**MSC ZOOLOGY**

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| **Name of the Course** | **Course Code** | **Activities/Content with a direct bearing on Employability/ Entrepreneurship/ Skill development** |
| Biosystematics, Bioinformatics and Non-chordates | Zoo-101 | 1. Bioinformatics and Evaluation of Biodiversity , Taxonomic procedure, curetting . 2. Non-chordates. 3. Biosystematics. |
| Cell Biology and Genetics | Zoo-102 | 1. Cell cycle, Biology of Cancer. 2. Cell cloning and its application, Genetic Counseling. 3. chromosomal system |
| Physiology, Histology and Histochemistry | Zoo-103 | 1.Histological preparation methods. 2.Basic requirements of a histochemical test. 3. Physiology and adaptive physiology. Blood grouping |
| Instrumentation and Biostatistics. | Zoo-104 | 1. Microscopy, Centrifugation, spectrophotometry. 2. ELISHA, RIA, PET, MRI, CAT, PCR. 3. Biostatistics. |
| Biophysics and Biochemistry | Zoo-201 | 1. Concept of Biomolecules, Principle of Bioenergetics. 2. Carbohydrate metabolism, Amino acids, proteins, Enzymes. 3. Storage of lipids, Nucleic acid |
| Microbiology And Immunology | Zoo-202 | 1. Structure of Bacteria and Viruses . 2. Host parasite interactio, production of Vaccine. Monoclonal and polyclonal antibodies 3. Immunological aspect of transplantation, Innate and adaptive immunity |
| Endocrinology and Reproductive physiolgy. | Zoo-203 | 1. Neuroendocrine system, Thyroid, pancreas, adrenal glands. 2. Steroid and their biosynthesis, sterility, IVF, Fertility control, contraception. 3. Hormone of vertebrate and invertebrates. Chemistry and biological action of hormones. |
| Evolutionary Biology and Animal Behaviour. | Zoo-204 | 1. Molecular basis of variation and inheritance, Evolution of social behavior, Evolution of Human health, Genotype-environment interaction. 2. Clasaification and analysis of behavior patterns, Hormone and behavior. 3. Geological time scale, Fossil studies. Migration of Fish and bird. |
| Chordates, Comparative Anatomy and Economic Zoology. | Zoo-301 | 1.Origin and evolution Of higher organism and Comparative analysis. 2. Vermicomposting, Fish culture, Prawn culture, Apiculture, Lac culture, seri culture. Single cell Protein. 3. Induced breeding , insect vectors of medical and veternary importance. |
| Developmental Biology | Zoo-302 | 1. Molecular aspect of developmental biology. 2. Parthenogenesis, placentation and implantation in mammals, metamorphosis and regeneration. 3. Nuclear transplantation in vertebrate embryo. |
| Environmental Biology and Wildlife Conservation. | Zoo-303 | 1. Ecosystem, Metapopulation, Species interaction, Wildlife, National and international treaties. 2. Global warming, climate change, Fate of carbon, water footprint, Waste management, Conservative methods. 3. Remote sensing , wildlife protection. |
| Allied Elective Courses; Animal physiology and Developemental Biology | Zoo-304. | 1. Blood Groups, Blood cells, Cardiac cycle, Mechanism of breathing, Renal physiology. 2. Gametogenesis, Fertilization, Hearing and Tactile response. 3. Regeneration, Blood pressure, Blood grouping. |
| Structure and Function of Vertebrates | Zoo-401B | 1. classification and evolution of Chordates, Endoskeleton, blood circulation, urinogenital system in vertebrates, Nervous system and sense organs. 2. Feeding and nutrition 3. Integument and its derivatives. |
| Population Genetics and Evolution | Zoo-402B | 1. Theories of organic evolution, Genetics of speciation, Molecular evolution. 2. Genetics of quantitative traits in populations, Origin of higher forms, Population genetics and ecology. 3. Conservation of genetic resources in diverse taxa. |
| Environmental Biology and Toxicology | Zoo-403B | 1.Energy flow in ecosystem, Environmental pollution and Green house effect on Biotic community, 2. Toxicology , Environmental Toxicology, Food additives, Principles of systemic toxicology, Genotoxicology and Regulatory  toxicology. 3.Statistical methods in toxicology, Environmental policy and Environmental impact assessment (EIA), , Residue analysis, Human toxicology. |
| Project and Project Dissertation. | Zoo-404B | Enhancement of subject specific knowledge, field experience, development of qualities like interpersonal skills, leadership qualities,computer knowledge etc. |

**MA ECONOMICS**

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| **Sl No** | **Course** | **Unit** | **Contents on Employability** | **Contents on Entrepreneurship** | **Contents on Skill Development** |
| 1 | Microeconomics | Consumer Behavior & Market Structure | Market research, consulting roles | Startup pricing strategies | Analytical thinking, game theory |
| 2 | Macroeconomics | National Income & Macroeconomic Policies | Banking & economic forecasting | Economic cycle-based investment decisions | Macroeconomic modeling & policy evaluation |
| 3 | Public Economics | Public Goods & Fiscal Policy | Government policy advisory | Public-private partnerships | Budget analysis & taxation skills |
| 4 | Indian Economy | Economic Reforms & Challenges | Development sector & economic policy research | Identifying economic sector opportunities | Economic reform impact assessment |
| 5 | Economics of Growth and Development | Growth Models & Development Strategies | International organizations & research institutes | Sustainable business development | Growth model application & scenario analysis |
| 6 | Monetary Management in an Open Economy | Exchange Rate & Monetary Policies | Central banking & financial analysis | Managing currency risks for global business | Exchange rate forecasting & financial modeling |
| 7 | Mathematical Economics | Optimization & Game Theory | Actuarial & risk analysis | Data-driven business decisions | Quantitative optimization & decision-making |
| 8 | Agricultural Economics | Agricultural Production & Policies | Agribusiness consulting | Sustainable agribusiness ventures | Economic modeling for farm efficiency |
| 9 | Environmental Economics | Environmental Valuation & Policy | Environmental impact assessment | Eco-friendly & green businesses | Cost-benefit analysis & sustainability measurement |
| 10 | Entrepreneurship and Economic Development | Startup Ecosystem & Economic Growth | Business development & startup incubators | Startup creation & scaling strategies | Business model development & financial planning |
| 11 | International Finance | Exchange Rate & Risk Management | Investment banking & forex trading | Import-export businesses | Hedging & risk management |
| 12 | International Economics | Trade Policies & Globalization | Trade policy analysis | Export-oriented business models | Tariff & trade agreement analysis |
| 13 | Basic Econometrics | Regression & Forecasting | Data analyst & econometrician | Market research-based startups | Regression modeling & econometrics |
| 14 | Financial Institutions and Market | Banking & Financial Markets | Stock market & banking roles | Fintech startups | Risk management & credit analysis |
| 15 | Financial Inclusion and Economic Development | Microfinance & Inclusive Growth | Rural banking & financial policy | Digital banking & microfinance startups | Designing inclusive financial services |
| 16 | Mathematical Methods for Economics | Mathematical Optimization & Economic Applications | Operations research & analytics | AI-driven economic analysis businesses | Mathematical programming & statistical applications |
| 17 | Dissertation | Research Methods & Data Analysis | Academic & research assistant roles | Policy consulting for startups | Data collection, interpretation & hypothesis testing |

**MA ODIA**

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| **Course Code** | **Course Name** | **Activities/ Content with direct bearing on Employability/ Entrepreneurship/ Skill Development** |
| CORE-1.1 | purana o prachina kabya kabita | Skill Development |
| CORE-1.2 | Adhunika Kabya Kabita | Employability |
| CORE-1.3 | Katha Sahitya | Skill Development |
| CORE-1.4 | Gadya Sahitya | Employability |
| CORE-2.1 | Bhasa Bijnana | Entrepreneurship/ Skill Development |
| CORE-2.2 | Odia Sahityara itihasa | Skill Development |
| CORE-2.3 | Odia natya sahitya | Skill Development |
| CORE-2.4 | Tulanatmaka sahitya samikshya tattya, anubad sahitya | Entrepreneurship |
| CORE-3.1 | Bhasatattya-1 | Entrepreneurship/ Skill Development |
| CORE-3.3 | Odia kathasahitya | Skill Development |
| CORE-3.4 | Natyatattya o Odia Natya Sahitya | Entrepreneurship/ Skill Development |
| CORE-3.5 | Adhunika kabya kabita | Skill Development |
| CORE-3.6 | Adhunika gadya sahitya | Employability |
| CORE-3.10 | Shrijagannath Sahitya | Entrepreneurship/ Skill Development |
| CORE-4.1 | Loka Sahitya | Skill Development |
| CORE-4.2 | Gabesana Padhhati | Employability |
| CORE-4.3 | Gabesana Nibandha Prastuti o Moukhika Parikhya | Employability/Skill Development |
| CORE-4.4 | Grantha Sampadana o Alochana | Employability/Skill Development |

**MA PSYCHOLOGY**

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| **Name of the Course** | **Course CODE** | **Activities/Content with a direct bearing on Employability/ Entrepreneurship/ Skill development** |
| Advanced  General Psychology-1 | Paper1 | 1-Focused and divided attention enhance productivity and efficiency in the workplace. 2-Perceptual skills help in recognizing market trends and making strategic business decisions. 3-Memory improvement strategies help in retaining and applying knowledge effectively. |
| Advanced  General Psychology-2 | Paper2 | 1-Understanding brain functions and neural processes enhances problem-solving, decision-making, and cognitive efficiency in the workplace. 2-Understanding biological and social motivations helps in recognizing market trends and making strategic business decisions. 3-Emotional regulation and stress management improve adaptability, decision-making, and overall skill development. |
| Life Span Developmental  Psychology | Paper3 | 1-Understanding human development across life stages enhances adaptability and problem-solving in professional and social environments. 2-Insights into cognitive and moral development help in strategic decision-making and leadership in business. 3-Managing psycho-social changes and aging-related challenges improves emotional intelligence and resilience in skill development. |
| Social  Psychology | Paper4 | 1-Understanding social cognition and influence enhances communication, teamwork, and decision-making in professional settings. 2-Insights into group dynamics and prosocial behavior help in leadership, negotiation, and conflict resolution in business. 3-Applying psychological principles to health and well-being improves resilience, stress management, and overall skill development. |
| Statistics,  SPSS & Computer  application | Paper5 | 1-Understanding statistical analysis and probability enhances data-driven decision-making and problem-solving in professional environments. 2-Applying statistical tests and regression models helps in market analysis, business forecasting, and strategic planning. 3-Proficiency in SPSS and data interpretation improves research skills, analytical thinking, and overall professional competence. |
| Research  Methodology | Paper6 | 1-Understanding correlation, causation, and research methods enhances critical thinking and informed decision-making in professional settings. 2-Applying experimental and qualitative research techniques helps in market analysis, consumer behavior studies, and business innovation. 3-Developing research and report-writing skills improves academic and professional credibility through proper documentation, plagiarism checks, and publishing in reputed journals. |
| Educational  Psychology | Paper7 | 1-Understanding sociocultural diversity in teaching and learning enhances inclusivity, communication, and adaptability in professional and educational settings. 2-Applying motivational strategies and classroom management techniques improves leadership, mentorship, and teamwork in various fields. 3-Implementing effective assessment methods supports performance evaluation, skill development, and data-driven decision-making. |
| Clinical  Psychology | Paper8 | 1-Understanding psychopathology and diagnostic classification enhances psychological assessment skills and informed decision-making in mental health and professional settings. 2-Recognizing and managing stress and anxiety disorders improves emotional resilience, workplace productivity, and personal well-being. 3-Awareness of personality and mood disorders helps in fostering empathy, effective communication, and conflict resolution in diverse environments. |
| Organisational  Psychology | Paper9 | 1-Understanding organizational behavior and psychological capital enhances leadership, teamwork, and workplace adaptability. 2-Applying motivation and job satisfaction theories improves employee performance, engagement, and organizational growth. 3-Developing cross-cultural awareness and communication skills fosters effective leadership and global business success. |
| Psychological  (Ability)Testing and  Seminar Presentation | Paper10 | 1-Cognitive assessment and aptitude tests enhance problem-solving, decision-making, and career planning. 2-Creativity and emotional intelligence tests improve innovation, adaptability, and interpersonal effectiveness in professional settings. 3-Standardized intelligence assessments (WISC/WAIS) aid in understanding cognitive strengths, learning potential, and skill development. |
| Special Paper-I  (Counselling/HRD) | Paper11 | 1-Understanding counseling theories and techniques enhances problem-solving, empathy, and effective communication in professional and personal settings. 2-Building strong counselor-client relationships improves trust, motivation, and the effectiveness of guidance in both online and offline environments. 3-Awareness of ethical and legal issues in counseling ensures responsible practice, confidentiality, and professionalism in various counseling contexts. |
| Special Paper- II(Counselling/HRM) | Paper12 | 1-Understanding counseling for children and adolescents helps in addressing emotional, behavioral, and academic challenges effectively. 2-Providing counseling support for adults enhances relationships, mental well-being, and career development. 3-Counseling for the elderly aids in coping with retirement, health issues, and bereavement, promoting emotional resilience. |
| Psychology: Issues and  Application | Paper13 | 1-Applying community psychology and social change strategies helps in leadership, decision-making, and effective problem-solving in diverse social and professional settings. 2-Understanding rehabilitation psychology enhances support for individuals with disabilities, substance abuse issues, and social challenges, promoting inclusion and well-being. 3-Utilizing psychology in information technology and mass media improves communication, learning strategies, and the ethical use of digital platforms. |
| Applied Psychology | Paper14 | 1-Applying psychology to entrepreneurship and economic development enhances motivation, training, and opportunities for youth and women entrepreneurs. 2-Understanding environmental and population psychology helps in addressing challenges like pollution, overpopulation, and sustainable development. 3-Utilizing psychology in defense and security improves personnel selection, mental resilience, and strategies for handling psychological warfare and military life challenges. |
| Psychological  (Personality)Testing and  Field visit | Paper15 | 1-Projective and personality assessments like the Rorschach Inkblot Test and TAT help in understanding deep-seated emotions, thoughts, and behavioral tendencies. 2-Trait-based personality tests like NEO-FFI and 16PF assess individual differences, aiding in career guidance, counseling, and organizational settings. 3-EPPS (Edwards Personal Preference Schedule) helps in evaluating personal motivation and preferences, useful for self-development and workplace productivity. |
| Internship | Paper16 | 1-Hands-on experience in psychological practice through internships enhances professional skills in hospitals, clinics, counseling centers, and research organizations. 2-Exposure to diverse psychological fields like mental health, rehabilitation, and industrial psychology helps students apply theoretical knowledge in real-world settings. 3-Presentation and evaluation of internship work develop communication skills, critical thinking, and professional competence in psychology. |
| Thesis/Term Paper | Paper17,18 | 1-Conducting research for a thesis enhances analytical skills, critical thinking, and contributes to publishable academic work. 2-Reviewing existing research for a term paper develops expertise in summarizing and synthesizing information into a structured, publishable format. 3-Engaging in research and writing prepares students for academic publishing, fostering professional growth in psychology. |
| Film  Appreciation | Paper19 | 1-Analyzing psychosocial themes in films helps students understand real-life psychological issues like mental illness, development, and rehabilitation. 2-Critical evaluation and written reports enhance analytical thinking, comprehension, and the ability to relate psychological theories to media. 3-Presenting findings before examiners develops communication skills, critical reflection, and professional articulation in psychology. |
| Observation &  Seminar Presentation | Paper20 | 1-Conducting observational studies enhances students' ability to systematically analyze behavior using scientific tools and methodologies. 2-Seminar presentations on psychological topics develop research, public speaking, and technical skills, including PowerPoint and digital tools. 3-Viva-voce assessments reinforce critical thinking, articulation of findings, and the ability to defend observations and research before evaluators. |