

MUNGASAJI MAHARAJ MAHAVIDYALAYA DARWHA

Course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students._

Course Outcome (CO's)

Department of Physics

- CO1.** The student will demonstrate a scientific knowledge of the core physics principles in Mechanics, Electromagnetism, Modern Physics and Optics.
- CO2.** The student will determine the appropriate level of technology for use in:
- a) Experimental design and implementation, b) Analysis of experimental data, and
 - c) Numerical and mathematical methods in problem solutions.
- CO3.** The student will effectively communicate their knowledge of physics from basic concepts to specific detailed presentations through a variety of oral, written, and computational modalities.
- CO4.** The student will demonstrate a purposeful knowledge of scientific literature and ethical issues related to physics.

Department Of Mathematics

- CO1.** Gain knowledge regarding the importance of Mathematics in day to day life.
- CO2.** Acquire the knowledge about the course content in the Mathematics syllabus of three year B. Sc.
- CO3.** Develop the knowledge in the concept of Algebra & Trigonometry, Differential & Integral Calculus, Differential Equations (Ordinary & Partial), Vector Analysis & Solid Geometry, Elementary Number Theory, Elements of Classical Mechanics, Advanced Calculus, Modern Algebra Groups & Rings, Mathematical Analysis, Mathematical Methods, Linear Algebra, Graph Theory.
- CO4.** Develop knowledge in creation of Power Point Presentation.
- CO5.** Develop knowledge in preparation of Mathematical Project.
- CO6.** Develop knowledge in preparation of Mathematical Posters.
- CO7.** Apply and evaluate Mathematics in day to day life to find solutions of problem.

Department of Chemistry

- CO1.** Acquire knowledge about the importance of Chemistry in day to day life.
- CO2.** Gain and understand knowledge about the course content in the Chemistry syllabus of three year B.Sc.
- CO3.** Develop the knowledge in the concept of Periodic Properties of Elements, Physical and Chemical behavior of compounds, Organic Compounds & their classification, Types of Reaction, State of matter, Thermodynamic & kinetic theory of gases etc.
- CO4.** Describe how to apply various phenomenon of Chemistry to Life
- CO5.** Apply and evaluate Chemistry in Day to Day activities to find solutions of problem.

Department of Botany

- CO1.** Critically evaluation of ideas and arguments by collection relevant information about the plants, so as recognize the position of plant in the broad classification and phylogenetic level.
- CO2.** Identify problems and independently propose solutions using creative approaches, acquired through interdisciplinary experiences, and a depth and breadth of knowledge/expertise in the field of Plant Identification.
- CO3.** Accurately interpretation of collected information and use taxonomical information to evaluate and formulate a position of plant in taxonomy.
- CO4.** Students will be able to apply the scientific method to questions in botany by formulating testable hypotheses, collecting data that address these hypotheses, and analyzing those data to assess the degree to which their scientific work supports their hypotheses.
- CO5.** Students will be able to present scientific hypotheses and data both orally and in writing in the formats that are used by practicing scientists.
- CO6.** Students will be able to access the primary literature, identify relevant works for a particular topic, and evaluate the scientific content of these works.
- CO7.** Students will be able to apply fundamental mathematical tools (statistics, calculus) and physical principles (physics, chemistry) to the analysis of relevant biological situations.
- CO8.** Students will be able to identify the major groups of organisms with an emphasis on plants and be able to classify them within a phylogenetic framework. Students will be able to compare and contrast the characteristics of plants, algae, and fungi that differentiate them from each other and from other forms of life.
- CO9.** Students will be able to use the evidence of comparative biology to explain how the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth. They will be able to use specific examples to explicate how descent with modification has shaped plant

morphology, physiology, and life history.

CO10. Students will be able to explain how Plants function at the level of the gene, genome, cell, tissue, Flower development. Drawing upon this knowledge, they will be able to give specific examples of the physiological adaptations, development, reproduction and mode of life cycle followed by different forms of plants.

CO11. Students will be able to explain the ecological interconnectedness of life on earth by tracing energy and nutrient flow through the environment. They will be able to relate the physical features of the environment to the structure of populations, communities, and ecosystems.

CO12. Students will be able to demonstrate proficiency in the experimental techniques and methods of analysis appropriate for their area of specialization within biology

Department Of Zoology

CO1 - Students gain knowledge and skill in the fundamentals of animal sciences, understands the complex interactions among various living organism

CO2 – Analyze complex interactions among the various animals of different phyla, their distribution and their relationship with the environment

CO3 – Apply the knowledge of internal structure of cell, its functions in control of various metabolic functions of organisms.

CO4 – Understands the complex evolutionary processes and behavior of animals

CO5 – Correlates the physiological processes of animals and relationship of organ systems

CO6 – Understanding of environmental conservation processes and its importance, pollution control and biodiversity and protection of endangered species

CO7 – Gain knowledge of Agro based Small Scale industries like sericulture, fish farming, butterfly farming and vermicomposting preparation.

CO8 – Understands about various concepts of genetics and its importance in human health

CO9 - Apply ethical principles and commit to professional ethics and responsibilities in delivering his duties

CO10 – Apply the knowledge and understanding of Zoology to one's own life and work

CO11 – Develops empathy and love towards the animal

Department of Computer Science

CO1. An ability to apply knowledge of computing and mathematics appropriate to the discipline.

An ability to identify, formulate, and develop solutions to computational challenges.

CO2. An ability to design, implement, and evaluate a computational system to meet desired needs within realistic constraints.

CO3. An ability to function effectively on teams to accomplish shared computing design, evaluation, or implementation goals.

CO4. An understanding of professional, ethical, legal, security, and social issues and responsibilities for the computing profession.

CO5. An ability to communicate and engage effectively with diverse stakeholders.

CO6. An ability to analyze impacts of computing on individuals, organizations, and society.

CO7. Recognition of the need for and ability to engage in continuing professional development.

CO8. An ability to use appropriate techniques, skills, and tools necessary for computing practice.

CO9. An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computational systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.

CO10. An ability to apply design and development principles in the construction of software systems of varying complexity.

CO11. Understand the role of operating system as System software. Able to compare the various algorithms and comment about performance of various algorithms used for management of memory, CPU scheduling, File handling and I/O operations.

CO12. Learn how to use lexical analyzer and parser generator tools. Understand how to build symbol tables and generate intermediate code.

CO13. Understand how to implement Object Oriented programming concept using basic syntaxes of control Structures, strings and function for developing skills of logic building activity.

CO14. Able to demonstrate understanding and use of different exception handling mechanisms and concept of multithreading for robust faster and efficient application development

Department Of Marathi

(Marathi Language & Literature)

CO1. To understand basics concepts in Marathi linguistics.

CO2. To develop attitude literary forms.

CO3. To develop Reading, Writing and Communications skills.

CO4. To study News Writing for Media. Nature themselves in soft skills and develop research attitude.

CO5. To gets the students introduced with various streams of Marathi. CO6. To develop Attitude of Marathi Linguistics & Grammar.

CO7. Information about Literary Theory.

CO8. To improve the speech of language of Marathi Geographical studies. CO9. To known about Saint Literature in Marathi.

CO10. Information about the history of Modern Marathi Literature. CO11. Study the aesthetics of Dalit Literature.

CO12. Components – Folklore concept, inspiration, purpose and types.

Department Of English

CO 1: Analyze the text for understanding content.

CO 2: Study basic English Grammar and composition for developing communication skills.

CO 3: Study and understand poetic types and trends

CO 4: Express creativity through writing poems.

CO 5: Understand and comprehend the significance and relevance of English as an International language.

CO 6: Study and understand fiction and non-fiction to learn human values.

CO 7: Learn various concepts of English language and literature teaching.

CO 8: Get acquaints with the life and culture of various nations though the works of art.

CO 9: Learn language thought literary text.

CO 10: Study and understand contemporary literary theories for the practical application to literary text.

Department Of Urdu

CO1. Discuss the reporting of any incident, function, match, excursion etc.

CO2. Discuss the expansion of given idea.

CO3. Discuss the Idioms and Proverbs.

CO4. Discuss the Essay on general topics.

CO5. Discuss the Official letters.

CO6. Discuss the Muslim education.

- CO7. Discuss the Cyber space.
- CO8. Discuss the social condition of India women.
- CO9. Discuss the Arts development in Lakhanow.
- CO10. Discuss the poetry - Gazals.
- CO11. Discuss the poetry-Mathnavi - Qasida - Marsiya.
- CO12. Discuss the life and works of poets and Gazal.
- CO13. Discuss the Umraojaan Ada.
- CO14. Discuss the poetry of literary Musaddas - e - Hali.
- CO15. Discuss the poet life and work of the authors.
- CO16. Discuss the History of Urdu Literature.
- CO17. Discuss the Hamari Shayri.
- CO18. Discuss the Iqbal`s selected poems

Department Of Persian

s

- CO1. Discuss the sources of ancient Iran.
- CO2. Discuss the Iran before and after Islam.
- CO3. Discuss the ancient ruling nation accept Aariyans.
- CO4. Discuss the Aariyans in Iran.
- CO5. Discuss the Medi, Hakhamunshi Maqduni, Salukidi, Ashkani. Sasani tribes.
- CO6. Discuss the ancient Iranian languages.
- CO7. Discuss the Parsi Bastan or Parsi Qadeem language.
- CO8. Discuss the style of Persian poetry.
- CO9. Discuss the classical Persian literature.
- CO10. Discuss the modern Persian literature.
- CO11. Discuss the basic of Persian language.
- CO12. Discuss the Persian easy writing.
- CO13. Discuss the forms of Persian poetry.
- CO14. Discuss the figure of speech of Persian poetry.
- CO15. Discuss the Scansion.
- CO16. Discuss the Baher- E-Mutaqarib, Mutadarik, Rajaz, Ramal, Hazaj.

- CO17. Discuss the Quatrain, Sonnet, Epic and poems.
- CO18. Discuss the classical prose.
- CO19. Discuss the Persian writing, modern novel and modern short stories.
- CO20. Discuss the Persian communication skill.

Department of Political Science

- CO1. Discuss the inter - relationship between liberty and equality
- CO2. Discuss the Aristotle and M.K. Gandhi's Concept on state
- CO3. Discuss the Abraham Linkan and B. R. Ambedkar's Concepts on democracy.
- CO4. Discuss the nationalism, socialism, behaviorism and sovereignty
- CO5. Discuss the china government's political system.
- CO5. Discuss the conflict between china and India.
- CO6. Discuss the U.N.O. and its Organ.
- CO7. Discuss the King and Crown of U.K.
- CO8. Discuss the Congress and President of U.S.A.
- CO9. Discuss the Judiciary of USA, UK and Switzerland
- CO10. Discuss the role of communist party in China and political parties in democratic state as U.K. U.S.A. Switzerland and India.
- CO11. Discuss the national and state political system of India.
- CO12. Discuss the local government of India.
- CO13. Discuss the Right to Information, Pesa Act and the role of women In Panchayatraj
- CO14. Discuss the Concept of Leadership, Reservation, Communalism, terrorism.
- CO15. Discuss the Western Political thought and Theory.
- CO16. Discuss the research Methodology and Research guidance for Students
- CO17. Discuss the foreign policy of India.
- CO18. Discuss the Political thoughts of Raja Ram Mohan Roy, Mahatma Gandhi, Dr. B. R. Ambedkar, Jawaharlal Neharu, Dr. Panjabrao Deshmukh.
- CO19. Discuss the Indian Government and Politics
- CO20. Discuss the Public Administration.

Department of Home-Economics

- CO1. Discuss the inter-relationship between parent and child.
- CO2. Discuss the role of heredity in development of child.
- CO3. Discuss the childhood behavioral problems.
- CO4. Discuss the need, importance and methods of water conservation.
- CO5. Discuss the selection of furniture and its maintenance.
- CO6. Discuss the waste disposal.
- CO7. Discuss the balanced diet for various stages.
- CO8. Discuss the Malnutrition.
- CO9. Discuss the following vitamins A, B, C, D, E and K deficiency symptoms.
- CO10. Discuss the food adulteration and prevention law.

Department of Economics

- CO1. Discuss the Introduction to Micro Economics, Demand & Supply
- CO2. Discuss the Cost & Revenue Analysis.
- CO3. Discuss the Market Structure and Production Factors.
- CO4. Discuss the Geographical, Economical and Demographic Features of Maharashtra.
- CO5. Discuss the Agriculture in Maharashtra.
- CO6. Discuss the Industry and infrastructure of Maharashtra.
- CO7. Discuss the Economy of Vidarbha region.
- CO8. Discuss the Introduction to Macro Economics, Money and Value of Money
- CO9. Discuss the Inflation And Deflation.
- CO10. Discuss the Output And Employment.
- CO11. Discuss the International Trade.
- CO12. Discuss the Commercial Bank In India.
- CO13. Discuss the Central Bank in India.

- CO14. Discuss the Co-Operative Bank And NABARD.
- CO15. Discuss the IMF And World Bank.
- CO16. Discuss the Recent Services in Banking Sector.
- CO17. Discuss the Indian Economy And Planning.
- CO18. Discuss the Indian Agriculture And Industry.
- CO19. Discuss the Important Areas of Concern, Environment And Pollution.
- CO20. Discuss the Fertility And Mortality in Indian Demography.
- CO21. Discuss the Migration And Urbanization In Indian Demography.

Department Of Sociology

- CO1. Discuss the theory of social Thinker Agust Comte, Herbert Spencer, and Emile Durkheim
- CO2. Discuss the social concept, scoop & important.
- CO3. Discuss the Ocial institution (Family, Religion and Marriage)
- CO4. Discuss the Indian social problem (Corruption, Former Suicide, and Family Problem).
- CO5. Discuss the social current issue in India
- CO6. Discuss the social problem of tribal in India.
- CO7. Discuss the institution of tribal society (economy, religion, family, marriage).
- CO8. Discuss the ideological and textual perspective
- CO9. Discuss the structural functional perspective
- CO10. Discuss the problem of urban, rural & tribal society in India.
- CO11. Discuss the methodology of social research.
- CO12. Discuss the social movements in India.
- CO13. Discuss the Social dynamics in tribal society
- CO15. Discuss the theory of social thinker Talcott Parsons, Robert Merton Dahrendorf
- CO16. Discuss the sociology of religion
- CO17. Discuss social problem and government policy
- CO18. Discuss the crime & society in India

CO19. Discuss the theory of social psychology

CO20. Discuss the scope of Indian sociology

Department Of History

CO1. Discuss the sources of ancient India.

CO2. Discuss the rise of religious movement.

CO3. Discuss the Mauryan, Gupta, Vakatak, Vardhan dynasty.

CO4. Discuss the Education and Position of women in ancient India.

CO5. Discuss the early Turkish Sultan of Delhi.

CO6. Discuss the Bahamani and Vijaynagar Kingdom.

CO7. Discuss the economy, religious and cultural life of sultanate period.

CO8. Discuss the establishment of consolidation of Mughal Empire.

CO9. Discuss the emergence of Maratha power.

CO10. Discuss the political administration under Maratha.

CO11. Discuss the advent of European powers.

CO12. Discuss the Socio-religious moments of India.

CO13. Discuss the early Gandhi and programs.

CO14. Discuss the India towards Independence.

CO15. Discuss the French revolution and making of the nations, Italy and Germany.

CO16. Discuss the First World War cause and effects.

CO17. Discuss the Mussolini and Hitler Foreign Policy.

CO18. Discuss the Second World War cause and result.

CO19. Discuss the United Nation Organization.

CO20. Discuss the Cold Wars - Cause and Effect

Department Of Commerce

CO1. Discuss the Introduction to Business Economics.

CO2. Discuss the Micro and Macro Economics.

CO3. Discuss the Utility Approach and Elasticity of Demand.

- CO4. Discuss the Market Structure and Production Functions.
- CO5. Discuss the Cost and Revenue.
- CO6. Discuss the Business and Managerial Economics.
- CO7. Discuss the Factors Pricing.
- CO8. Discuss the importance of Database Management System (DBMS) in Today`s Business.
- CO9. Discuss the Information Technology & Business Data Processing.
- CO10. Discuss the Microsoft Office (MS-Excel).
- CO11. Discuss the Indian Tax System.
- CO12. Discuss the GST TDS and TCS.
- CO13. Discuss the Audit System in India.
- CO14. Discuss the Business Audit, Verification and Valuation of Assets and liabilities.
- CO15. Discuss the Audit of Banking, Insurance and Educational Institutions in India.
- CO16. Discuss the Online Business in India.
- CO17. Discuss the Business Models in E-Commerce and E-Governance.
- CO18. Discuss the EDI issues.
- CO19. Discuss the Recent situation of online businesses in Today`s Scenario.
- CO20. Discuss the E-Commerce and Legal Securities Issues.
- CO21. Discuss the Strategic Management and Planning in Indian Business.
- CO22. Discuss the Important of Entrepreneurship and Skill Development in India.