

# **Matoshree Vimalabai Deshmukh Mahavidyalaya, Amravati**

## **Programme Outcomes (POs)**

### **Programme Outcomes of Bachelor of Home Science**

- 1) To Take science from laboratories to common people
- 2) Develop professional skill in food and Nutrition Management of Resources and interior development, clothing construction & communication technologies.
- 3) To learn entrepreneurial skill for self empowerment as well as for community.
- 4) To understand science & technology that enhance the quality of life.
- 5) To understand and appreciate the role of interdisciplinary science to enhance the quality of human life.
- 6) To train the students to take up lead roles in extension and community outreach programmes and thus to contribute towards programmes development.
- 7) To Provide opportunities to the students to sharpen their capabilities with sense of social responsibilities.

## **Programme Specific Outcomes (PSOs)**

### **PSOs of B.Sc. (Home Science) Introduction to Home Science**

- 1) To Introduce the student for programme of Home Science.
- 2) To introduce Home Science as a discipline and multidisciplinary course.
- 3) To Make the students aware of role of resource Management in development of family & communication.
- 4) Role of Human Development in building good citizen.
- 5) Role of Food and Nutrition for sound health of individual and community.
- 6) Role of Textile & clothing in personality development.
- 7) Role of communication and extension in community Development.

## **Course Outcomes (COs)**

### **Cos of B.Sc. (Home Science) Introduction to home Science**

After completion of the course the students will be able

- 1) To understand the role of Home Science in development of family, community and nation.
- 2) To acquaint with home science discipline which is an integrated body of knowledge for improving quality of life
- 3) To know about the need and importance of resources, food and clothing.
- 4) To understand role of communication & extension in community development which ultimately helps for national development.
- 5) To we knowledge of Human Development to become better citizens.

### **Programme Specific Outcome (PSOs)**

#### **PSOs of B.sc. (Home Science) Chemistry (Food Chemistry & Textile Chemistry)**

- 1) Basic knowledge about food groups and also the toxicants.
- 2) Role of vitamins, minerals, water in human body and also their deficiencies.
- 3) Knowledge about washing of different type of cloth and about laundry materials.
- 4) Learn the process of traditional dyeing methods such as Tie & Dry and Batik.
- 5) Knowledge about dyes and their types.

### **Course Outcomes (COs)**

#### **COs of B.sc. (Home Science) Chemistry (Food Chemistry & Textile Chemistry)**

After completion of the course the students will be able to

- 1) Understand food composition and circulate the knowledge in family, society for better healthy life style
- 2) Understand chemistry of food
- 3) Deliver the knowledge of traditional Tie & Dry method to family & ultimately the society and be self sufficient through this technical knowledge.
- 4) Acquire jobs in textile industry.

### **Programme Specific Outcome (PSOs)**

#### **PSOs of B.Sc. (Home Science) Communication Skills**

- 1) Know the elements of communication and communication process.
- 2) To design a message.
- 3) Importance of body language in communication.
- 4) Basic knowledge of English Grammar for the use in communication.
- 5) To improve reading, listening, speaking and writing skills.
- 6) To improve handwriting in English and Marathi.

### **Course Outcomes (Cos)**

#### **COs of B.Sc. (Home Science) Communication Skills**

After completion of the course the students will be able

- 1) To development skills of communication in English and Marathi.
- 2) To understand the importance of communication in academic and professional growth.
- 3) To develop ability of writing application, formal and informal letters.
- 4) To develop command on writer and spoken English.
- 5) To develop Report writing skills.
- 6) To use body language in communication for personality development.

### **Programme Specific Outcome (PSOs)**

#### **PSOs of B.Sc. (Home Science) Ecology and Environment**

- 1) To introduce the concept of ecology, environment in students.
- 2) Environment Education.
- 3) Role of Government and NGO's and Educational Institution in Conservation of Environment.
- 4) Importance of Environmental Resources.
- 5) Awareness about the pollution and introduction of pollution control measures.
- 6) Types of wastes and their management.

### **Course Outcomes (Cos)**

#### **COs of B.Sc. (Home Science) Ecology and Environment**

After completion of the course the students will be able to

- 1) Know about the duties and rights of citizen towards environmental protection.
- 2) Get knowledge of laws & policies regarding environment conservation.
- 3) Get knowledge of quality of air.
- 4) Know the importance of biodiversity and its conservation.
- 5) Get the knowledge of budding & vegetative propagation of garden plants.
- 6) Detect the PH of soil.
- 7) Get the knowledge of waste management.

### **Programme Specific Outcome (PSOs)**

#### **PSOs of B.Sc. (Home Science) Human Physiology**

- 1) Basic knowledge of human body as a whole.
- 2) Basic knowledge of blood, its composition, blood group, blood coagulation, blood vessels, arteries.
- 3) Basic knowledge of cell, bone.
- 4) Basic knowledge of vital systems of body.

### **Course Outcomes (Cos)**

#### **COs of B.Sc. (Home Science) Human Physiology**

After completion of the course the students will be able to

- 1) Understand the physiology of human body.
- 2) Understand the integrated function of all system of the body.
- 3) Know the importance of working of human physiology.
- 4) Take care of vital organs.
- 5) Get the basic knowledge of diseases.

### **Programme Specific Outcome (PSOs)**

#### **PSOs of B.Sc. (Home Science) Food and Nutrition**

- 1) Concept of nutrition, nutrition and diet during stages of life and scientific methods of quality cooking with improvement in nutritional quality of food.
- 2) Importance of food selection and menu planning.
- 3) Knowledge of nutrients, cereal, pulses, various preparations.
- 4) Types of natural sweetness and their use as preservatives.
- 5) Assessment of nutritional status, direct nutritional assessment of various age groups.
- 6) Diet survey.
- 7) Importing knowledge about health education and malnutrition.

### **Course Outcomes (Cos)**

#### **COs of B.Sc. (Home Science) Food and Nutrition**

After completion of the course the students will be able to

- 1) To apply cooking in scientific way.
- 2) To understand the concept of adequate diet and menu planning for normal and therapeutic diet.
- 3) To develop skill of preparing nutrient rich recipes.
- 4) To create nutrition awareness in the family and society.
- 5) To step forward for graduation in sports nutrition, food science and Quality control, clinical nutrition & Dietetics, Dietetics, nutrition & food processing, nutrition Management, clinical nutrition and community nutrition, Institutional food service along with 5 core.
- 6) To get job opportunities in food subject industry, as food analysis, food scientist, cook/chef, food preservation Industry, Hospital, Hotels, cafeterias.
- 7) On their own to start with a food unit "Mess" or "food park"
- 8) To supply their products to commercial units.

### **Programme Specific Outcome (PSOs)**

#### **PSOs of B.Sc. (Home Science) Resource Management**

- 1) Understand the process of management scientific manner
- 2) Types, modes, techniques, tools in decision making
- 3) Type of family resources, factor affecting use of resources
- 4) Family characteristics influencing management, factors motivating management.
- 5) Interior designing, furniture layouts, house keeping, landscaping, developing skill in making art handicraft articles and get the knowledge of color schemes.
- 6) Elements of Art, Principal of Art
- 7) Family's Housing needs and Planning, Principles of kitchen designing and planning.

## **Course Outcomes (Cos)**

### **COs of B.Sc. (Home Science) Resource Management**

After completion of the course the students will be able to

- 1) Know systematic process of management and of goal, values, standard etc, Use of management teachings in day to day life.
- 2) Understand the decision making process
- 3) Sensitize with family resources
- 4) Find out the goals and values of family
- 5) Understand elements and principles of art and design
- 6) Make handicraft art articles, toys and sale them to be self reliant.

## **Programme Specific Outcome (PSOs)**

### **PSOs of B.Sc. (Home Science) Human Development**

- 1) Basic knowledge of stages of development
- 2) Awareness about emotions and emotional.
- 3) Problems related to adolescence
- 4) Physical and mental changes in middle age in relation to changing family pattern
- 5) Importance of mental hygiene
- 6) Problems of old age.

## **Course Outcomes (Cos)**

### **COs of B.Sc. (Home Science) Human Development**

After completion of the course the students will be able to

- 1) Develop awareness about important aspects of development during the whole life span
- 2) Understand the issues and adjustment at each stage of life span
- 3) Know the importance of mental health which is necessary to be stress free in this competitive world
- 4) Know the problems regarding old age and children.

## **Programme Specific Outcome (PSOs)**

### **PSOs of B.Sc. (Home Science) Communication and Extension**

- 1) Difference between formal and extension education
- 2) Qualities, role and functions of extension worker for community development
- 3) Role of national programmes related to education, health and economic development – ICDS, IRDF, NAEP etc.
- 4) Role of national organization- ICMR, ICAR, ICCW, NIN, CFTRI
- 5) Extension programme planning, evaluation. Data collection
- 6) Extension teaching aids
- 7) Role, qualities of leader
- 8) Methods of communication in extension education.

### **Course Outcomes (Cos)**

#### **COs of B.Sc. (Home Science) Communication and Extension**

After completion of the course the students will be able to

- 1) To understand the importance of communication for extension
- 2) To understand the role of extension worker
- 3) To develop the social responsibility and to get acquainted with social and societal problems
- 4) To extend his / her knowledge in rural, tribal housewives and ultimately the society through extension activities.
- 5) To get employment in KVK under central Govt. scheme as extension officer
- 6) To get employment in ICDS scheme.

### **Programme Specific Outcome (PSOs)**

#### **PSOs of B.Sc. (Home Science) Textile and Clothing**

- 1) Types of fibers and their properties
- 2) Basic knowledge of different types and their properties.
- 3) Details processes of fabric construction, weaving, knitting, braiding, felting
- 4) Method of dyeing, printing & different fabric finishes
- 5) Use of sewing machine & maintenance, embroidery, hand embroidery, machine embroidery, regional embroidery, regional costume
- 6) Garment making, dress designing
- 7) Principles of design, classification of design
- 8) Ability to differentiate between different types of fabrics and selection of clothing according to personality.

### **Course Outcomes (Cos)**

#### **COs of B.Sc. (Home Science) Textile and Clothing**

After completion of the course the students will be able to

- 1) To develop creativity in designing of textile and clothing
- 2) To impart knowledge of principals of art and elements of art in society
- 3) To be self employed by opening a boutique
- 4) To be an entrepreneur through embroidery, dress designing, fashion designing
- 5) To run hobby classes for printing
- 6) To open unit for block printing an fabric
- 7) To be self employed by knitting
- 8) To select and guide about suitable garments keeping in mind the personality type and components of design
- 9) To acquire jobs in textile industry

### **Programme Specific Outcome (PSOs)**

#### **PSOs of B.Sc. (Home Science) Nutritional Biochemistry**

- 1) Knowledge of Human Biochemistry
- 2) Digestion and metabolism of carbohydrates, lipids, proteins
- 3) Energy metabolism
- 4) Function of carbohydrates, lipids and proteins
- 5) Role of DNA and RNA in protein synthesis
- 6) Vitamins, minerals and enzymes
- 7) Blood – composition, blood groups, coagulation

### **Course Outcomes (Cos)**

#### **COs of B.Sc. (Home Science) Nutritional Biochemistry**

After completion of the course the students will be able to

- 1) To develop and understand the principles of Biochemistry
- 2) To obtain an insight into Biochemistry of major nutrients and physiologically important compounds
- 3) Apply the knowledge acquired to human nutrition and dietetics.

### **Programme Specific Outcome (PSOs)**

#### **PSOs of B.Sc. (Home Science) Computer Application in Home Science**

- 1) Computer fundamentals
- 2) MS – Word
- 3) Internet
- 4) MS- Office
- 5) MS- Excel
- 6) MS- Power Point

### **Course Outcomes (Cos)**

#### **COs of B.Sc. (Home Science) Computer Application in Home Science**

After completion of the course the students will be able to

- 1) Handle computers in daily life as it is need.
- 2) Know the basics of computers
- 3) Use computers for education, information
- 4) Work in any private firm as operator with this knowledge

### **Programme Specific Outcome (PSOs)**

#### **PSOs of B.Sc. (Home Science) Health, Hygiene and Microbiology**

- 1) Concept and dimensions of health
- 2) Concept of diseases
- 3) Destruction of microorganisms by Disinfectants

- 4) Ventilation concept
- 5) Air borne diseases

### **Course Outcomes (Cos)**

#### **COs of B.Sc. (Home Science) Health, Hygiene and Microbiology**

After completion of the course the students will be able to

- 1) Know the personal and community hygiene
- 2) Understand the physical environment
- 3) Understand the concept of health and diseases
- 4) Know the method of sterilization for killing the microorganisms
- 5) Get the general idea of air borne diseases
- 6) Be helpful to society for creating awareness.

### **Programme Specific Outcome (PSOs)**

#### **PSOs of B.Sc. (Home Science) Elective Subject- Pranayam and Yogasana**

- 1) Introduction by yoga, pranayam for physical, mental and ----- health and personality development
- 2) Chakras, mudras
- 3) Yogasana for general fitness and in different diseases
- 4) Practice of yogasana

### **Course Outcomes (Cos)**

#### **COs of B.Sc. (Home Science) Elective Subject- Pranayam and Yogasana**

After completion of the course the students will be able to

- 1) Develop the skill of doing pranayam, practice pranayam
- 2) Know the importance of Mudras nad Chakras
- 3) Understand need and importance of yogasana
- 4) Develop the skill of yogasana
- 5) Practice pranayam and yogasana for healthy and stress free life
- 6) Circular this knowledge to the family members and society for healthy life.

### **Programme Specific Outcome (PSOs)**

#### **PSOs of B.Sc. (Home Science) Elective Subject – Internet**

- 1) Introduction to Internet
- 2) Tools of Internet
- 3) Use of Internet
- 4) Microsoft outlook express



### **Course Outcomes (Cos)**

#### **COs of B.Sc. (Home Science) Elective Subject – Internet**

After completion of the course the students will be able to

- 1) Understand architecture of internet
- 2) Use of internet in self study
- 3) Use of internet for search of information related to the subject
- 4) Use of internet for shopping & marketing and business

### **Programme Specific Outcome (PSOs)**

#### **PSOs of B.Sc. (Home Science) Elective Subject – Event management**

- 1) Meaning, definition, need and importance of Event management
- 2) Evaluation of event, competition of events
- 3) SWOY Analysis of team members
- 4) Concepts of event Management

### **Course Outcomes (Cos)**

#### **COs of B.Sc. (Home Science) Elective Subject – Event management**

After completion of the course the students will be able to

- 1) Empower the students to manage and organize various events
- 2) Sanitize the students about various responsibilities and preparation of events
- 3) Serve as event planners in the society and get self employment through it

### **Program Outcomes (POs) :**

Program Outcomes (POs) of Bachelor of Arts

After the completion of B.A. Program the students will develop ability :

1. To know the diverse aspects of society, its problems and structure.
2. To develop among them a sense of social responsibility
3. To have a basic understanding of social, economic, historical, political and religious institutions.
4. To communicate with the people in a better way.
5. To improve soft skills and linguistic skills.
6. To understand fundamental human values.
7. To make a progressive and successful career in various spheres of life.

**PSOs of B.A. English:**

- 1) Basic knowledge of English grammar.
- 2) Basic knowledge of English as language.
- 3) To develop the students' command on written and spoken English
- 4) An ability to understand literature.
- 5) To prepare the students to face personal interviews.
- 6) An ability to write resume, letters of application, emails, formal and informal letters.

**COs of B.A. Compulsory English :**

- \* To acquire overall linguistic competence and communicative skills.
- \* To do interpersonal communication and casual conversation.
- \* To develop reading, writing, speaking and listening skills in the English.
- \* To write curriculum vitae, fax and emails, letters of application, formal and informal letters in English.
- \* To acquire interview techniques.
- \* To write newspapers reports, essays and reviews on various topics.

**Programme Specific Outcome (PSOs)****PSOs of B.A. (Hindi)**

On Completion of B.A. (Hindi) students are able:

- 1) To understand the basic concept and subject of Hindi and its origin
- 2) To make or not the importance of subject Hindi and its Branches.
- 3) To understand various aspects of Hindi Literature with a process to reach method and giving new mode. And direction
- 4) To make an attempt in different area and theory such as vocabulary and vice versa.
- 5) To know Hindi Literature, its roots, courses perspectives and methods
- 6) Elaborating and understanding its philosophical methods of Hindi Literature
- 7) Evaluating the concept of Hindi from part to present and making the society more closely through Literature

## **Course Outcomes (Cos)**

### **PSOs of B.A. (Hindi)**

- 1) Helps to know importance of Hindi language as a national language.
- 2) Helps to study with Hindi Literature which reflect mirror of human life
- 3) Helps to create new opportunities in Hindi translation, Tourism, new reports etc.
- 4) Hindi poems particularly focus on humanity as well as nature which sustained the environment
- 5) The help to create interest among the students about drama, poetry, novel which will open new opportunities in such a field.

### **PSOs of B.A. Compulsory Marathi :**

- 1) To enable the students to standard writing practices.
- 2) To acquaint students with Marathi literature, language and culture.
- 3) To enable the students to analyze and appreciate literary texts.
- 4) To develop linguistic skills of the students.
- 5) To enable the students to use Marathi for creative writing.
- 6) To improve the students' skills of writing Marathi.

### **COs of B.A. Compulsory Marathi :**

After the completion of the course the students will be able :

- \* To obtain knowledge of Marathi as language.
- \* To acquire linguistic competence and communicative skills.
- \* To write newspapers reports, essays and reviews on various topics.
- \* To acquire basic knowledge of Marathi grammar.
- \* To acquire ability to appreciate literature.
- \* To develop skills of translation and narration.

### **PSOs of B.A. Political Science :**

- 1) To understand the concepts and theories in political theory.
- 2) To make students aware of various political, social and economic systems that exists across the international community.
- 3) To familiarize the students with the core intellectual traditions in political thoughts.
- 4) To understand the basic structure of Indian political system.
- 5) To familiarize the students with political structure both constitutional and administrative.

6) To develop the students' interest in political field and acquaint them with current political system.

### **COs of B.A. Political Science :**

After the completion of the course the students will be able :

- \* To understand the rights of the President and the Governor.
- \* To understand the duties of Prime Minister and cabinet as well as the function of opposite parties.
- \* To understand the duties and rights of the Parliament and Supreme Court
- \* To know the administration and laws of England, America and China.
- \* To understand political thoughts of various political thinkers.
- \* To understand the difference between Presidential and Parliamentary Democracy.
- \* To know the function of The United Nations organization (UNO) and South Asian Association for Regional Cooperation (SAARC)
- \* To face various competitive examinations.

### **PSOs of B.A. Home Economics :**

- 1) To understand the field and concept of Home Economics
- 2) To provide knowledge of the role of diet, nutrients and methods of interior decorations.
- 3) To enhance the decision making capability of women in the family.
- 4) To develop entrepreneurial skills of the students.
- 5) To understand the methods of food preparation and food preservation.
- 6) To encourage the students for self-employment.
- 7) To understand various aspects of child development.

### **COs of B.A. Home Economics :**

After the completion of the course the students will be able :

- \* To acquire basic knowledge involved in planning of residential house.
- \* To acquire necessary capability for self-employment.
- \* To understand the methods of food preparation and food preservation
- \* To acquire knowledge about nutritive value of foods.
- \* To understand the concept of Human Development and the knowledge of Early Childhood-Education.

- \* To understand the role of heredity and environment in child development.

### **PSOs of B.A. Economics:**

- 1) To understand the fundamental concepts of Economics.
- 2) To understand the role of agriculture in economy of Maharashtra.
- 3) To understand India's foreign trade and the concept of globalization.
- 4) To make students aware of public finance and public revenue.
- 5) To familiarize the students with various policy issues in relation to Indian economy.
- 6) To make students aware of fiscal policy, international trade theories and policies.

### **COs of B.A. Economics "**

After the completion of the course the students will be able:

- \* To identify the relevance and use of various economic theories.
- \* To understand diverse aspects of economy of Maharashtra
- \* To understand overall information of Indian Economy.
- \* To obtain information about the roles of IMF, World Bank and WTO in Indian Economy.
- \* To understand Indian population issues and Indian Economy.
- \* To get information of Environmental Economics.

### **PSOs of Sociology**

On Completion of B.A. (Sociology) students are able:

- 1) Be introduced to social structure of society
- 2) Get aware of social issues and problem and will be able to find out solutions
- 3) To introduce students with social values and ethics.

### **Cos of B.A. (Sociology)**

- 1) To understand human interaction
- 2) To behave to be responsible person with humanity
- 3) The help students to understand society and to adopt social conditions in a desirable manner

### **PSOs of B.A. Community Development and Extension (CDE)**

On Completion of B.A. (CDE) students will be able:

- 1) To observe and analyse the social institutions and practices and social issues
- 2) To develop research skills through field visits.
- 3) To understand social responsibility, community Organization .

- 4) To understand the concept of small saving Groups, peoples participation in rural development

#### **COs of B.A. Community Development and Extension (CDE)**

- 1) Student become good citizen
- 2) Understand concept of leadership and social work
- 3) Students can get opportunity to work at Zill Parishad, Panchayat Samiti, Gram Panchayat.
- 4) Students will prefer low field.

#### **PSOs of B.A. Cooperation**

1. The students understand the basic concepts in cooperation can apply them in the real world he is also updated with the recent trends in the subject.
2. The students also build a strong base for various graduate courses in cooperation related fields.

#### **COs of B.A. Cooperation**

The students get knowledge of redemption of preference share and debentures, amalgamation of companies, capital reduction and internal reconstruction.

The course focuses on structure of mutual fund organization, Accounting and taxation of mutual funds and also per for manse measurement of mutual funds.

#### **Program Outcomes (POs) of Bachelor of Science**

After completion of B.Sc. program the students will be able :

1. To acquire general grasp of science and technology.
2. To acquire knowledge in all basic sciences.
3. To use modern tools of ICT to learn and transfer knowledge.
4. To develop analytical skills to tackle real life problems.
5. To familiarize with the fundamentals of science education.
6. To develop a spirit of scientific temper and inquiry.

#### **PSOs of Physics :**

- 1) To understand the role of Physics in the present day context.
- 2) To make students familiar with the importance of energy conservation and enviornmental protection.
- 3) To comprehend the pursuit of Physics, its history and methodology.
- 4) To improve technological aspects of the students through various teaching-learning methods.

- 5) To understand types of fiber optic, basic concepts of different types of LASER, and renewable sources of energy
- 6) To make students familiar with the concepts of Statistical Mechanics and Solid-state physics.

### **COs of Physics :**

After the completion of the course the students will be able :

- \* To understand the concepts of gravitation and planetary motions.
- \* To know about kinetic theory of gases, the basic laws of thermodynamics, and the concepts of alternating current with various with various combinations
- \* To know about mathematical background and laws of electrostatics, solid state electronic devices and special theory of relativity.
- \* To understand the various branches of Physics as optics, acoustics, and various renewable sources of energy.
- \* To understand the concepts of statistical mechanics and solid state physics.
- \* To know about quantum mechanics and nuclear physics.

### **PSOs of Chemistry :**

- 1) To familiarize the students with the nature, technique and implementation of modern chemistry.
- 2) To understand scientific and functional principles of instruments typically used in most areas of Chemistry.
- 3) To perform experimental protection, transition, calculation, and prepare solutions as well as use physical properties to classify compounds and chemical reactions.
- 5) To learn and understand how Chemistry is useful to societal, cultural, and environmental problems in relation to energy, medicine and health concerns of our society.

### **COs of Chemistry :**

After the completion of the course the students will be able :

- \* To understand applications of aromatic hydrocarbons and aliphatic hydrocarbons.
- \* To understand kinetic theory of gases and crystal field theory.
- \* To know about the concepts of hybridization and hybridization of different molecules and their geometry.
- \* To understand concepts of stereochemistry and electrochemistry.

- \* To become aware of the spectroscopy and mass spectrometry of Nuclear Magnetic Resonance phenomena.
- \* To identify inter conversions of chemical and electrical energy by experience of electrochemistry of radio isotopes in industry, agriculture, medicine and biosciences.
- \* To know complex thermodynamic and kinetic stability and complex geometry.
- \* To know fundamentals of organometallic chemistry, inorganic polymers and bio-inorganic chemistry.
- \* To understand the chemistry of transition elements.
- \* To understand the colligative properties of dilute water as well as the rules of symmetry.
- \* To know the spectroscopic methods to consider the molecule's atomic structure.
- \* To classify colors depending on the structure and mode of operation, preparation and use of colorants, medications and pesticides.
- \* To understand the photochemical and thermal reactions by radiation - matter interaction.

#### **PSOs of Mathematics :**

- 1) To understand the nature of mathematical proofs and write clear and concise proofs.
- 2) To become proficient in using mathematics to solve problems both in education and in real life situations.
- 3) To communicate effectively in oral and written form.
- 4) To appreciate the usefulness, power and beauty of mathematics.
- 5) To understand and be able to use the language, symbols and notation of mathematics.
- 6) To understand how to write simple computer programs to perform the mathematical competition.

#### **COs of Mathematics :**

After the completion of the course the students will be able :-

- \* To understand the common body of knowledge in mathematics and apply analytical and theoretical skills to model and solve the mathematical problems.
- \* To understand various concepts of Trigonometry
- \* To understand Differential Equations : Ordinary and Partial.
- \* To understand Vector Analysis and Solid Geometry.
- \* To understand advanced calculus and Elementary Number theory.
- \* To grasp various mathematical methods.



- \* To understand Linear Algebra, Graph Theory, and Special Theory of Relativity.

### **PSOs of Botany :**

- 1) To make students familiar with the significance of Botany in the present day context.
- 2) To make students familiar with the diversity and role of fungi in forest ecosystem.
- 3) To understand plants and their classifications as well as role of cell biology and its function.
- 4) To understand tools and techniques of recombinant DNA technology.
- 5) To understand Ecological and environmental of flora in forest ecosystem.
- 6) To make students familiar with the physiological characters of wild and cultivated plants.

### **COs of Botany :**

After the completion of the course the students will be able :

- \* To understand diversity and applications of Microbes and Cryptogams,
- \* To know about taxonomical and economical study of gymnosperms and utilization of spices, timber and Bamboo.
- \* To understand about conservation of flora in forest ecosystem
- \* To know about classification of plants based on anatomy and embryology.
- \* To understand the role of cell biology, role of genetics and biochemistry of plants.
- \* To know about the physiological characters of wild and cultivated plants.
- \* To understand food chain and food web in ecosystem.
- \* To understand DNA technology, the concepts of gene, cloning vectors, gene transfer techniques, tissue culture techniques, fermentation technology, health care edible vaccines etc.
- \* To understand basics of prokaryotic system, role of microbes in agriculture, medicine and industry.

### **PSO'S of Zoology :**

- 1) To acquire knowledge about entire invertebrates in Animal Kingdom
- 2) To understand various aspects of cell and development biology.
- 3) To learn and understand life and diversity of Chordata and concept of evolution.


- 4) To acquaint the students with essence of hereditary unit of life, concept of genetic disorders, concept of Ecology and ecosystems in maintenance of nature balance.
- 5) To acquaint the students with animal physiology, concept of homeostasis, economic Zoology, pest control and the concept of aquaculture.
- 6) To understand Molecular Biology and the concept of Biotechnology.

### **COs of Zoology :**

After the completion of the course of the students will be able :

- \* To understand cell and its various cell organelles and its functions.
- \* To obtain knowledge about diverse branches of biology like genetics, evolution, ecology, physiology and biotechnology.
- \* To acquire basic skills in the observation and study of nature, biological teaching, experimental skills and scientific investigation.
- \* To understand the unit of life, rich nature of bio diversity of organism and their ecological and evolutionary significance.
- \* To make career in such diverse fields as Apiculture, Sericulture, Fisheries and Lac culture.
- \* To work in zoological survey of India, Archeology, wild life management, photography.



  
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