Arts & Science Mahila Mahavidyalaya, Mehkar, Dist Buldana

Program Outcomes (2016-17)

Bachelor of Arts

PO 1 The students acquire knowledge in the field of social sciences, literature and humanities which make them sensitive and sensible enough.

PO 2. The B.A. graduates will be acquainted with the social, economical, historical, geographical, political, ideological and philosophical tradition and thinking.

PO 3. The program also empowers the graduates to appear for various competitive examinations or choose the post graduate programme of their choice.

PO 4.The B. A. program enables the students to aquire the knowledge with human values framing the base to deal with various problems in life with courage and humanity.

PO 5. The students will be ignited enough to think and act over for the solution of various issues prevailed in the human life to make this world better than ever.

PO 6. Programme provides the base to be the responsible citizen.

Marathi

B.A I SEM-I, II (Marathi)

1. Understanding the interrelation between literature and society.
2. Explaining the nature of language ,literature and writing.
3. Obtaining the skills of literary criticism.
4. Imbuing the letter writing and communication skills.
5. Illustrating the nature of literary forms like one-act-play, travellogue and short story.

B.A.II (Marathi)

1. Introduction of the medieval Marathi language and literature.
2. Introduction of the contemporary literary works.
3. Acquiring the skill of translation.
4. Explanation of the need and significance of editing.

B.A.III Poetry:

1. Acquaintance with oriental poetry.
2. Understanding the nature and features of poetry.
3. Creating the skill of critical appreciation of a poem.
4. Developing the poetic devices and their usages.

ENGLISH

B.A. I , II, III (ENGLISH)

Program Outcomes (Pos)

1. After completion of the papers the students are introduced to competency of the communication skills. They come to knowthe methods of communication to improve their listening, writing, speaking and reading skills
2. To enable them practice those skills in their daily life.

Programme Specific Outcomes (PSO's)

A student, who has taken admission into this program of B.A with English as specific subject of study, is expected to target on following outcomes.

a. Basic knowledge of English as a Language.

b. Major knowledge of English as Literature.

c. Basic knowledge of English Grammar.

d. Critical study of English Literary studies.

e. Relation between pleasure of literature and real life.

Course Outcomes (**CO's**) B.A.I, B.A.II and B A III (English Course)

1. Spoken communication and written communication.
2. Writing of Resume, letters of application, business letters.
3. Writing News-report, Essay, paragraph, review, etc.
4. Narration of experience, daily routine.
5. Interview Techniques.
6. Understanding and interpretation of poem, prose, essay, short stories, etc.

B.A.I, B.A.II & B.A.III (English Literature)

Program Outcomes (Pos)

1) To comprehend literary texts of ancient and modern literature written by great writers of English.
2) To acquire good knowledge with regard to the analysis of critical frameworks and methodologies for better interpretation of literature.

Programme Specific Outcomes (PSOs)

1) Reading : Students will get awareness about the best literary tradition. They can get confidence and power by living vicariously through well developed characters. Reading help the students to be aware with various perspectives. They will help to expand their range of experience.
2) Awareness about Culture and History: Students come to know about culture and history. They come to know about cultural tradition and can explain in their historical contexts.
3) Critical Insight: Reading help students for gaining a critical insight about the reality.

Course Outcomes (Cos)

Students are introduced to communication skills

1. Enjoyment of literature
2. Pleasure of literacy forms such as novel, poem, play, and essay.
3. Critical understanding of literature.
4. Relation between literature and real life.
5. Emotional development of human mind.

ECONOMICS

Programme Specific Outcomes of Economics

 Understanding how different degrees of competition in a market affect pricing and output.

 Understanding the efficiency and equity implications of market interference, including government policy.

 Developing research knowledge in economics.

 Developing the skill of data collection & use of sampling techniques in research.

 Developing the knowledge about theories of economic growth & Development and issues of economic planning.

 Creating awareness about changing macro-economic policies and theories.

Course Outcomes of Economics

B.A. I Microeconomics

Nature and scope of microeconomics

Law of Demand and Law of supply and its implications in life

The importance of theory of profit and interest and its practicality

B.A-II Banks and Financial Institutions

 Understanding the meaning, function and role of commercial banking.

 Comprehending the procedure of an account opening, operating and closing.

 Knowing the structure, function and role of RBI in economic development.

 Judging the progress of financial inclusion.

 Evaluating the importance, characteristics and components of the financial Market.

 Understanding the role and types of development banks and Non banking

financial intermediaries.

 Realizing the banking reforms and Basel norms-I and II.

 Identifying recent trends in Indian Banking such as E- Banking, MICR Clearing, ATMs, Credit cards and Debit Cards, Travelers Cheques, Gift Cheques, Demat Account.

Macro Economics

 Identifying the basic concepts and theories of Macro economics.

 Awareness about changing macro economics policies and theories.

 Understanding various concepts such as; GDP, GNP NNP, Personal Income, Disposable Income, Per Capita Income, and National Income.

 Identifying the factors determining gross domestic product, employment, the general level of prices, and interest rates.

 Realizing the law of markets, consumption function and investment function.

 Judging the role of fiscal policy and monetary policy in a Developing economy.

 Knowing features, phases and theories of trade cycles.

 Evaluating types, merits and demerits of taxes.

 Comprehending the role of public finance in developing economy.

B.A III Indian Economy

 Understanding characteristics, features, structural changes in Indian Economy.

 Comprehension of the nature and impact of New Economic Reforms on the Indian Economy.

 Knowing the problems of unemployment, poverty, rising economic and social inequality and problems of regional imbalances in India.

 Evaluating the changing role of agriculture, industrial and service sector and foreign sector in Indian Economy.

 Measuring the problems and prospects of cottage and small scale industries, and industrial sicknesses.

 Measuring the growth, volume, composition and direction of India's foreign trade and capital inflow since 1991.

B.A. POLITICAL SCIENCE

Program Specific Outcomes

1. Knowledge about political system of the nation.
2. Study of national and international political affairs.
3. Study from competitive examination point of view.
4. Understanding the government mechanism, its functions, duties and responsibilities.
5. Creating appropriate and efficient political leaders.
6. Getting knowledge of political law.
7. Getting knowledge of Constitution of India.

Course Outcomes

B.A.-I : Indian Government and Political System

1. Acquiring the knowledge about Indian Constitution.
2. Getting awareness about one's rights and duties.
3. Getting information about political parties and system of justice in India.
4. Knowing about the problems and challenges in Indian politics.

B.A.II: - Government of Maharashtra

1. Getting information about the historical survey the formation of Maharashtra State.
2. Study of the local governing mechanism.
3. Developing leadership at local level.

Indian Political Thinking

1. Study of the Indian Political Thinking and their thoughts.
2. Study of the contribution of political thinkers in independent movements and

their need for modern society.

B.A.III -Public Administration

1. Study of the administrative system of the nation.
2. Getting information about various concepts in Public Administration.
3. Study of the mechanism for the solution of problems in Public Administration

The Constitution of America, China & Sweden

1. Getting information about the system of the Constitution and Government
2. Study of different constitutions comparatively.

International Relationship :-

1. Study of the international political system.
2. Study of the international & regional organizations.
3. Study of the relations of India with neighboring countries.

Western Political Thinkers :-

1. Getting information about western thinkers and their political thoughts.
2. Comparative study of the ancient thoughts and modern thoughts.

B.A. SOCIOLOGY

Program Specific Outcomes:

a) Acquaintance with social transactions, social relations, social formations, social control, social values and culture.

b) Knowing the significance of social institution, caste system, religion, nationalism, integrity, equality and justice.

c) Getting the knowledge of the works of social reformers all over the nation.

d) Ability to follow new stream of thoughts and theories of social thinkers.

e) Getting the deep knowledge about various social groups like tribal community, women bulk etc.

f) Ability to deal with research in sociology.

BA I-SEM-I: Introduction to Sociology

1) Fundamentals of sociology enables the student to understands the basics of Sociology.
2) Enhanced basic needs and social complexities speedy life enhances the importance of Social Sciences
3) Correlation between other social sciences
4) Scientific study of Structural functional approach and dialectical approach
5) Definitions characteristics and importance of Basic concepts, Society, community, group.
6) Status and role of social institutions , Social values , Social norms and Social Control .

BA I-SEM-II: Introduction to Sociology

1) Individual and society, culture and Socialization
2) Concept of Family and Marriage
3) Introduction to Social movement
4) Social Stratification and Social Change

BA II-SEM-III: Indian Social Problem

1) Nature of Social Problems and types
2) Approach towards Social Problem
3) Family Problem : Dowry, Divorce and Violence against women
4) Impact of Population Explosion
5) Problems of Rural India: Migration, Unemployment, Farmer Suicide
6) Drugs addiction and Cures

BA II-SEM-IV: Indian Social Problem

1) Definition and Nature of Corruption and ill impact.
2) Terrorism : Objects, Historical Background, Law
3) White Collar Crime
4) Indian Schedule Caste and Tribes
5) Challenges of Urbanization
6) Slum, Crime, Juvenile delinquency
7) Social riots, Intolerance and Racism

BA III-SEM-V: Social Anthropology

1) Meaning, Nature and Emergence of Social Anthropology
2) Methods of Social Anthropology
3) Indian Tribal Society: Characteristics, Classification
4) Tribal Religion: Role and Impact of Magic
5) Tribal Economy: Classification and Concept

BA III-SEM-V: Social Anthropology

1) Tribal Marriage System: Tradition and Problems
2) Tribal Family: Nature, function and lineage
3) Tribal totem , Needs of youth
4) Social Problems in Indian Tribes : Illiteracy, Poverty, Debt Settlements and inflation
5) Tribal Development: Policies and Challenges

B.A. History

1. History unables the students about the development of human imaginative power .
2. It arouses feelings of patriot, self patriot and pride
3. History enhances outlook of students
4. Increases the roots of civilization in the mindset of students
5. Helps to build social responsibility, leadership and overall development
6. Develop instill moral values among the students
7. It develops courage, audacity, fearlessness, adventure and patience
8. It helps in competitive examinations
9. It develops an idea of existing and historic political, social, economical and cultural backgrounds

BA I-SEM-I History of India from earliest time 1205 AD

1. Recognition of ancient Indian histories literature and physical means
2. The study of Haddapan civilization helps to inculcate the interest in civic town planning and Vedic immense knowledge pool.
3. Comprehension of Philosophy of Jain and Budha Religion helps to inculcate patience, good behavior , equality, character building and peace lovingness among the students .
4. Human welfare schemes of Samrat Ashoka helped to harness liberal view
5. Spirituality and self belief and respect inculcated in the students .
6. Public interest and welfare schemes of Gupa edge helped to understand the modern day public administration.
7. The study of world famous varsity ' Nalanda' inculcated the interest in education and reading.

B.A I SEM-II (History of India from earliest time 1206-1525 AD)

1. Emergence of Sultanshahi from the darkness of Slavery helped to harness self confidence in the students. The study of Mohd. Tughalak harnessed commercial management.

2. Addiction to bad habits leads a powerful person to face weakness , it enhanced precariousness in students

3. The most powerful empires couldn't stand without public support this helped to harnessed democratic behavior

4.The study of Sufi and Bhakti movement helped to create religious harmony

5. The paper helped to create a universal vision and ideal citizen

B.A. II SEM –III (History of India from 1526-1756 AD)

1. The study of water resource management in the Mughal era helped to tackle modern day water crisis.

2. The study of Chatrapati Shivaji Maharaj and Sambhaji helped to inculcate bravery, courage, audacity, self control and the equality among the students. It also helped to understand the necessity of government and governance with social welfare vision.

3. The Maratha Freedom war helped in harnessing the inspiration and freedom fighter ultimately wins is impregnated .

B.A. II SEM-IV (History of India from 1757-1947 AD)

1.The study of Lord Doullhoussi and Lord Welassley harnessed prognostication, diplomacy, ambition.

2. Lord Corniwalis's Land Revenue System encouraged the ambition to be always ready to safeguard our national interest.

3. Modern education system initiated by British empire helped to build a sense of social responsibility and developmental vision.

4. The Gandhian thoughts impacted the vision of students and inculcated the importance of sattyagrah and non violence.

B.A. III SEM-V History of Modern World From 1780-1920 AD

1. The students should have an integrated view of the process of change in the society, Economy and Civilization in the contest of Political Development.

B.A. III SEM-V History of Modern World From 1921-1965 AD

1. The students should have an integrated view of the process of change in the Society, Economy and civilization in the contest of Political Development.

2. Nationalism and formation of INC

BA Home Economics

BA I- SEM- I

1. To introduce the students to the field of home economics
2. To create an awareness among the students about resources and their management in the family
3. To make aware about decision making and to enhance the decision making capability of the women
4. To provide knowledge and develop skills regarding principals and methods of interior decoration
5. To develop skill regarding preparing the bouquets and flower arrangements for decoration and enhance the chance of employment

B.A. I-SEM-II

1. To acquire basic knowledge of principals involved in planning of residential house
2. To learn and apply various methods and techniques of work simplifications
3. To develop employability skills and earning while learning
4. To bring awareness about waste management and water conservation for environment protection
5. To train the students for self employment

B.A. II SEM-III

1. To understand the basic concept of nutrition
2. To gain the knowledge of food and its functions and nutritive value
3. To develop abilities to plan diets for various stages
4. To inspire the entrepreneurship

B.A II- SEM- IV

1. To understand the basic concept related to nutrition
2. To develop abilities to plan diets for various diseases
3. To understand the methods of food preparation and food preservation
4. To encourage the students for self employment
5. To aware the work of different agencies in the area of health

B.A III – SEM V

1. Major concept of human development
2. Maternity and child welfare
3. Premature babies and their care
4. Problems of childhood
5. Importance of immunization

B.A III –SEM VI

1. Importance of environment in development of child
2. Factors affecting physical development
3. Discipline Merits and Demerits
4. Motor development, Speech development and social development
5. Importance of parent child relationship

Program Outcomes

Bachelor of Science

PO 1. The B. Sc. Programme develops scientific temperament and attitude among the science graduates.

PO 2. The qualities of a science – observation, precision, analytical mind, logical thinking, clarity of thought and expression, systematic approach, qualitative and quantitative decision making are enlarged.

PO 3. The program also empowers the graduates to appear for various competitive examinations or choose the post graduate programme of their choice .

PO 4. This programme train the learners to extract information, formulate and solve problems in a systematic and logical manner.

PO 5. This programme enables the learners to perform the jobs in diverse fields such as science, engineering, industries, survey, education, banking, development-planning, business, public service, self business etc. efficiently.

B.Sc.- (Chemistry)

Program Specific Outcomes

1 Creating interest in environmental issue.

2 Increasing working knowledge of instruments.

3 Obtaining the knowledge of pharmaceutical tables

4 Social awareness about the quality of water.

5 Increasing the practical skill of the students

6 Awareness about plastic garbage.

Course Outcomes

Physical chemistry

1 Developing problem solving skills.

2 Developing scientific knowledge.

3 Developing working knowledge of instrument.

Inorganic Chemistry

1. Developing ability to apply the knowledge on contents of principles of chemistry.

2. Developing the power of appreciation, the achievement in chemistry and role in nature and society.

Organic Chemistry :

1. Exposure to elemental chemistry

2 Developing proper aptitude towards the subject.

3. Creating scientific approach towards various chemical reactions.

B.Sc.- (MICROBIOLOGY)

Program Specific Outcomes

1. Understanding about cultivating the pure bacterial cultures from soil, water, air, milk, etc.

2 Ability to use laboratory instruments like spectrophotometer, colorimeter, LAF, PH meter, Electrophoresis, Compound microscope, Centrifuge.

3 Preparing for a career in a pharmacy and medical related business or industries.

4 Ability to plan the small-to-mid-size laboratories and industries of their own.

5 Effectively utilizing the knowledge of microorganisms to develop sustainable solutions to current and future environmental problems.

6 Developing and implementing solution based systems and/or processes that address issues and/or improve existing systems within in a microorganism based industries.

Course Outcomes

B. Sc. I Fundamentals of Microbiology & Microbial Physiology (Paper I)

1. Awareness about basics of microbiology.
2. Introduction to different techniques.
3. Realization of scope of microbiology.

B.Sc I Microbiology, Biochemistry, Biostatistics and computer:

1. Mechanism to handle microscope.
2. Making a contamination free laboratory.
3. Getting the idea about control of Microorganisms.
4. Carbohydrate, Protein, Lipid, Nucleic Acid Sythesis
4. Brief ideas about staining techniques
5. Introduction to Biostatistics and Computer technology

B.Sc I Introduction of Medical Microbiology, Microbial Techniques and

Bioinstrumentation:

1. Studying basic knowledge of pathogens, diseases and their control.
2. Knowledge about different techniques used for microorganisms isolation is inculcated among students.
3. Instrumental knowledge and their use along with awareness to equipments is studied.

B.Sc II Molecular Biology and Genetic Engineering (Paper III)

1. Ability to apply the knowledge in Genetics ,Genetic engineering & Biochemistry
2. Acceptance of the challenges in genetic.
3. Knowledge of microbial techniques.
4. Knowledge of bacterial genome replication.
5. Knowledge of creating and recombinant bacteria.
6. Idea to Design the genetically modified organisms
7. Demonstrating and educating different streams in microbiology.
8. Understanding methods and tools to design, implement knowledge in today's world issues.
9.Knowledge of basics in microbial biochemistry.
10. Knowledge about application of enzymes, proteins in industries and pharmaceuticals.
11.Understanding the depth of molecular microbiology.
12. Developing awareness for understanding of ongoing issues.

B. Sc I Medical Microbiology (Paper IV):

1. Knowledge of the underlying principal of immunology and its application in solving problems in biology systems.
2. Dealing with clinical and emerging areas in immunology such as immune mechanisms that protect against pathogens and the implication for vaccine development and global health.

B. Sc III Environmental Microbiology & Bioinstrumentation: (Paper V)

1. Knowledge of environmental factors and pollution issues.
2. Recognize the polluted water and treatment using proper methods.
3. Awareness for hygienic practices.
4. Biointrumentation: Knowledge of various instruments for applicability

B. Sc III Industrial Microbiology:

1. Getting knowledge related to foodstuffs and contamination of food products.
2. Understanding industrial use of microorganisms.
3. Learning different topics of food poisoning, toxication and develop probiotics.
4.Educating concepts and techniques currently used in the area of Industrial Microbiology.
5. Getting known with industrial methodology
6. Understanding classification of industrial products and their use.
7. Brief idea about statistical analysis of data.

B.Sc.- (Computer Science)

Program Specific Outcomes

A Effectively communicating computing concepts and solutions to bridge the gap between computing industry experts and business leaders to create and initiate innovation.

B. Ability to use approximately system design notations and apply system design engineering process in order to design, plan and implement software systems.

C. preparing for a career in an information technology oriented business or industry or for graduate study in computer science or other scientific or technical fields.

D. Ability to complete successfully to program small –to-mid-size programs on their own.

E. Effectively utilizing the knowledge of computing principles and mathematics theory to develop sustainable solutions to current and future computing problems.

F. Developing and implementing solution based system and/or process that address issues and/or improve existing systems within a computing based industry.

Course Outcomes

Introduction to Computer & Modern Operating Environments (B. Sc I):

1. Understanding the fundamental hardware and software components that make up a computer.
2. Understanding the difference between an operating system and application program, and what each is used for in a computer.
3. Performing common basic functions like editing, formatting, printing, scanning etc using tools.
4. Ability to sort data, manipulate data using formulas and functions and add and modify charts in a worksheet.

Introduction to Programming in C (B. Sc I)::

1. Ability to develop applications.
2. Creation algorithms and flowcharts to solve simple programming problems.
3. Understanding to design, implement, test, debug a program that uses calculations, loops, array, function, pointers, structure etc.
4. Memory management using C.

Introduction of Database and HTML (B. Sc I)::

1. Knowledge of Database concepts, data model, Relational Algebra.
2. Knowledge of basic SQL queries.
3. Knowledge of Internet Basics.
4. Understanding methods and tools to design, implement, test web pages and develop Web Application.

Fundamental of Software Engineering (B. Sc II):

1. Understanding how to work as an individual and as part of a multidisciplinary team to develop and deliver quality software.
2. Demonstrating an understanding of and apply current theories, models, and techniques that provide a basis for the software lifecycle.
3. Understanding methods and tools to design, implement, test, document, and maintain a software system.
4. Communicating effectively and professionally both in writing and by means of presentations to both specialist and a general audience.

Object Oriented Programming Using C++ (B. Sc II):

1. Using the characteristics of an object-oriented programming language in a program.
2. Using the basic object-oriented design principles in computer problem solving.
3. Programming with advanced features of the C++ programming language.

4. Using C++ classes for code reuse.

Relational Database Management System (B. Sc II):

1. Understanding the purpose and differences between Database models.
2. Knowing the design and implement relational database.
3. Designing and implementing SQL queries for both data manipulation and data definition tasks.
4. Knowing about protecting data from physical harm and unauthorized access with user access privileges.
5. Designing and executing programs using PL/SQL.
6. Getting known of new software application i.e. MYSQL for designing database.

Computer Network (B. Sc III):

1. Understanding the concepts, vocabulary and techniques currently used in the area of computer networks.
2. Getting known with wireless networking concepts.
3. Understanding classification of network, transmission impairments, Data transmission methods etc.
4. Understanding installation of Windows Server 2008 and managing active directory.

Visual programming using C# (B. Sc III):

1. Design, document, code and test C# console and GUI applications
2. Building and using classes, events, methods, properties.
3. Design and implement Web Applications using ASP.NET.
4. Understand and use of different validation controls.
5. ADO.NET database application.

Linux Operating System (B. Sc III):

1. Understanding the Linux Architecture, use of basic command and to explain

administrator privileges, super user basic command to add, modify and delete users and to understand basics of File systems.

2. Understanding the Directory commands, File related commands and changing file permission and directory permission. To understand VI editor basics. Pattern searching and search and replace commands.

3. Understanding shell basics, connecting commands and Basics and Extended regular expressions, the grep and egrep and shell programming.

4. Understanding shell programming, logical Operators, File Links and to understand process creation and decision making looped control structures.

PHP and MySQL(BSc III):

1. Getting the PHP Programming skills needed to successfully build interactive, data driven sites.

2. Understanding working of XAMPP server and working of different array functions to insert, retrieve, display and sort array elements.

3. Understanding how to develop web applications in PHP using MySQL.

Network Technology and Windows Server 2008(BSc III):

1. Understanding reference models in networking like ISO/OSI reference model and TCP/IP reference model.

2. Introducing switching, multiplexing and demultiplexing techniques.

3. Getting knowledge of file sharing and security in windows server 2008.

4. Understanding group, group policy and inheritance of group policy etc.

Java Programming (B. Sc III):

1. Knowledge of creating java programs that solve simple business problems.

2. Knowledge of compile and execute java programs using class, object, constructors, destructors, inheritance, etc.

3. Knowledge of creating and using of packages, multithreading, exception handling.

4. Design and implement Applets programming and AWT.

E-Commerce (B. Sc III):

1. Knowledge of technologies supporting E-commerce, including web services and electronic payment system.
2. Recognition of fundamental principles of E-business and Knowledge about Electronic Data Interchange.
3. Analysis of real business cases regarding their E-Business strategies and transformation processes and choices.
4. Knowledge about security threats and security solutions in e-commerce.

B.Sc. Mathematics

Program Specific Outcomes

1 Ability to calculate and reason to design complex and critical financial models for Bank and Insurance Companies.

2 Ability to understand both concrete and abstract problems.

3 Ability to make critical observations.

4 Ability to accurately organize, analyze and interpret data.

5 Develop the mathematical logic which is very useful for solving mathematical reasoning problems.

Course Outcomes

B.Sc-I SEM-I Paper I (Algebra & Trignometry), Paper II (Calculus), Paper III (Geometry) Paper IV (Differential Equations)

1. Developing the interest towards mathematics.
2. Creating the relationship of mathematics with other subjects.
3. Developing the understanding and fluency in mathematics thorough inquiry and connecting mathematical concepts.
5. Developing knowledge about limit continuity and differentian.

B.SC-I SEM –II Paper-III (Differential Equations) Paper IV- (Vector Analysis & Solid Geometry)

1. Developing the knowledge of applications of derivative and integration, etc.
2. Developing several perspectives of differential equations.
3. Developing interest about directional derivatives and line integral.
4. Developing the knowledge about polynomial equations
5. Developing the knowledge of how to draw graphs, paths, walks and curvatures.

B.Sc-II SEM-III Paper V (Advanced Calculus) Paper VI (Elementary number theory)

1. Developing the knowledge about double & Triple integral
2. Developing skill of finding the root of various polynomials.

3. Developing knowledge about limit continuity and differentian.

B. Sc-II SEM-IV Paper VII (Modern Algebra), Paper VIII (Classical methods)

1. Developing the knowledge of real number and real valued functions .
2. Studying the properties of real numbers (Ries2 space and positive operators).
3. Developing acknowledgement about ring and group theory
4. Computation the trajectory of a spacecraft requires the accurate numerical solution of a system of ordinary differential equations.

B. Sc-III SEM-V Paper IX (Mathematical analysis), Paper X (Mathematical Methods)

1. Inculcating about analytic functions
2. Increasing the knowledge about limit continuity of complex functions
3. Introducing laplace transformation and its property

B. Sc-III SEM-VI Paper XI (Linear Algebra), Paper XII (Optional: Special theory of Relativity/Graph Theory)

1. Exposure to linear transformation and its properties
2. Increasing the knowledge about vector space and dual spaces
3. Introducing homomorphism, isomorphism of a linear transformation
4. Review of newtonian mechanics and relativelistic kinematics
5. Geometrical representation of space and time
6. Developing the ideas about different types of matrices
7. Knowledge about graphical representation , various circuits .

B.Sc.- (Physics)

Program Specific Outcomes

1 Identifying and describing physical systems with their professional knowledge.

2 Developing their scientific intuition, ability and techniques to tackle problems either theoretical or experimental in nature.

3 Knowledge of general physics like sound, wave, friction, forces and laws of motion and use of mathematics.

4. Information of electrical current, circuits, construction and their use.

5. Learning about concepts of nuclear physics and nuclear energies and importance of their use for mankind.

6. Knowing about the light and its importance in life, its characteristics, properties and use in various instruments

Course Outcomes

B.Sc. I SEM- I Physics

By the end of this Course students should be able to know about:

1. Different types of motions in nature
2. Difference between translational motion and rotational motion
3. Various elastic constants and property of Elasticity.
4. Surface tension and its applications.
5. Experimental skill development

B.Sc. I SEM- II Physics

By the end of this Course students should be able to know about:

1. Oscillations and waves and their properties.
2. Use of waves in general life.
3. Optics and properties of light.
4. What are the optical instruments and their developments.
5. Kinetic theory of gases

6. General information of various types of gases and theories related to it.
7. How gas can be liquefied? What are the conditions for liquefactions of gases?
8. Thermal properties of gases and various laws related in thermodynamics.
9. Transport phenomena in gases.

B.Sc. II SEM-III Physics

By the end of this Course students should be able to know about:

1. Vectors and scalar and mathematical applications.
2. Processional motion and properties of the body.
3. Elasticity of flat spiral spring.
4. Viscosity of liquids and mathematical theory related with it.
5. Solid state electronic device and mathematical background
6. Special theory of relativity

B.Sc. II SEM-IV Physics

By the end of this Course students should be able to know about:

1. Geometrical optics and interference explaining Lens system
2. Diffraction and its types
3. Concept of polarization
4. LASERS and its applications
5. Fiber optics and classification energy sources and its uses.

B.Sc. III SEM- V Physics

By the end of this Course students should be able to know about:

1. Applications of quantum mechanics
2. Applications of molecular spectroscopy
3. Nuclear physics and its types
4. Negative and Positive feedback and its advantages

B.Sc. III SEM- VI Physics

By the end of this Course students should be able to know about:

1. Statistical mechanics and its types
2. Types of solid, crystallography and characterization of solids
3. Applications of electrical properties and band structure
4. Magnetic properties of material and classification
5. Applications of Superconductivity and nano technology

B.Sc. BOTANY

Program Specific Outcomes

1. Identifying different resources helpful for human life.
2. Identifying different groups of plants
3. Acquiring knowledge about inheritance, biochemical and metabolic activities.
4. Development of horticultural skill.
5. Acquiring knowledge about importance of environment.

Course Outcomes B.Sc –I Sem- I Diversity and applications of microbes and cryptogams. (Algae, Fungi, Bryophytes and Pteridophytes.)

1 Developing interest in plant diversity.
2 Developing skill of identification of Algae, Fungi and Bryophytes.
3 Creating interest in biological industry.

B.Sc –I SEM-II- Gymnosperm, Angiosperm and utilization of plants

1. Economic and biological importance of Gymnosperm.
2. Inculcating identification skills for morphological and anatomical characteristics
3. Developing the interest of flowering plants
4. Diversity in vascular plant.
5. Characters of vascular plants and classification of plants.
6. External & internal characters of plants.

1. Acquiring basic knowledge about biochemical, physiological mechanism in plants.
2. Imparting knowledge of Horticulture.

B.Sc –II SEM- III -Diversity in vascular plants. B.Sc –II Paper IV - Pteridophytes, Gymnosperms, Angiosperms and Anatomy.

The student can understand the knowledge about Pteridophytes, Gymnosperms, Angiosperms and Anatomy

B.Sc –I Paper IV- Cytology, Genetics and utilization of plants.

The student can understand the knowledge about Cytology, Genetics and utilization of plants

B.Sc –II PaperVIII- Cytogenetic and utilization of plants.

Students should be able to know

1. Structure of cell.
2. Types of organisms and characteristics.
3. History, distribution, structure and functions of different cell organelles,
4. Transmission of character
5. Mendelism.
6. Resource of plants to fulfill the basic needs.

B. Sc. ZOOLOGY

Program Specific Outcomes

1. Improving the knowledge about criteria for animal classification.
2. Study of salient features of chordates and non-chordates.
3. Improving the knowledge of animals about their special adaptations and evolutionary relationship.
4. Scientific study of their nature of habitant with environment.
5. Improving information about external morphology and anatomy of animals including human being.

Course Outcomes

B.Sc.I. (Sem.I) Animal Diversity and Non Chordata- Paper I

1. Understanding the arrangement of organism or groups of organism in distinct categories in accordance with particular & well established plan.
2. Explanation of unity in diversity of organism.
3. Studying specific & scientific names to organism.
4. Collecting information about useful and harmful animals, helps in understanding the nature of habitant.

B.Sc.I. (SEM-II) CELL BIOLOGY AND DEVELOPMENTAL BIOLOGY.

1. Understanding the structure and function of cell & cell organelles , to study animal tissue to improve knowledge about genetic information, it study how organism evolve from a single cell division, get knowledge about unicellular & multi-cellular organisms
2. Understanding normal function of cell, organ or tissue.
3. Study of structure function, molecular organization, growth, reproduction and genetics of cell.

B.Sc. II (SEM-III) Evolution & Genetics And Life and Diversity of Chordata

1. Study of chemistry within living organisms.

2. Study of chordata in detail

3. Study of evolutionary processess

B.Sc. II (SEM IV)- Ecology And Genetics

1. Improving environmental component such as biotic and biotic factors.

2. Study of how each organism interlock with one another.

3. Perceiving prey predator relationship, study interrelationship of different organisms, to know about distribution of organism with reference to the geographical conditions, to improve knowledge related to undesirable change in physical, chemical or biological characteristics.

4. Study of tropic level of food chain.

5. Understanding evolutionary history of certain animals, study their sericulture which is one of the longest agro industries & silk is used in the manufacture of woven materials.

.

B.Sc. III SEM-V- Animal Physiology and Economic Zoology

1. Improving proper knowledge about histology of animal tissue, organ, understanding physiology of animals including external features & internal features used in pathology lab for detecting malfunction which leads to disorders, physiology useful for study of normal function of body plan for their molecular level.

2. Enhancing the knowledge about respiration, circulation, Muscle and Nerve physiology.

3. Commercial exploitation of zoology providing the business opportunity to students e.g. Apiculture, Sericulture, Aquaculture.

B.Sc.III SEM-VI- Molecular Biology and Biotechnology

1. To improve the understanding about the structure, function and makeup of the molecular building blocks of life.

2. Study the molecular basis of biological activity between biomolecules in the systems of cell.

3. Biotechnology is most important for its implications in health and medicine.

Physical Education:

1. Students get acquainted with outdoor games, indoor games, Yoga, exercise gymnasium which leads to healthy life.

2. Physical education enhances the concern towards health and physical capabilities of the students.

3. It encourages the students to participate in various competitions on university , state and national level

4. It gives an idea about the importance of extracurricular activities along with the studies and help to build a multidimensional personality of the student.

Co - Ordinator IQAC
Arts & Science Mahila Mahavidyalaya
Mehkar, Dist. Buldana

Principal
Smt.Sindhutai Jadhao Arts
& Sceience Mahavidyalaya
Mehkar