 1	Introductory Microeconomics	Exploring Economics, Demand and Supply, Market Sensitivity and Elasticity, Government Intervention, Utilitarian Approach	Human Values, Environment & Sustainability	Discusses the role of utilitarianism in economic decisions and the impact of government interventions on sustainability.
GE - 1	Introductory Microeconomics	Exploring Economics, Supply and Demand, Market Structures, Input Markets	Human Values	Covers gender aspects in market structures and the influence of human values on economic behavior.
CC - 3	Introductory Macroeconomics	National Income Accounting, Income Determination, The Classical System	Environment & Sustainability	Examines the relationship between economic policies and environmental sustainability.
GE - 2	Introductory Macroeconomics	National Income Accounting, The Simple Keynesian Model, Money Supply, Inflation, The External Sector	Environment & Sustainability	Analyzes the impact of macroeconomic factors on environmental sustainability and economic stability.
CC 5	Intermediate Microeconomics – I	Theories of Consumer Behaviour, Production and Costs, Market Structure, Input Market in Perfect Competition	Gender, Human Values	Addresses how consumer behavior theories can incorporate gender considerations and the role of human values in market efficiency.
CC 6	Intermediate Macroeconomics- I	IS-LM Model, Aggregate Demand and Supply, Money Supply, Inflation, Unemployment	Environment & Sustainability	Focuses on how macroeconomic models address sustainability issues and the impact of inflation on environmental policies.
SEC-3- A(1)	Rural Development	Aspects of Rural Development, Panchayats, Rural Credit and Self Help Groups, Government Programmes	Gender, Human Values, Environment & Sustainability	Evaluates rural development programs through gender perspectives, human values, and their impact on sustainability.

College Mau







Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
GE - III	Issues in Economic Development and India	Economic Development, Poverty, Inequality, Development Strategies, International Organizations	Gender, Human Values, Environment & Sustainability	Discusses the interplay between economic development strategies and their effects on gender equality and environmental sustainability.
CC8	Intermediate Microeconomics II	Imperfect Market Structure, Input Market under Imperfect Competition, General Equilibrium, Efficiency and Welfare	Professional Ethics, Human Values	Focuses on ethical implications of market structures and the importance of human values in ensuring market efficiency.
CC9	Intermediate Macroeconomics II	New Classical and New Keynesian Theories, Economic Growth	Environment & Sustainability	Analyzes how different macroeconomic theories address environmental sustainability and growth.
SEC-4- B(2)	Research Methodology	Methodological Issues, Managerial Economics	Professional Ethics, Human Values	Emphasizes ethical research practices and the role of human values in economic research and managerial decisions.
GE4	Indian Economic Policies	Macroeconomic Policies, Agriculture, Industry, Indian Foreign Trade	Environment & Sustainability	Examines how Indian economic policies impact environmental sustainability and economic performance.
CC11	International Economics	Trade Theories, Trade Policy, Open Economy Macroeconomics, Balance of Payments	Environment & Sustainability	Discusses the environmental impact of international trade policies and sustainable trade practices.
CC12	Indian Economy	Economic Development since Independence, Population and Human Development, Economic Reforms	Gender, Human Values, Environment & Sustainability	Evaluates economic development with a focus on gender impacts, human values, and sustainability.
DSE-5- B(1)	Comparative Economic Development (1850-1950)	Economic Development Strategies, Regional Development	Gender, Environment & Sustainability	Analyzes historical development strategies with a focus on gender issues and environmental sustainability.









Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
DSE-6- B(2)	Environmental Economics	Market Failure, Environmental Policy, International Environmental Problems, Measuring Environmental Costs and Benefits	Environment & Sustainability	Provides insights into the economic analysis of environmental policies and the measurement of environmental costs and benefits.
DSE-6- A(2)	Money and Financial Markets	Financial Institutions, Markets, Instruments, Financial Innovations, Banking System	Professional Ethics, Environment & Sustainability	Focuses on ethical considerations in financial markets and the impact of financial practices on sustainability.









8, KAFI AHMED KIDWAI KOAD, KOLKATA 700013, INDIA Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

#### \* <u>DEPARTMENT OF ENGLISH:</u> UNDERGRADUATE COURSE IN ENGLISH (B.A.)

#### UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.ac.in/pdf/UG-English-syllabus.pdf</u>

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC - 1	History of Literature and Philology	Restoration Comedy of Manners, Eighteenth Century Novels, Pre- Romantic Poetry, Romantic Non- fiction Prose	Human Values	Examines how historical literary movements reflect changing human values and societal norms.
CC - 3	Indian Writing in English	Poetry by Derozio, Dutt, Das, Ramanujan, Ezekiel, Mahapatra; Drama by Mahesh Dattani	Gender, Human Values	Highlights gender issues and human values through Indian poetry and drama, reflecting on cultural and social dynamics.
CC - 4	British Poetry and Drama (14th - 17th Century)	Drama by William Shakespeare, including "Macbeth"; Wife of Bath's Prologue	Gender, Human Values	Analyzes gender roles and human values as depicted in early British drama and poetry.
GE - 2	Essays, Drama, and Novel	Essays by Charles Lamb and George Orwell; Drama: As You Like It, Arms and the Man; Novel: The Mayor of Casterbridge	Gender, Human Values, Environment & Sustainability	Explores gender roles, human values, and environmental themes in essays, drama, and novels.
CC - 6	Popular Literature	Agatha Christie, The Murder of Roger Ackroyd	Human Values	Discusses moral and ethical dilemmas portrayed in popular literature and their implications on human values.
CC - 7	British Poetry and Drama (17th and 18th Century)	The Rover (Part I) by Aphra Behn	Gender	Focuses on gender issues in the context of 17th and 18th-century British literature.
CC - 8	18th Century British Literature	Works by Samuel Johnson, The Way of the World, Elegy Written in a Country Churchyard by Thomas Gray	Human Values, Environment & Sustainability	Examines human values and environmental reflections in 18th- century British literature.
CC - 9	British Romantic Literature	Works by William Wordsworth, Samuel Taylor Coleridge, P.B. Shelley, John Keats, William Blake	Environment & Sustainability	Highlights the Romantic era's engagement with nature and sustainability.









Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC - 11	Women's Writings	Amar Jiban by Rassundari Devi	Gender	Focuses on gender issues and the representation of women's experiences in literature.
CC - 12	Early 20th Century British Literature	George Bernard Shaw's Pygmalion, Joseph Conrad's Heart of Darkness	Human Values	Analyzes early 20th-century literature's exploration of human values and ethical questions.
DSE - A2	Literary Theory and Criticism	Tradition and the Individual Talent by T.S. Eliot	Professional Ethics, Human Values	Discusses the role of professional ethics and human values in literary theory and criticism.
DSE - B2	Postcolonial Literature	Poetry by Pablo Neruda, Derek Walcott, David Malouf, Mamang Dai; Novel by Chinua Achebe	Gender, Human Values, Environment & Sustainability	Explores postcolonial themes, focusing on gender issues, human values, and environmental concerns in literature.
DSE - A3	Partition Literature	The Marooned by Protiva Basu; The Final Solution by Manik Bandyopadhyay; Poetry by Sahir Ludhianvi, Birendra Chattopadhyay, Sankha Ghosh	Gender, Human Values, Environment & Sustainability	Examines the impact of partition on gender, human values, and environmental issues through literature.
DSE - B3	Autobiography	Autobiography of an Unknown Indian by Nirad C. Chaudhuri, BK. 1	Human Values	Reflects on personal narratives and their engagement with human values and cultural identity.

**Bil College** Maulan ata-1







8, KAFI AHMED KIDWAI KOAD, KOLKATA 700013, INDIA Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

#### ◆ <u>DEPARTMENT OF ENGLISH:</u> POSTGRADUATE COURSE IN ENGLISH (M.A.)

#### PG CBCS syllabus: <u>https://maulanaazadcollegekolkata.ac.in/pdf/Eng-PG-CBCS-SYLLABUS.pdf</u>

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC - 1	British Literature from Geoffrey Chaucer to the Beginning of English Civil War	Milton's essays: "Areopagitica", "of Education"	Professional Ethics, Human Values	Milton's "Areopagitica" addresses freedom of the press and censorship, reflecting on professional ethics and human values related to intellectual freedom.
CC - 2	Elizabethan and Jacobean Drama	The Spanish Tragedy - Thomas Kyd; Volpone - Ben Jonson	Human Values	Examines themes of justice, morality, and the human condition in Elizabethan and Jacobean drama.
CC - 3	British Literature from the English Civil War to the French Revolution	George Etherege - The Man of Mode	Gender, Human Values	Explores societal norms and gender roles in the context of Restoration comedy.
CC - 4	British Literature from the French Revolution to 1836	Poems of Keats	Human Values	Analyzes Keats' exploration of beauty, nature, and human experience, reflecting on human values.
CC - 5	British Literature from the Reign of Queen Victoria (1837 to 1901)	Matthew Arnold – Culture and Anarchy (IV. Hebraism and Hellenism and V. PORRO UNUM EST NECESSARIUM)	Human Values	Arnold's critique on culture and society addresses issues of moral and ethical values.
CC - 6	British Literature from the End of the Victorian Age to 1945 – Poetry and Novel	Graham Greene: Brighton Rock; Ash Wednesday - T. S. Eliot	Professional Ethics, Human Values	Explores ethical dilemmas and moral questions through Greene's and Eliot's works.
CC - 7	British Literature from the End of the Victorian Age to 1945 – Drama, Short Fiction and Non-Fiction	T. S. Eliot - Tradition and the Individual Talent; Baudelaire; What is a Classic?; Man and Superman by Shaw	Professional Ethics, Human Values	Eliot's and Shaw's works reflect on tradition, individual talent, and societal ethics.

College Mau





# *Government of West Bengal* OFFICE OF THE PRINCIPAL Maulana Azad College 8, rafi ahmed kidwai road, kolkata 700013, india



Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC - 8	British Literature from 1946 to the Present - Drama, Non-Fiction and Short Fiction	Atonement	Gender, Human Values	Explores themes of guilt, forgiveness, and redemption, reflecting on gender roles and human values in post-war literature.
CC - 9	British Literature from 1946 to the Present - Drama, Non-Fiction and Short Fiction	LEAR; Roald Dahl - The Landlady and The Visitor	Human Values	Analyzes themes of power, authority, and morality in contemporary literature.
DSE - III	Indian Literature	Raja Rao - Kanthapura	Human Values	Examines the impact of colonialism and the struggle for independence on Indian society and human values.
DSE - IV	Modern European Literature	Mother Courage and her Children - Bertolt Brecht	Human Values, Professional Ethics	Brecht's play addresses the ethics of war and human suffering, reflecting on professional and human values.
CC - XI	Literary Criticism I	Aristotle's Poetics, The Art of Poetry - Horace, Coleridge's Biographia Literaria	Professional Ethics	Aristotle's and Coleridge's works discuss the role of ethics and critical analysis in literature.
CC - XII	Literary Criticism II	Roland Barthes, "Death of an Author", Dream on a Monkey Mountain, The Handmaid's Tale, Derrida	Gender, Human Values	Barthes' and Derrida's critiques challenge traditional notions of authorship and authority, reflecting on gender and human values.
DSE XII	Modernism and Postmodernism	Gabriel Garcia Marquez: One Hundred Years of Solitude	Human Values	Marquez's novel addresses themes of solitude, memory, and human experience, reflecting on broader human values.

College Maulan kata-1







8, KAFI AHMED KIDWAI KOAD, KOLKATA 700013, INDIA Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

#### **DEPARTMENT OF HISTORY:** UNDERGRADUATE COURSE IN HISTORY (B.A.)

#### UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.ac.in/pdf/UG-History-Syllabus.pdf</u>

Paper	Paper Name	Brief Description of the	Crosscutting	Descriptions about the
Code	i uper raine	Topics	Issues	Crosscutting Issues
CC - 1	History of India (From the Earliest Times to C300 BCE)	Hunter gatherers, Harappan Civilization, Cultures in Transition	Environment & Sustainability	Examines early human interactions with the environment and the impact of ancient civilizations on ecological systems.
CC - 2	Social Formations and Cultural Patterns of the Ancient World other than India	Slave Society in Classical Greece, Greek Polis and Culture, Bronze Age Civilization	Human Values, Professional Ethics	Discusses the ethical implications of slave societies and the evolution of human values in ancient cultures.
CC - 3	History of India (c 300 BCE to c.750 CE)	Changing Political Formations, Economy and Society, Cultural Developments, Religion, Philosophy and Society	Human Values, Gender	Explores societal changes and their impact on human values and gender roles during early historical periods.
CC - 4	Social Formations and Cultural Patterns of the Medieval World other than India	Feudal Society, Judaism and Christianity under Islam, Crisis of the Roman Empire, Religion and Culture in Medieval Europe	Gender, Human Values	Analyzes gender roles and human values within medieval societies and religious contexts.
CC - 5	History of India III (c. 750-1206)	Early Medieval India, Political Structures, Agrarian Structure & Social Change, Trade and Commerce, Religious and Cultural Developments	Human Values, Environment & Sustainability	Investigates the impact of agrarian structures and trade on social changes and environmental sustainability.
CC - 6	Rise of Modern West -I	Economic Developments, Renaissance, Reformation Movements, Counter Reformation	Professional Ethics, Human Values	Examines the ethical and human values shifts during the Renaissance and Reformation periods.
CC - 7	History of India IV (c.1206-1526)	Delhi Sultanate, Society and Economy, Sultanate Political Structure, Religion and Culture	Human Values, Gender	Looks at the socio-economic and cultural impacts of the Delhi Sultanate on human values and gender roles.









Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
GE-3	History of India from 1206-1707	Economy Society under Mughals, Emergence of Maratha Power, Bhakti & Sufi Movement, Mughal state, Akbar to Aurangzeb	Human Values, Gender, Environment & Sustainability	Focuses on the impact of Mughal and Maratha rule on social structures, gender roles, and environmental changes.
CC - 8	Rise of Modern West -II	The English Revolution, Scientific Revolution, European Politics in 17th & 18th Century, Mercantilism, Prelude to Industrial Revolution	Professional Ethics, Human Values	Explores the ethical implications and human values shifts during major European political and scientific changes.
CC - 9	History of India IV (c.1550-1605)	Establishment of Mughal Rule, Consolidation under Akbar, Rural Society and Economy, Political and Religious Ideas	Human Values, Environment & Sustainability	Investigates how Mughal rule influenced rural society, economy, and environmental conditions.
CC - 10	History of India IV (c.1605-1750)	Mughal Empire under Aurangzeb, Visual Culture, Political Culture under Jahangir and Shah Jahan, Patterns of Regional Politics, Trade and Commerce	Human Values, Gender	Analyzes the impact of Mughal rule on social structures and gender roles.
GE-4	History of India, 1707-1950	Emergence of Independent States, Establishment of Colonial Power, Revolt of 1857, Colonial Economy, Socio-religious Movements, Gandhi and Nationalism, Communalism	Human Values, Environment & Sustainability	Examines the effects of colonialism and nationalism on human values and environmental sustainability.
CC - 11	History of Modern Europe (c.1780- 1939)	Restoration and Revolution, French Revolution & Napoleon, Capitalist Industrialization, Nationalism in 19th and 20th Century Europe, Imperialism, Diplomacy and The First World War	Professional Ethics, Human Values	Focuses on ethical considerations and human values during key events in modern European history.
CC - 12	History of India IV (c.1750-1857)	18th Century India, Colonial Power, Trade and Industry, Popular Resistance, Rural Economy and Society, Colonial State and Ideology	Human Values, Environment & Sustainability	Investigates the impact of colonial rule on Indian society, economy, and environment.

Ric College Maulan kata-1







Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
DSE A 1	History of Bengal (c.1757-1905)	Imperialism and China, Social Reforms, Protest Movements, Political History of Bengal, Partition of Bengal (1905)	Human Values, Gender	Analyzes social reforms and protest movements in Bengal, including their impact on gender roles and human values.
DSE B 1	History of Modern East Asia I-China (c.1840-1949)	Imperialism and China, History of China (c.1919- 1949)	Human Values	Examines the impact of imperialism on Chinese society and its effect on human values.
CC - 13	History of India VIII (c.1857- 1950)	Nationalism up to 1919, Gandhian Nationalism after 1919, Social and Religious Reforms, Communalism, Independence and Partition, Emergence of a new state	Human Values, Gender	Focuses on the role of nationalism and social reform in shaping human values and gender roles in India.
CC - 14	History of Modern Europe -II (c.1780-1939)	U.S.A in World Politics, Cold War, Korean War, Cuban Missile Crisis, Vietnam War, De- Stalinisation, Détente, Decline of Soviet Union, West Asian Crisis, De- colonisation	Professional Ethics, Human Values	Analyzes the ethical implications and human values during key events in modern European history and global politics.
DSE A II	History of Bengal (c.1905-1947)	Partition of Bengal, Swadeshi Movement, Gandhian Nationalism after 1919, Government of India Act 1935, Communal Politics, Peasant, Labour, Caste & Women's Movements in Bengal, Independence and Partition	Human Values, Gender	Examines the impact of political and social movements on gender roles and human values in Bengal.
DSE B II	History of Modern East Asia II-Japan (c.1868-1945)	Transition from Feudalism to Capitalism, Democracy and Militarism/Fascism, Japanese Imperialism	Human Values	Focuses on the impact of Japan's transition from feudalism to capitalism and its effects on human values.

Ric College Maulan olkata-1





### Government of West Bengal OFFICE OF THE PRINCIPAL AUIANA Azad Colleae

**Maulana Azad College** 8, RAFI AHMED KIDWAI ROAD, KOLKATA 700013, INDIA Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com

Website: https://maulanaazadcollegekolkata.ac.in

#### ◆ <u>Department of Islamic History & Culture:</u> Undergraduate Course in IHC (B.A.)

#### UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.ac.in/pdf/UG-IHC-Syllabus.pdf</u>

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC - 1	Early Islam till Prophet	Early Arabia, Prophet at Makka and Madina, Administration and Society	Human Values, Gender	The teachings of the Prophet emphasize equality, justice, and compassion, which are core human values. The role of women in early Islamic society highlights gender considerations.
CC - 2	Pious Caliphate	Pious Caliphs, Administration, Socio-economic and Cultural History	Professional Ethics, Human Values	The administration under the Pious Caliphs demonstrates the importance of ethical governance and justice. The socio-economic and cultural history offers insights into human values and community ethics.
GE - 1	Early Islam to four Pious caliphs	Early Arabia, Prophet at Makka and Madina, Administration and Society. Pious Caliphs, Administration, Socio- Economic and Cultural History	Human Values, Gender, Professional Ethics	This course covers the foundational period of Islam, emphasizing ethical leadership, gender roles, and the development of societal values.
CC - 3	History of Umayyads	Establishment, Socio-economic, Administration, cultural development	Human Values, Professional Ethics	The Umayyad period's administration and cultural policies provide lessons on leadership, ethics, and the integration of human values in governance.
CC - 4	History of Abbasids	Establishment, Socio-Cultural History and State, Administration and Economy	Human Values, Environment & Sustainability	The Abbasid era's emphasis on learning and cultural development highlights the value of human knowledge. Discussions on the economy and statecraft may include sustainable practices.
CC - 5	Muslim Spain	Political History, Social, Cultural and intellectual activities	Human Values, Gender	The rich cultural and intellectual heritage of Muslim Spain offers insights into human values, especially in terms of tolerance, coexistence, and the role of women in society.











Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC - 6	History of Medieval Europe	Breakup of Roman Empire, Political structures, Agrarian System and Economy, Religion and state, Changing Political structures, Art, Architecture and Culture	Human Values, Environment & Sustainability	The medieval period in Europe was marked by significant changes in political and social structures, offering lessons in human values and the impact of environmental practices on society.
CC - 7	History of Modern Europe	French Revolution and its Aftermath, Napoleonic Europe, Unification of Germany and Italy, Industrial Revolution, Growth of Socialistic Thought, Cultural developments, Rise of Triple Alliance and Entente, First World War and its Aftermath	Professional Ethics, Human Values, Environment & Sustainability	The French Revolution and subsequent events highlight issues of ethics, human rights, and the impact of industrialization on the environment, offering lessons in sustainability.
SEC - A	Archives and Museums	Definition and History of Development, Types of Archives, Museum Presentation and Exhibition, Role of Museum in Society	Professional Ethics, Human Values, Environment & Sustainability	The study of archives and museums emphasizes the ethical responsibilities in preserving history, the role of museums in promoting human values, and sustainable practices in the management of cultural heritage.
CC-8	Early Medieval India and Delhi Sultanate (600- 1526)	Historiography of Early Medieval India, Political Structure, Religious and Cultural Development, Society and Economy	Human Values, Gender, Environment & Sustainability	This period's historiography provides insights into human values, the role of women in society, and sustainable practices in medieval India.
CC-9	History of Mughal India (1526-1707)	Sources and Historiography, Establishment of Mughal rule, Consolidation of Mughal rule, Political History under Jahangir, Shahjahan and Aurangzeb, Rural Society and Economy, Art, Architecture and Culture	Human Values, Gender, Environment & Sustainability	The Mughal period's focus on art, architecture, and culture reflects human values. Discussions on rural society and economy may include sustainable agricultural practices and gender roles in society.
SECB	Art Appreciation	Prehistoric and Protohistoric Art, Ancient Indian Art and Architecture (c. 600 BCE to 1200 C.E.), Medieval Indian Art and Architecture (1200-1800 C.E.), Modern and Contemporary Indian Art	Human Values, Environment & Sustainability	The appreciation of art across different periods highlights the cultural values of societies and their relationship with the environment, offering lessons in sustainability and human values.







# *Government of West Bengal* OFFICE OF THE PRINCIPAL Maulana Azad College 8, rafi ahmed kidwai road, kolkata 700013, india



Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC 11	Ottoman Empire	Growth and Expansion of Ottoman Power, Transformation, Society and Culture	Human Values, Gender	The Ottoman Empire's social and cultural transformations offer insights into human values, gender roles, and the ethical considerations in governance.
DSE A1	History of Modern India (1857-1906)	Establishment of British rule and Muslims, Muslim Reformist Movement, Emergence of Political Consciousness with special reference to Foundation of Muslim League, Partition of Bengal	Professional Ethics, Human Values	The struggle for independence and the role of reformist movements highlight the importance of ethics and human values in political consciousness and societal reforms.
DSE B1	History of Modern India (1906-1947)	Political Movements, Role of Religion in Politics, Growth of Separatist Politics and Towards independence and Partition	Professional Ethics, Human Values	The period leading to independence reflects the ethical challenges in politics and the human values associated with religious and national identity.
CC 13	Sultanate Bengal (1204- 1576)	Bengal on the eve of Muslim Conquest, Foundation and Consolidation of Muslim rule in Bengal, Independent Sultans. Society, Administration, Economy and Religious Developments	Human Values, Gender, Professional Ethics	The establishment of Muslim rule in Bengal highlights issues of governance, societal values, gender roles, and the ethical responsibilities of rulers.
CC 14	Mughal Bengal and Nawabs (1576-1765)	Subhadari rule in Bengal from 1576 to 1727. Nawabi Rule in Bengal (1727-1765), Social, Political, economic and Cultural History	Human Values, Gender, Professional Ethics	The transition from Mughal to Nawabi rule in Bengal offers insights into the ethical responsibilities of rulers, societal changes, and the role of women in society.
DSE A3	Sufism in India	Origin and Development of Sufism, Principal Sufi orders in India, Introduction to Sufi Literature	Human Values, Gender	Sufism in India promotes spiritual human values, ethical living, and the inclusive role of women in religious practices.
DSE B3	Medieval Indian Architecture (13th-18th Century)	Introduction to Indo Islamic Architecture, Architecture of Delhi Sultanate and Regional Dynasties, Mughal Architecture- Origin, Growth and Culmination. Rise of Regional Schools	Environment & Sustainability, Human Values	The study of medieval architecture highlights the sustainable practices in construction and the cultural values embedded in the architectural heritage.







### Government of West Bengal OFFICE OF THE PRINCIPAL Maulana Azad College 8, rafi ahmed kidwai road, kolkata 700013, india

Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

#### **<u>DEPARTMENT OF MICROBIOLOGY</u>**: UNDERGRADUATE COURSE IN MICROBIOLOGY (B.SC.) \*

#### UG CBCS syllabus: https://maulanaazadcollegekolkata.ac.in/pdf/MCBA\_CBCS\_CU.pdf

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC-1 (TH+PR)	Introduction To Microbiology And Microbial Diversity	Unit-1: History of Development of Microbiology; Unit-2: Diversity of Microbial World; Unit-3: An Overview of scope of Microbiology	Environment & Sustainability	Understanding microbial diversity is essential for environmental sustainability as it highlights the ecological roles of microorganisms in ecosystems and their importance in biogeochemical cycles.
CC-6	Microbial Physiology And Metabolism (Theory)	Unit 1: Microbial Growth and Effect of Environment on Microbial Growth; Unit 4: Anaerobic respiration and fermentation	Environment & Sustainability	This paper explores the impact of microbial processes on the environment, emphasizing their role in waste decomposition, nutrient cycling, and bioremediation, which are key to sustaining healthy ecosystems.
CC-9	Environmental Microbiology (Theory)	Unit 1: Microorganisms and their Habitats; Unit 2: Microbial Interactions; Unit 3: Biogeochemical Cycling; Unit 4: Waste Management; Unit 5: Microbial Bioremediation; Unit 6: Water Potability	Environment & Sustainability	This course focuses on the critical role microbes play in the environment, including waste management and bioremediation, which are vital for sustainable development and the maintenance of clean water resources.
CC-14	Medical Microbiology (Theory)	Unit 1: Normal microflora of the human body and host pathogen interaction; Unit 7: Antimicrobial agents: General characteristics and mode of action	Professional Ethics, Human Values	This paper discusses the ethical use of antimicrobial agents and the significance of maintaining human health through an understanding of the normal microflora, reinforcing the need for responsible and ethical medical practices.
SEC-A1	Environmental Microbiology	Microbial Bioremediation, Waste management, Soil Microbiology, Microbial Activity in Soil and Greenhouse gases, Microbial Control of Soil-borne plant pathogens, Agriculture Biotechnology, Phytostimulation, Bioinsecticide, Biofertilizer	Environment & Sustainability	In-depth study of environmental microbiology emphasizing sustainable agricultural practices, waste management, and biotechnological applications.

College Mau







Paper	Paper Name	Brief Description of the Topics	Crosscutting	Descriptions about the
Code	T uper Munie	biter Description of the Topics	Issues	Crosscutting Issues
SEC-A2 (TH)	Biofertilizers and Biopesticides	Unit 1: Biofertilizers; Unit 4: Mycorrhizal Biofertilizers; Unit 5: Bioinsecticides	Environment & Sustainability	Promoting the use of biofertilizers and biopesticides contributes to sustainable agriculture by reducing dependence on chemical fertilizers and pesticides, thereby protecting the environment and enhancing soil health.
SEC-B1	Food Fermentation Techniques (Theory)	Unit 1: Fermented Foods; Unit 6: Probiotic Foods	Environment & Sustainability, Human Values	Food fermentation techniques support sustainable food systems by reducing waste and providing health benefits through probiotic foods, contributing to overall community well-being.
CC-11	Food And Dairy Microbiology (Theory)	Unit 3: Principles and methods of food preservation; Unit 4: Fermented foods; Unit 5: Foodborne diseases	Environment & Sustainability, Human Values	The course underlines sustainable food preservation techniques and addresses public health issues through the study of foodborne diseases, promoting the well-being of communities and sustainable food practices.
DSE-A2 (TH+PR)	Plant Pathology (Theory)	Unit 3: Plant disease epidemiology; Unit 5: Control of Plant Diseases	Environment & Sustainability	This paper addresses the management of plant diseases, which is critical for sustainable agriculture and protecting ecosystems from the adverse effects of disease outbreaks.
DSE-B2 (TH+PR)	Instrumentation And Biotechniques (Theory)	Unit 1: Microscopy; Unit 4: Spectrophotometry	Professional Ethics, Human Values, Gender	The ethical use of advanced instrumentation in biotechnology, along with equal opportunities in scientific research, reinforces professional ethics and human values, including gender inclusivity, in the scientific community.

**Bil College** Maulan kata-1







8, KAFI AHMED KIDWAI ROAD, KOLKATA 700013, INDIA Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

#### **DEPARTMENT OF PERSIAN:** UNDERGRADUATE COURSE IN PERSIAN (B.A.)

UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.in/naac\_dvv/assets/naac\_document/UG-Persian.pdf</u>

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC-2	Persian Prose (Modern)	خوش مزگیها , ابو علی سینا , ز گہوارہ تا گور , ماجرای کبوتران	Professional Ethics	خوش مزگیها, ابو علی سینا, ز گہوارہ تا Explore ethical .گور, ماجرای کبوتران considerations in various aspects of life.
CC-3	History of Persian Literature (Classical)	داستان هنبوی و ضحاک ِ Baharistan	Professional Ethics	داستان هنبوی و ضحاک . Focuses on ethical dilemmas and moral lessons in classical Persian literature.
CC-3	History of Persian Literature (Classical)	Kimiya -e- Saadat, Shaikh Saadi (Ghazal 1 and 2)	Human Values	Kimiya-e-Saadat, Shaikh Saadi (Ghazal 1 and 2). These works reflect on the essence of human values.
CC-3	History of Persian Literature (Classical)	Hafiz (Ghazal 1,2, & 8)	Gender	Hafiz (Ghazal 1, 2, & 8). Highlights the role of gender in classical Persian poetry.
CC-3	History of Persian Literature (Classical)	Qitat-e-Ibn -e-Yamin (1,3 & 5)	Professional Ethics & Human Values	Qitat-e-Ibn-e-Yamin (1, 3 & 5). Combines ethical and humanistic reflections in Persian literature.
CC-4	Persian Poetry (Classical and Modern)	کرم کتابی ، محاورہ بین خدا و انسان (اقبال ), اشک یتیم (پروین اعتصامی)	Human Values	کرم کتابی, محاوره بین خدا و انسان (اقبال), . Emphasizes اشک یتیم (پروین اعتصامی) compassion and moral values in Persian poetry.
CC-4	Persian Poetry (Classical and Modern)	چشمہ و سنگ (ملک الشعرا بھار)	Environment & Sustainability	. جشمہ و سنگ (ملک الشعرا بھار) . poem reflects on the natural environment and the importance of sustainability.
CC-7	History of Persian Literature in India during Mughal Period	در وصف کشمیر Qasaid –e- Urfi	Environment & Sustainability	Qasaid-e-Urfi در وصف کشمیر. Describes the natural beauty of Kashmir, emphasizing environmental appreciation.
CC-7	History of Persian Literature in India during Mughal Period	Rubayat-e-Sarmad (1, 2, 3, 6 and 10)	Human Values	. Rubayat-e-Sarmad (1, 2, 3, 6, and 10). Reflects on profound human values through Sufi poetry.









Paper	Donon Nome	Brief Description of the	Crosscutting	Descriptions about the
Code	Paper Name	Topics Issues		Crosscutting Issues
CC-8	Modern Persian Poetry	آ زا دی و استقلال از ابو القاسم لا هوتی حا لا چرا از شهر یا ر ِ قلب مجروح از پروین اعتصامی جا مہ مقتول ا ز نیما یو شج ,نا گفتہ از نادر نادر پور ِ نو روز آ وارگان از خلیل اللہ خلیلی	Human Values	آزا دی و استقلال از ابو القاسم لا هوتی, حا لا چرا از شېر يا ر, قلب مجروح از پروين اعتصامی, جا مہ مقتول از نيما يو شج, نا گفتہ از نادر نادر پور, نو روز آ وارگان از these poems explore دخليل الله خليلی themes of freedom, resilience, and human dignity.
CC-11	Mystical Persian Literature	حکایت ِ مرد بقال و طوطی و نی نا ) Maulana Rumi ( مہ	Professional Ethics	by حکایت ِ مرد بقال و طوطی و نی نا مہ Maulana Rumi. Reflects on ethical lessons within a mystical context.
CC-11	Mystical Persian Literature	Muntiq ut Tayr (Hekayat-e- Miwa Dadan)	Human Values	Muntiq ut Tayr (Hekayat-e-Miwa Dadan). Sufi allegories that teach about human values and spiritual growth.
CC-12	Ethical Persian Literature (Prose)	Gulistan (1,2, 3,4 and 5) by در یاد (، (، در یاد ()) Qabus Nama	Professional Ethics	Gulistan (1, 2, 3, 4, and 5) by Sheikh Saadi Shirazi, در یاد کردن پند from Qabus Nama. These prose works are foundational in teaching ethical conduct and moral reasoning.
CC-12	Ethical Persian Literature (Poetry)	Abu-Said Abul Khayr (Rubaiyyat), Umar Khayyam (Rubayyat)	Professional Ethics	Abu-Said Abul Khayr (Rubaiyyat), Umar Khayyam (Rubayyat). Ethical considerations in classical Persian poetry.
CC-14	Persian Literature in Bengal	Raza Ali Wahshat ( 1 and 2 (غزل)	Gender	Raza Ali Wahshat (1 غزل and 2). These ghazals reflect on gender issues within the context of Persian literature in Bengal.









Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

#### \* <u>Department of Physics</u>: Undergraduate Course in Physics (B.Sc.)

UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.in/naac\_dvv/assets/naac\_document/UG-Physics.pdf</u>

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC-6	Thermal Physics	Introduction to Thermodynamics, Thermodynamic potentials, Kinetic Theory of Gases, Conduction of Heat	Environment & Sustainability	Understanding the principles of thermodynamics and heat conduction contributes to better energy management and sustainability practices.
CC-7	Modern Physics	Radiation and its nature, Basics of Quantum Mechanics, Nuclear Structure, Lasers	Environment & Sustainability	The study of radiation, its effects, and safe handling is crucial for environmental protection and sustainability.
SEC A-1	Scientific Writing (Project Type)	Introduction to LATEX, Document classes, Representation of Mathematical equations	Professional Ethics	Emphasizes the ethical presentation of scientific data and integrity in scientific communication.
CC-11	Electromagnetic Theory	Maxwell's Equations, EM Wave Propagation, Polarization	Environment & Sustainability	Understanding electromagnetic waves' interaction with the environment is essential for the development of sustainable technologies.
DSE A1 (b)	Laser and Fibre Optics	Basic properties of laser, Resonators, Fiber optics, Holography	Environment & Sustainability	The applications of lasers and fiber optics in reducing energy consumption and promoting sustainable communication technologies.
DSE B1 (a)	Astronomy and Astrophysics	Stars and stellar systems, Galaxies, Cosmology	Human Values	The study of the universe fosters a sense of humility, interconnectedness, and appreciation for the place of humanity in the cosmos.







ALAD COLLEGE

8, RAFI AHMED KIDWAI ROAD, KOLKATA 700013, INDIA Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

#### ★ <u>DEPARTMENT OF PHILOSOPHY:</u> UNDERGRADUATE COURSE IN PHILOSOPHY (B.A.)

UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.ac.in/pdf/UG-Philosophy-syllabus.pdf</u>

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC - 1	Professional Ethics	Cārvāka School— Ethics	Professional Ethics	Explores the ethical theories of the Cārvāka School, focusing on materialism and its implications for professional ethics.
CC - 3	Indian Philosophy	Psychology, Social & Political Philosophy, Philosophy of Region, Human Rights	Human Values, Human Rights	Addresses social justice, human rights, and the impact of philosophical concepts on societal issues.
CC - 4	Western Philosophy	Western Philosophy	Human Values, Environment & Sustainability	Examines Western philosophical perspectives on human values and environmental ethics.
GE - 2	Western Philosophy	Locke, Berkeley, Hume, Kant	Human Values, Environment & Sustainability	Discusses contributions of Western philosophers to understanding human values and environmental ethics.
CC - 10	Inductive Logic	Inductive Logic	Human Rights	Focuses on logical reasoning related to human rights, emphasizing the ethical dimensions of inductive logic.
SEC-A	Human Rights	Human Rights	Human Rights	Analyzes the concept of human rights from various philosophical perspectives, focusing on its ethical and practical implications.
CC - 12	Indian Ethics	Indian Ethics	Professional Ethics, Human Values	Studies traditional Indian ethical theories and their application to professional conduct and human values.
DSE-A	Philosophy of Language	Philosophy of Language	Human Values	Explores the relationship between language and human values, including the ethical implications of language use.
DSE-B	Hume	An Enquiry Concerning Human Understanding	Human Values	Analyzes Hume's perspectives on human nature and values, and their impact on understanding human rights and ethics.
CC - 14	Western Ethics	Western Ethics	Professional Ethics	Examines Western ethical theories and their application to professional conduct and ethical dilemmas.
DSE-A	Practical Ethics	Practical Ethics	Professional Ethics	Focuses on practical applications of ethical theories in real-world scenarios, emphasizing professional conduct.







### Government of West Bengal OFFICE OF THE PRINCIPAL Maulana Azad College

**8, RAFI AHMED KIDWAI ROAD, KOLKATA 700013, INDIA** Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

### \* DEPARTMENT OF POLITICAL SCIENCE: UNDERGRADUATE COURSE IN POLITICAL SCIENCE (B.A.)

#### UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.ac.in/pdf/UG-PolSc-CBCS.pdf</u>

Paper	Paper Name	Brief Description of the	Crosscutting	Descriptions about the
Code		Topics	Issues	Crosscutting Issues
CC - 2	Understanding Political Theory, Approaches	Legal, Institutional, Behavioral approaches, Liberalism, Social Welfarism, post-colonial theory, and Feminism	Gender	Examines how different approaches, including Feminism, influence the understanding of gender roles and issues in political theory and practice.
CC - 3	Constitutional Government In India	Constituent Assembly, Preamble, Citizenship, Fundamental Rights, Union Executive, Union and State Legislature, State Executive, Governor and CM, Judiciary	Human Values, Environment & Sustainability	Explores Fundamental Rights, which include environmental rights and the broader ethical implications of governance on human values and sustainability.
CC - 4	Politics In India	Party System, Electoral Process, role of Business groups, Working Class and Peasants, Role of Religion, Language, Caste and Tribe, Regionalism and New Social Movements	Gender, Environment & Sustainability	Analyzes the impact of socio- economic factors and social movements on gender equity and environmental sustainability in Indian politics.
CC-7	Perspectives on International Relations	Evolution of the Discipline, Theories like Realism, Neo- Realism, Dependency, Development, Environment, Migration and Terrorism	Environment & Sustainability	Focuses on the role of environmental issues in international relations, including theories of development and global environmental challenges.
SEC-3- A(1)	Democratic Awareness Through Legal Literacy	Criminal Procedure Code, IPC, Personal Laws, Laws relating to Dowry, Sexual Harassment, Violence Against Women, Consumer Rights, RTI, Cybercrime, Anti-terrorist Laws	Gender	Addresses legal frameworks and their impact on gender equality, focusing on laws related to sexual harassment, violence against women, and broader gender rights.
CC-12	Political Sociology	Social Bases of Politics, Political Culture, Socialization, Political Participation, Political Development, Political Communication, Social Stratification, Gender and Politics, Religion and Politics, Military and Politics, Electoral Behaviour	Gender	Examines the intersection of gender with political sociology, including gendered patterns in political participation and social stratification.

College Mau





### Government of West Bengal OFFICE OF THE PRINCIPAL Maulana Azad College 8, rafi ahmed kidwai road, kolkata 700013, india



Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
DSE-5- B(2)	Development Process and Social Movements in Contemporary India	Development Process since Independence, Planning, Liberalisation, Mixed Economy, New Middle Class, Land Reform, Green Revolution, Social Movements, Approaches, Globalisation and Social Movements in India	Environment & Sustainability	Evaluates the impact of development processes and social movements on environmental sustainability and the balance between economic development and ecological preservation.
DSE-6- B(3)	Citizenship in a Globalising World	Classical Conception of Citizenship, Evolution of Citizenship and the Modern State, Citizenship and Diversity, Globalization and Global Justice, Cosmopolitan Citizenship	Human Values, Environment & Sustainability	Explores the evolution of citizenship in the context of global justice, human values, and environmental sustainability, including the challenges of globalisation and cosmopolitanism.

#### \* DEPARTMENT OF SANSKRIT: UNDERGRADUATE COURSE IN SANSKRIT (B.A.)

UG CBCS syllabus: https://maulanaazadcollegekolkata.ac.in/pdf/UG-Sanskrit-Syllabus.pdf

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC - 1	Classical Sanskrit Literature (Poetry)	Raghuvaṃśa, Kumārasambhava, Kirātārjunīya, Nītiśataka; Origin & development of mahākāvya & gītikāvya	Human Values, Ethics	Exploration of dharma, ethical dilemmas, and the moral responsibilities of individuals and rulers in classical texts.
CC - 4	Self Management in the Gita	Gītā: Cognition and emotive, Gītā: Controlling the mind	Human Values, Professional Ethics	Teachings on self-discipline, ethical decision-making, and the pursuit of righteous action.
CC-5	Classical Sanskrit Literature (Drama)	Svapnavāsavadatta, Abhijñānaśākuntalam, Critical Survey of Sanskrit Drama	Gender, Human Values	Examination of gender roles, relationships, and societal values as depicted in classical Sanskrit dramas.









Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC-6	Poetics and Literary Criticism	Introduction to Sanskrit Poetics, Forms of Kāvya Literature, Śabda-śakti and rasa-sūtra, Figures of speech and Meter	Human Values, Ethics	The role of poetry in conveying moral and ethical teachings, as well as societal values.
CC-7	Indian Social Institutions and Polity	Indian Social Institutions, Structure of Society and Values of Life, Origin and Development of Indian Polity, Cardinal Theories	Human Values, Gender, Professional Ethics	Analysis of social structures, gender roles, ethical leadership, and the importance of justice and equity in society.
CC-8	Indian Epigraphy, Palaeography and Chronology	Epigraphy, Palaeography, Study of selected inscriptions, Chronology	Human Values, Environment & Sustainability	Inscriptions that provide insights into ancient values, sustainability practices, and societal ethics.
CC-11	Vedic Literature	Introduction & Selected Suktas, Vedic Grammar, Brāhmaņa and Upaniṣad	Human Values, Environment & Sustainability	The Vedas' perspectives on the environment, cosmic order (rta), and ethical living.
DSE - 1	Darśana	Tarkabhāṣā, Saptapadārthī, Vivekacūḍāmaṇi	Professional Ethics, Human Values	Exploration of philosophical theories on ethics, logic, and moral responsibility.
CC 13	Indian Ontology & Epistemology	Essentials of Indian Philosophy, Ontology, Epistemology	Human Values, Professional Ethics	Ethical considerations in Indian philosophy, theories of knowledge, and moral ontology.
DSE-4	Veda	Eastern & Western interpretation of the Veda, Śunaḥśepopākhyāna of Aitareya Brāhmaṇa, Taittiriyopaniṣad Śikṣāvallī, Muṇḍakopaniṣad	Human Values, Environment & Sustainability	Examination of Vedic teachings on environmental stewardship, moral order, and sustainable living.









8, RAFI AHMED KIDWAI ROAD, KOLKATA 700013, INDIA Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

#### ★ <u>Department of Sociology</u>: Undergraduate Course in Sociology (B.A.)

UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.in/naac\_dvv/assets/naac\_document/UG-Sociology.pdf</u>

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC - 1	Introductory Sociology I	Sociology: Discipline & Perspective; Human Society	Human Values	Introduction to sociology as a discipline that studies human society, social structures, and human values.
CC - 2	Sociology of India – I	India: An Object of Knowledge; Indian Society: Concepts and Institutions	Human Values, Gender	Exploration of Indian society, its social institutions, and gender dynamics.
CC - 3	Introductory Sociology – II	Plurality of Sociological Perspective; Functionalism; Feminist Perspective	Gender, Human Values	Discussion of various sociological perspectives, including feminism, which addresses gender inequalities and human values.
CC - 4	Sociology of India – II	Ideas of India; Resistance, Mobilization and Change; Challenges to Civilization, State, and Society	Human Values, Gender, Professional Ethics	Examination of social change, resistance movements, and ethical challenges in Indian society.
CC - 5	Political Sociology	Contextualising the study of Politics; Political Systems; Everyday State and Local Structures of Power in India	Professional Ethics, Human Values	Study of political systems, power structures, and ethical considerations in governance and everyday politics.
CC - 7	Sociology of Gender and Sexuality	Gendering Sociology; Gender as a social construct; Gender, power, and resistance	Gender, Human Values	Analysis of gender as a social construct, gender inequalities, and the dynamics of power and resistance in society.
CC - 9	Population Studies	Population, Social Structure and Processes; Population, Gender and Migration; Population Dynamics and Development	Gender, Human Values, Environment & Sustainability	Exploration of population issues, including gender dynamics, migration, and sustainable development.
CC - 10	Social Stratification	Theories of Stratification; Identities and Inequalities; Mobility and Reproduction	Human Values, Gender	Examination of social stratification, identity formation, and inequalities based on class, caste, gender, etc.
CC - 11	Sociological Thinkers - I	Origin & development of sociology as a distinct discipline; Karl Marx; Max Weber; Emile Durkheim	Human Values, Professional Ethics	Study of foundational sociological thinkers and their contributions to understanding human values and ethical issues.









Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
DSE - A (1)	Urban Sociology	Movements and Settlements with reference to India; Urban Space: Problems with reference to India	Environment & Sustainability, Human Values	Analysis of urbanization, environmental issues, and the sustainability of urban spaces in India.
DSE - A (3)	Environmental Sociology	Envisioning Environmental Sociology; Environmental Movements in India; Global Issues	Environment & Sustainability, Human Values	Study of environmental issues, sustainability, and movements addressing environmental challenges.
DSE - B (1)	Indian Sociological Traditions	G. S. Ghurye; Radhakamal Mukerjee; Verrier Elwin; Iravati Karve; Leela Dube	Human Values, Gender	Exploration of Indian sociological traditions, focusing on key thinkers who addressed social issues, gender, and human values.
CC - 13	Sociological Thinkers - II	Talcott Parsons; Claude Levi- Strauss; G H Mead & Erving Goffman; Horkheimer, Adorno & Marcuse	Human Values, Professional Ethics	Examination of modern sociological theories and their contributions to understanding ethics, human values, and society.
DSE - B (4)	Project: Fieldwork and Dissertation	With Dissertation Students' Group	Human Values, Professional Ethics	Application of sociological research methods to study issues related to human values, ethics, and social dynamics.
CC - 14	Research Methods - II	Doing Social Research; Statistical Methods; Research Project-II	Human Values, Professional Ethics	Training in social research methods, focusing on ethical considerations and the study of human values.







### Government of West Bengal OFFICE OF THE PRINCIPAL **Maulana Azad College** 8, RAFI AHMED KIDWAI ROAD, KOLKATA 700013, INDIA

**8, RAFI AHMED KIDWAI ROAD, KOLKATA 700013, INDIA** Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

#### ★ <u>Department of Mathematics</u>: Undergraduate Course in Mathematics (B.Sc.)

#### UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.ac.in/pdf/UG-Math.pdf</u>

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC - 7	Ordinary Differential Equation & Multivariate Calculus-I	Ordinary Differential Equation; Multivariate Calculus-I	Environment & Sustainability	Differential equations and multivariate calculus are essential in modeling environmental systems, analyzing sustainability issues, and understanding complex natural processes.
CC - 9	PDE & Multivariate Calculus-II	Partial Differential Equation; Multivariate Calculus-II	Environment & Sustainability	PDEs and multivariate calculus are used to model and solve problems related to environmental dynamics, fluid mechanics, and other sustainability challenges.
CC - 10	Mechanics	Kinematics of a Particle, Newton's Laws of motion, Law of Gravitation, Stability of equilibrium	Environment & Sustainability, Human Values	Mechanics involves understanding natural forces, which is crucial for sustainability studies and fostering a respect for the physical world, aligning with human values.
CC - 11	Probability & Statistics	Sampling Distribution, Estimation of Parameters, Statistical Hypothesis	Professional Ethics, Human Values	Understanding probability and statistics is essential for making ethical decisions based on data, ensuring fairness, and promoting human values in societal and scientific contexts.
DSE - A1	Bio Mathematics	Mathematical Biology and Modelling Process, Activator and Inhibitor system model, Discrete models	Environment & Sustainability, Human Values	Bio Mathematics involves the study of biological systems and sustainability issues through mathematical modeling, promoting a deeper understanding of the environment and the ethical implications of biological research.
DSE-B1	Linear Programming & Game Theory	Formulation and Basic theory of LPP, Simplex method, Duality Theory, Game Theory	Professional Ethics, Human Values	Linear programming and game theory involve decision-making processes that require ethical considerations, particularly in resource allocation and strategic interactions, emphasizing human values.
DSE - A2	Mathematical Modelling	Monte Carlo Simulation modelling, Queuing models, Optimization modelling, Sensitivity analysis	Environment & Sustainability, Professional Ethics	Mathematical modeling is crucial in environmental management and sustainability, providing tools to address ethical issues in decision-making and optimization processes that impact human and ecological well-being.

College Mau







**8, RAFI AHMED KIDWAI ROAD, KOLKATA 700013, INDIA** Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

### ★ <u>DEPARTMENT OF STATISTICS</u>: UNDERGRADUATE COURSE IN STATISTICS (B.SC.)

#### UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.in/naac\_dvv/assets/naac\_document/UG-Stat.pdf</u>

Paper	Paper	Brief Description of	Crosscutting	Descriptions about the Crosscutting
Code	Name	the Topics	Issues	Issues
CC - 6	Demography and Vital Statistics	Concepts of fertility, mortality, migration, population growth, and demographic rates	Human Values, Environment & Sustainability	This course involves understanding human population dynamics, which is essential for sustainable development, resource management, and addressing ethical issues related to population policies.
CC - 8	Survey Sampling & Indian Official Statistics	Techniques of survey sampling, official statistics, data collection methods	Professional Ethics, Human Values	Ethical considerations in data collection and analysis are crucial, ensuring accuracy, transparency, and fairness in the interpretation of official statistics, which reflect societal values and norms.
CC - 9	Statistical Inference-I and Sampling Distributions	Estimation, hypothesis testing, confidence intervals	Professional Ethics, Human Values	This course emphasizes ethical decision- making in statistical inference, ensuring that conclusions drawn from data are valid, reliable, and do not mislead, which is critical for maintaining public trust.
CC - 10	Index Numbers and Time Series Analysis	Construction of index numbers, analysis of time series data	Environment & Sustainability	Time series analysis is vital in monitoring environmental trends, resource utilization, and sustainability metrics, providing data- driven insights for sustainable decision- making.
SEC - B	Monte Carlo Method	Simulation techniques, random number generation, statistical inference using simulations	Professional Ethics, Environment & Sustainability	Monte Carlo methods are used in environmental modeling and risk assessment, requiring ethical considerations in simulation practices and their implications on sustainability.
CC - 11	Statistical Inference-II	Advanced topics in estimation and testing of hypothesis	Professional Ethics, Human Values	Involves critical thinking about ethical issues in statistical decision-making, particularly in contexts where data-driven decisions impact human lives and societal values.
CC - 12	Linear Models and Regression	Regression analysis, linear models, diagnostics	Professional Ethics, Human Values	Ethical considerations in regression analysis include ensuring that models are used responsibly, data privacy is maintained, and results are communicated transparently, respecting human values.







## *Government of West Bengal* OFFICE OF THE PRINCIPAL Maulana Azad College 8, rafi ahmed kidwai road, kolkata 700013, india



Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

Paper	Paper	Brief Description of	Crosscutting	Descriptions about the Crosscutting
Code	Name	the Topics	Issues	Issues
DSE - B	Operations Research	Linear programming, optimization	Professional Ethics, Environment & Sustainability	Operations research involves optimization techniques that are crucial for resource allocation, production efficiency, and environmental management, all of which require ethical and sustainable practices.
CC - 13	Design of Experiments	Experimental designs, factorial experiments, ANOVA	Professional Ethics, Human Values	Design of experiments involves ethical considerations in planning and conducting experiments, ensuring the integrity of data and respecting the dignity of participants, reflecting human values.
DSE - A	Survival Analysis	Life tables, Kaplan- Meier estimator, Cox proportional hazards model	Human Values, Environment & Sustainability	Survival analysis is critical in fields like healthcare and environmental studies, where understanding the factors affecting survival is essential for ethical decision- making and sustainable practices.









**8, RAFI AHMED KIDWAI ROAD, KOLKATA 700013, INDIA** Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

### ◆ <u>Department of Urdu:</u> Undergraduate Course in Urdu (B.A.)

#### UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.ac.in/pdf/UG-Urdu-syllabus-20-7-18.pdf</u>

Paper	Paper	Brief Description of the	Crosscutting	Descriptions about the Crosscutting
Code	Name	Topics	Issues	Issues
CC - 1	Urdu Zaban-o- Adab Ki Tarikh	Evolution of Urdu language, contribution of Sufi saints, Fort William College and its literary services	Human Values, Professional Ethics	The course reflects on the role of language and literature in shaping societal values, ethical considerations in historical context, and the role of educational institutions in cultural development.
CC - 2	Classki Ghazal	Development of the classical Ghazal, its themes, and cultural significance	Gender, Human Values	The course explores the portrayal of gender and human emotions in classical Ghazal, examining how these themes contribute to broader human values and cultural understanding.
CC - 3	Qasida aur Marsiya	Study of Qasida and Marsiya, their historical and cultural context	Human Values, Environment & Sustainability	This course emphasizes the ethical portrayal of societal issues and human emotions in literature, with particular focus on themes of loss, mourning, and the environment.
CC - 4	Masnawi, Nazm aur Rubai	Exploration of Masnawi, Nazm, and Rubai, their historical development, and thematic content	Human Values, Gender, Professional Ethics	The course examines the reflection of social norms, gender roles, and ethical values in these poetic forms, highlighting their impact on shaping cultural and ethical discourse.
CC - 6	Afsana aur Drama	Overview of Urdu short stories (Afsana) and drama, their cultural and social significance	Human Values, Environment & Sustainability	This course emphasizes the ethical portrayal of societal issues and human emotions in literature, contributing to the understanding of cultural and environmental contexts.
CC - 10	Taraqqi Pasand Aur Jadid Nazm	Progressive and modern poetry, social and revolutionary themes	Human Values, Gender, Professional Ethics	The course explores themes of social justice, gender equality, and ethical issues in modern and progressive poetry, reflecting the evolving societal values and the role of literature in advocating change.
SEC-A	Urdu Adab Aur Hindustani Film	The relationship between literature and film, impact of Urdu poetry on Indian cinema	Environment & Sustainability, Human Values	This course discusses how films and literature shape and reflect societal values, including environmental awareness and human values, and how they influence public perception.









Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC - 11	Adabi Tahreekat	Various literary movements in Urdu, including the Progressive Writers' Movement and its impact on literature and society	Human Values, Professional Ethics	The course examines how literary movements addressed social and ethical issues, promoting human values, and influencing social reforms through literature.
CC - 12	Adab Aur Tanqeed	Literary criticism, relationship between literature and various disciplines	Professional Ethics, Human Values	This course delves into ethical considerations in literary criticism, exploring the connection between literature and other fields, and how they shape societal norms and values.
DSE- A(2)	Iqbal	Study of Iqbal's poetry, prose, and philosophical ideas	Human Values, Environment & Sustainability	Iqbal's work is analyzed for its emphasis on self-awareness, human dignity, and the ethical and sustainable development of society.
DSE- B(1)	Tanz-O- Mezah	Satire and humor in Urdu literature, their role in social commentary	Human Values, Professional Ethics	This course explores how satire and humor have been used as tools to highlight social issues and ethical dilemmas, encouraging reflection and promoting human values.
CC-14	Bengal Ka Urdu Adab	History of Urdu literature in Bengal, including modern and progressive movements	Human Values, Professional Ethics	This course examines the influence of Urdu literature in Bengal on social change, ethical considerations, and the promotion of human values through literary movements.
DSE- B(4)	Nazer Akbarabadi	Study of Nazir's poetry, including themes like social issues, human nature, and cultural reflections	Human Values, Environment & Sustainability	Nazir's work is analyzed for its portrayal of social and environmental issues, reflecting on human nature and the ethical implications of societal actions.
SEC- B(2)	Urdu Adab Aur Hindustani Film	Relationship between Urdu literature and Indian films, impact on society	Human Values, Environment & Sustainability	This course discusses the ethical and cultural influence of Urdu literature on Indian films and their role in shaping public awareness about human values and environmental issues.

**Bil College** Maulan kata-1





### Government of West Bengal OFFICE OF THE PRINCIPAL **Maulana Azad College** 8, RAFI AHMED KIDWAI ROAD, KOLKATA 700013, INDIA



Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

### ◆ <u>Department of Urdu</u>: Postgraduate Course in Urdu (M.A.)

#### PG CBCS syllabus: <u>https://maulanaazadcollegekolkata.ac.in/pdf/Urdu-PG-CBCS-SYLLABUS.pdf</u>

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC - 1	Lisaniyat Aur Urdu Zaban Ki Tarikh	Study of linguistics, its branches, different theories of language, and family of languages.	Human Values, Professional Ethics	This course examines the evolution of language and its role in shaping societal values and ethical considerations, emphasizing the importance of linguistic diversity and preservation.
CC - 2	Tarikh-e- Adab-e-Urdu: Aaghaz Ta Haal	The history of Urdu literature from its inception to the present, including ancient and modern trends.	Human Values, Professional Ethics	The course explores the ethical and cultural significance of Urdu literature throughout history, highlighting its role in fostering human values and cultural identity.
CC - 3	Urdu Ghazal: Classiki	Study of classical Ghazal, its development in Deccan and Northern India, and its evolution post-1857.	Gender, Human Values	The course delves into the portrayal of human emotions and gender roles in classical Ghazals, reflecting on how these themes contribute to broader societal values and cultural understanding.
CC - 4	Urdu Mein Ghair Afsanwi Nasr	Non-fiction prose in Urdu, including biographies, memoirs, and letters, with a focus on Delhi College and literary traditions.	Human Values, Professional Ethics	The course emphasizes the ethical considerations in literary expression and the portrayal of human values through non-fiction prose, reflecting on the impact of historical and cultural contexts.
CC - 5	Urdu Dastan- o-Manzoom Dastan	Exploration of Urdu narratives, including novels, novelettes, short stories, and dramas.	Human Values, Professional Ethics	This course examines the ethical and societal issues presented in Urdu narratives, focusing on how these stories reflect and influence societal norms and human values.
CC - 6	Urdu Ghazal: Jadeed	Modern Urdu Ghazal, literary movements, and new themes in post-1960 Urdu Ghazals.	Human Values, Gender	The course explores contemporary themes in modern Urdu Ghazals, including discussions on gender, social justice, and evolving human values.
CC - 7	Urdu Mein Ghair Afsanwi Nasr	Study of non-fiction prose in Urdu, including essays, sketches, and satire.	Human Values, Professional Ethics	The course focuses on the ethical considerations in non-fiction prose, particularly in essays and satire, and how these forms reflect and influence human values and societal norms.









Paper	Paper Name	Brief Description of the	Crosscutting	Descriptions about the Crosscutting
Code		Topics	Issues	Issues
CC - 8	Urdu Fiction	Development of Urdu novels and short stories, including their social and cultural significance.	Human Values, Environment & Sustainability	The course highlights the ethical portrayal of societal issues and human emotions in fiction, with a particular focus on themes related to environmental and social sustainability.
CC - 10	Iqbal: Bal Jibrayel Aur Zarb-e-Kalim Ke Hawale Se	Study of Iqbal's poetry and prose, focusing on themes in "Bal-e-Jibraeel" and "Zarb-e-Kalim."	Human Values, Environment & Sustainability	Iqbal's work is analyzed for its emphasis on human dignity, self-awareness, and sustainable development, reflecting on the ethical implications of societal actions.
CC - 11	Urdu Nazm	Study of Urdu Nazm, including Qasida, Masnavi, and Marsiya, from inception to the present.	Human Values, Professional Ethics	The course explores the reflection of social norms, gender roles, and ethical values in these poetic forms, highlighting their impact on shaping cultural and ethical discourse.
CC - 12	Urdu Nazm: Taraqqipasand Tahreek, Halqa-e- Arbab-e Zauq, Jadeediat	Study of progressive movements in Urdu poetry, including the influence of modernism and the Halqa- e-Arbab-e-Zauq.	Human Values, Professional Ethics	This course explores themes of social justice, gender equality, and ethical issues in modern and progressive poetry, reflecting the evolving societal values and the role of literature in advocating for change.
CC - 13	Bengal Mein Urdu Adab: Unisween Sadi	The history of Urdu language and literature in Bengal, including the role of Fort William College and the 1857 Rebellion.	Human Values, Professional Ethics	The course examines the influence of Urdu literature in Bengal on social change, ethical considerations, and the promotion of human values through literary movements.
D.S.E 1	Adbi Tahrikaat: Aligarh Tahrik ta Rumani Tahrik	Study of various literary movements, including the Aligarh Movement and Romanticism, with a focus on Fort William College.	Human Values, Professional Ethics	The course discusses the role of literary movements in addressing social and ethical issues, promoting human values, and influencing social reforms through literature.
GE 1	Jadid Urdu Shaeri: Nazm, Geet, Sonnet wagairah	Modern Urdu poetry, including the impact of partition on social and political changes, and the rise of modernism.	Human Values, Gender	The course analyzes modern Urdu poetry in the context of socio-political changes, exploring themes of gender equality, social justice, and the ethical implications of literary expression.









Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
CC- 14	Urdu Tanqid: Taraqqi pasand adabi tahreek se qabl	Introduction to literary criticism, including the difference between creation, criticism, and research.	Professional Ethics, Human Values	The course delves into the ethical considerations in literary criticism, exploring the connection between literature and other fields, and how they shape societal norms and values.
CC-15	Urdu Tanqid: Taraqqi pasand adabi tahreek se baad	Study of post-progressive literary criticism, including the relationship between literature and life, and the concept of practical criticism.	Professional Ethics, Human Values	This course examines the ethical implications of literary criticism and its impact on society, with a focus on the relationship between literature and real- life issues.
CC-16	Bengal mein Urdu Adab: Biswi sadi	Development of Urdu literature in Bengal during the 20th century, including modernism and various literary genres.	Human Values, Environment & Sustainability	This course analyzes the role of Urdu literature in reflecting and influencing societal values, ethical considerations, and the importance of environmental and cultural sustainability.
DSE3	Adbi Tehrikaat: Taraqqi Pasand Adbi Tehrikat Ta Jadidiyat	Study of various literary movements, from progressive to post- modern, with a focus on selected texts.	Human Values, Professional Ethics	The course discusses the influence of literary movements on societal norms and values, emphasizing the ethical responsibilities of literature in shaping public consciousness.
GE 3	Meer: Khususi Mutala	Detailed study of Meer's life and literary contributions, including his Ghazals, Qasida, Masnavi, Marsiya, and other forms.	Human Values, Professional Ethics	This course explores the ethical and cultural significance of Meer's work, analyzing how his literary contributions reflect and influence societal values and ethical considerations.







### Government of West Bengal OFFICE OF THE PRINCIPAL **Maulana Azad College** 8, RAFI AHMED KIDWAI ROAD, KOLKATA 700013, INDIA



8, KAFI AHMED KIDWAI KOAD, KOLKATA 700013, INDIA Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

#### ★ <u>Department of Zoology</u>: Undergraduate Course in Zoology (B.Sc.)

UG CBCS syllabus: <u>https://maulanaazadcollegekolkata.ac.in/pdf/syllabus/zoology/UG-Zoology-Syllabus-CU.pdf</u>

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
ZOOA- CC-1-1- TH	Non-Chordate I: Protists to Pseudocoelomates	Study of basic animal classification, various phyla including Protista, Porifera, Cnidaria, Platyhelminthes, and Nematoda.	Environment & Sustainability	Emphasizes the importance of biodiversity, the ecological role of these organisms, and the need for sustainable environmental practices to preserve diverse ecosystems.
ZOOA- CC-1-2- TH	Molecular Biology	Study of nucleic acids, DNA replication, transcription, translation, gene regulation, and molecular techniques.	Professional Ethics	Discusses ethical considerations in genetic research, the implications of gene manipulation, and the responsibilities of scientists in conducting research that respects human and environmental well-being.
ZOOA- CC-2-3- ТН	Non-Chordates II – Coelomates	Covers evolution of coelom, and study of Annelida, Arthropoda, Mollusca, Echinodermata, and Hemichordata.	Environment & Sustainability	Focuses on the ecological importance of coelomates, their role in ecosystems, and the necessity of conserving these species to maintain environmental balance.
ZOOA- CC-2-3- TH	Cell Biology	Study of cellular structures, functions, and processes including plasma membrane, organelles, cell signaling, and the cell cycle.	Professional Ethics, Human Values	Highlights ethical issues in cell research, such as stem cell use, and the significance of understanding cellular processes in medical and biotechnological advancements.
ZOOA- CC-3-5- TH	Chordata	Study of the Chordates, including Protochordata, Agnatha, Pisces, Amphibia, Reptilia, Aves, and Mammals.	Environment & Sustainability	Discusses the importance of Chordates in maintaining ecological balance, their roles in different ecosystems, and the need for conservation to prevent biodiversity loss.
ZOOA- CC-3-6- TH	Animal Physiology: Controlling and Coordinating System	Study of tissues, bone and cartilage, nervous, muscular, reproductive, and endocrine systems.	Human Values, Professional Ethics	Explores the ethical implications of physiological research on animals, the humane treatment of laboratory animals, and the respect for life in scientific studies.









Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
ZOOA- CC-3-7- TH	Fundamentals of Biochemistry	Study of the structure and function of carbohydrates, lipids, proteins, nucleic acids, enzymes, and metabolic pathways.	Professional Ethics	Emphasizes the ethical considerations in biochemical research, including the use of biochemical techniques and their impact on human health and the environment.
ZOOA- CC-4-8- TH	Comparative Anatomy & Vertebrates	Comparative study of the anatomy of various vertebrate systems including integumentary, digestive, respiratory, circulatory, and skeletal systems.	Human Values, Environment & Sustainability	Discusses the evolutionary significance of anatomical adaptations, their impact on survival, and the ethical considerations in studying vertebrate anatomy, especially in terms of conservation and sustainability.
ZOOA- CC-4-9- TH	Animal Physiology: Life Sustaining Systems	Study of the physiology of digestion, respiration, circulation, heart, thermoregulation, osmoregulation, and renal physiology.	Environment & Sustainability	Highlights the physiological adaptations of animals to their environments, the impact of environmental changes on these systems, and the importance of preserving natural habitats for physiological health.
ZOOA- CC-4- 10-TH	Immunology	Overview of the immune system, innate and adaptive immunity, antigens, immunoglobulins, cytokines, and vaccines.	Professional Ethics, Human Values	Discusses the ethical considerations in immunological research, the development and use of vaccines, and the importance of immunological health in maintaining societal well-being.
ZOOA- CC-5- 11-TH	Ecology	Study of ecosystems, energy flow, population dynamics, community structure, and biodiversity conservation.	Environment & Sustainability	Focuses on the importance of ecological balance, the impact of human activities on ecosystems, and the need for sustainable practices to preserve biodiversity and ensure environmental health.
ZOOA- CC-5- 12-TH	Principles of Genetics	Study of Mendelian genetics, linkage, mutation, sex determination, genetic inheritance, and transposable genetic elements.	Professional Ethics, Human Values	Explores the ethical issues in genetic research, including genetic modification, gene therapy, and the implications of genetic manipulation on future generations and biodiversity.









Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
ZOOA- DSE(A)- 5-1-TH	Parasitology	Study of parasitic organisms, their life cycles, and their impact on hosts.	Human Values, Professional Ethics	Discusses the ethical implications of parasitology research, the importance of controlling parasitic diseases for human health, and the humane treatment of hosts in scientific studies.
ZOOA- DSE(A)- 6-2-TH	Animal Biotechnology	Study of molecular techniques in gene manipulation, genetically modified organisms, and culture techniques.	Professional Ethics, Environment & Sustainability	Discusses the ethical considerations in biotechnological research, the impact of GMOs on ecosystems, and the importance of sustainable biotechnological practices that do not harm the environment.
ZOOA- DSE(B)- 6-2-TH	Fish & Fisheries	Study of fish classification, morphology, physiology, aquaculture, and the role of fish in research.	Environment & Sustainability	Focuses on sustainable fishing practices, the importance of conserving aquatic ecosystems, and the role of fish in maintaining environmental balance and biodiversity.

**Bil College** Maulan kata-1







**8, RAFI AHMED KIDWAI ROAD, KOLKATA 700013, INDIA** Phone: 033 2249-3737/2226-7814 e-mail: maulanaazadcollegekolkata@gmail.com Website: https://maulanaazadcollegekolkata.ac.in

### ★ <u>Department of Zoology</u>: Postgraduate Course in Zoology (M.Sc.)

PG CBCS syllabus: <u>https://maulanaazadcollegekolkata.in/naac\_dvv/assets/naac\_document/zoology-Msc-syllabus.pdf</u>

Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
ZCT 102	Ecological Theories	Population Ecology, Community Ecology, Ecological Crises and Management, Behavioural Ecology, Ecological Economics.	Environment & Sustainability	Discusses the impact of ecological crises, the importance of sustainable management practices, and the role of ecological economics in promoting environmental sustainability.
ZCT 207	Developmental Biology & Neurobiology	Principles of Developmental Biology, Metamorphosis, Organogenesis, Regenerative Biology, Neurophysiology, Neuronal Disorders.	Human Values, Professional Ethics	Explores the ethical considerations in developmental and neurobiological research, such as the humane treatment of model organisms and the implications of research on human health and well-being.
ZCT 209	Parasitology and Immunology	Study of parasitic organisms, immune system function, and interactions.	Human Values, Professional Ethics	Addresses ethical issues in parasitology and immunology research, including the humane treatment of hosts, and the importance of developing treatments that are both effective and ethically sound.
ZCT 311	Conservation Biology	Study of conservation principles, strategies for preserving biodiversity, and the impact of human activities on ecosystems.	Environment & Sustainability	Focuses on strategies for conserving biodiversity, the effects of human activities on ecosystems, and the importance of sustainable practices in conservation efforts.
ZET 315	Environmental Biology and Toxicology	Study of environmental impacts, pollution, and toxicological effects on living organisms.	Environment & Sustainability	Discusses the impact of pollutants on ecosystems and health, the importance of environmental protection, and sustainable practices to mitigate toxicological effects.
ZET 318	Applied Entomology	Insect ecology, pest management	Environment & Sustainability	Focuses on sustainable pest management practices, contributing to environmental health and agricultural sustainability.









Paper Code	Paper Name	Brief Description of the Topics	Crosscutting Issues	Descriptions about the Crosscutting Issues
ZET 328	Applied Parasitology	Parasite-host interactions, control methods	Professional Ethics & Human Values	Ethical considerations in the treatment and management of parasitic diseases highlight the importance of human values in scientific practices.
ZCT 430	Animal Behavior and Evolutionary Biology	Study of cooperation and conflict, foraging, aggression, natural selection, adaptation, evolutionary processes, and speciation.	Environment & Sustainability, Human Values	Examines how evolutionary processes impact animal behavior and adaptation, and the importance of understanding these processes for conservation and human-animal interactions.
ZCP 431	Laboratory Course for Core Subjects	Practical lab work related to core zoology subjects.	Professional Ethics	Highlights the importance of adhering to ethical practices in laboratory settings, including proper treatment of specimens and responsible conduct in scientific research.
ZCT 429	Taxonomy & Biostatistics	Study of character states, taxa, species, classification approaches, phylogenetic reconstruction, and statistical methods.	Professional Ethics, Human Values	Discusses the ethical considerations in taxonomy and biostatistics, such as accurate data representation and respect for biological diversity in classification efforts.



