# Program Outcomes (POs), Programme Specific Outcomes (PSOs)

& Course Outcomes (COs)

for

**Bachelor of Science** 

&

**Master of Science** 

in Zoology



# Programme Outcomes (POs) of B.Sc Zoology

- Equip with the knowledge of anima classification & diversity, ecology, economic importance of animals.
- Learn the fundamental of physiology, cell and molecular biology, genetics, biochemistry, endocrinology, and parasitology.

# Programme Outcomes (POs) of M.Sc Zoology

- Equip with in depth knowledge in animal physiology, biochemistry, cell & molecular biology, genetic, endocrinology, animal ecology and parasitology.
- Learn fish biology, entomology and limnology.

# Programme Specific Outcomes (PSOs) of B.Sc Zoology

Semester	Toology
semester	Vranctice PSO 1
	Know the taxonomic positions and characteristics, life cycles, and even the parasitic mode of important lower animals.
t	its conservation and scope tourism seates
	Comprehensive understanding of water ecosystem, types and the inter-
	impact on water quality by different wastes.
	PSO 2
	-Distinguish the general features and classification of phylums Annelida,
II	Livinopoda, Moliusca aliu Echinodermata
	- Acquaint with the structure and function of various cell organelles, cell division and cell signalling.
	-Understand Environmental hazard and it sources, climatic change and its effect,
	pollutants, waste management technologies and some common diseases.
	PSO 3
	Know the origin of chordate, general descriptions of Pisces, Amphibian,
	Reptilia, Aves and Mammals.
	Know the types of tissues, physiology of nervous and muscles, reproduction and
Ш	endocrine system.
111	Comprehend the structure and functions of carbohydrates, lipids, proteins,
	nucleic acid and enzymes.
	Biology of bee; their diseases and enemies. Prospect in economy and
	entrepreneurship.
	Know the physiology of digestion, excitable tissue, respiration, excretion,
	circulation, endocrine and reproduction.
	PSO 4
	Know the anatomy of vertebrates; integumentary, circulatory, digestive,
	respiratory urinogenital and nervous systems; sense organs in vertebrates.
	Conceptual knowledge of the Mechanism involved in
IV	digestion, respiration, blood, renal and heart.
11	Understand the metabolism of carbohydrates, protein, lipids and protein;
	mechanisms involved in oxidative phosphorylation.  -Know important diagnostic methods in blood and urine; infectious and non-
	infectious diseases including tumours.
	-Understand the importance of Macro- and micronutrients; deficiencies and their
	effect on health. Contemporary life-styles, parasitic microorganisms and health.
	PSO 5
	Understand the concept of DNA as a genetic material and their behavior.
v	Understand mendelian genetics; Mutation, role of chromosomes in sex
	determination; recombinant bacteria and viruses.
	Understand the historical evolution of ethology and chronobiology; biological
	Rhythm and clocks and its effect on animal behavior.
	Know the anatomy of male and female reproduction; Hormones and its role in
	fertilization and reproductive health.
	PSO 6
	Know the different stages of embryonic development and its implications.
VI	Understand the theories of evolution of life; population genetics.
	Comprehend the classification, morphology and physiology of fish; Inland
	fisheries and its sustainable aquaculture.
	Realize the broad concept of immune system; immunoglobulins, types of
	vaccines.

# Programme Specific Outcomes (PSOs) of M.Sc Zoology

Semester	PSO 1
	Understand the principles of genetics and cytogenetics
	Know the principles of animal physiology
1	Understand the concept and principles of biosystematics and evolutionary process
	Understand the concept and principles of developmental biology
	PSO 2
	Conceptual understanding of the principles in cell & molecular biology
П	Understand the principle of biochemistry
	Understand the concept and principles of proteomic & enzymology
	Understand Immunology; types of Immunoglubulins.
	PSO 3
	Understand life cycle, morphology, infection and mode of control of
III	various parasites.
	Understand the principle and techniques in biology: bioinformatics and
	statistical analysis.
	Understand the anatomy of fish, taxonomy, breeding and biodiversity.
	Know the classification of insect, morphological characters, physiology-
	structure functions and metabolism.
	Students take up a project/field studies in real time scenario and analyse the
	outcome based on the data they collect.
	PSO 4
IV	Understand the concept of ecology; biodiversity measurements,
	conservation and management. Community structure.
	Know important animal behaviours; biological rhythms/clock.
	Understand the fisheries of India; its by-products; fish diseases.
	Understand the eusocial insects; insect pest and various control measures.
	Research topics are assigned, supervised and submitted in hard and soft
	copy format.



# Course Outcomes (COs) of B.Sc Zoology

Semester	Course	COs		
	Core 1 Non-Chordates I	COI	To describe the general characters, classification and life cycles of selected species from Protozoa, Porifera, Cnidaria, Ctenophora, Platyhelminthes, Nemathelminthes	
· Ī	Core 2 Principle of Ecology	CO2	To explain the population and its attributes, characteristics of community, structure and functions of ecosystem and concept of biodiversity and wildlife conservation.  To perform various physico-chemical experiment.	
1.01	GE 1 Aquatic Biology	CO3	To explain the properties of freshwater, marine and estuarine ecosystem, pollutions and its management.	
	Core 3 Non-chordates II	CO4	To describe the general characters and classification of Annelida, Arthropoda, Mollusca, Echinodermata	
II	Core 4 Cell Biology	CO5	To describe the structure and functions of Endoplasmic Reticulum, Golgi apparatus, Lysosome, Mitochondria, Peroxisomes Cytoskeleton/ Nucleus.  To write an account on cell division and cell signalling.	
	GE 2 Environment and public health	CO6	To explain the source and effect of various pollutions and to describe the cause, symptom and control of various diseases.	
	Core 5 Diversity of Chordates	CO7	To write the general characteristics, classification of chordate, pisces, amphibia, reptilian, aves and mammals.	
	Core 6 Physiology: Controlling and Coordinating Systems	CO8	To explain the structure and functions of various tissues, nervous, muscular, reproductive, and endocrine system.	
III	Core 7 Fundamentals of Biochemistry	CO9	To explain the structure properties and functional significance of carbohydrates, lipids, protein, nucleic acid and enzymes.	
	SEC 1 Apiculture	CO10	To write the morphology of honeybee, modern bee hive, various diseases and enemies, products of apiculture industry,	
	GE 3 Human Physiology	COII	To describe the digestion and absorption of carbohydrate, fats and protein.  To explain the structure of neuron and its propagation, transport of gases, mechanism of urine formation, structure of heart, various endocrine glands	
	Core 8 Comparative Anatomy of Vertebrates	CO12	Realize the importance of integumentary, circulatory, digestive, respiratory, urinogenital and nervous systems in vertebrates. Types of sense organs in vertebrates will be broadly understood.	
IV	Core 9 Physiology: Life Sustaining Systems	CO13	To explain the structure and mechanism of digestion and respiration, circulation, excretion and blood components.	
	Core 10	CO14	Comprehensive knowledge of the metabolism	

	Biochemistry of Metabolic Processes  SEC 2 Medical Diagnostics	CO15	involved in carbohydrates, protein, lipids and protein breakdown. Familiarize the mechanisms involved in oxidative phosphorylation  To distinguish various diagnostic methods in blood and urine analysis; know infectious and non-infectious diseases. Get an extensive impression of tumours and their impact on health.
	GE 4 Food, Nutrition and Health	CO16	To explain the macro- and microfittiens and health benefits as well as problems associated with their presence or absence will be recognised. Lifestyles diseases as well as diseases due to parasitic microorganisms will be identified.
	Core 11 Molecular Biology	CO17	To describe the process of DNA replication, transcription and translation. Write the post transcriptional modifications and processing of eukaryotic RNA. Explain the regulation in gene and DNA repair mechanism.
V	Core 12 Principles of genetics	CO18	To explain linkage, crossing over and chromosomal mapping. Write the different types of gene mutation. Explain the different types of recombination in bacteria and viruses.
•	DSE 1 Animal behavior and chronobiology	CO19	To describe the various patterns of behavior. What are the different types of social and sexual behavior? Explain biological Rhythm and clocks
de de	DSE 2 Reproductive Biology	CO20	To describe the gonodal hormones and the mechanism of hormones action in reproduction. Explain the functional anatomy of male and female reproduction. Write the process of fertilization in reproductive biology.
	CORE 13 Development Biology	CO21	To describe the history and different stages of embryonic development and its implications.
VII.	CORE 14 Evolutionary Biology	CO22	To describe the evolutionary concept, theories, population genetics, products of evolution, origin and evolution of man and its phylogenetic trees.
VI	DSE 3 Fish and Fisheries	CO23	To write the classification, morphology and physiology of fish and also inland fisheries and its sustainable aquaculture.
	DSE 4 Immunology	CO24	To describe the overview, types of immunity, immunoglobulins, complementary systems and types of vaccines.

# Course Outcomes (COs) of M.Sc (Zoology)

Semester	Course	COs		
	Core I			
	Genetics &	COI	Acquire knowledge of genetics & cytogenetics and	
	Cytogenetics		its application	
	Core 2			
	Animal	CO2	Learn about animal physiology and the various	
	Physiology		physiological pathways and its importance	
I	Core 3			
	Biosystematics &		Learn the concept and principles of taxonomy,	
¥.	Evolutionary	CO3	biosystematics and process of biological evolution.	
	Biology		cross stemanes and process of every	
	Core 4			
	Developmental	CO4	Acquires knowledge of animal development	
	Biology		requires knowledge of animal assets	
	Core 5			
	Cell & Molecular	COS	Learns about cell organelles and functions, the role	
	Biology		of various molecules in the living system	
	Core 6	001	Understand the biological functions of various	
11	Biochemistry	CO6	molecules, the biochemical pathways	
II	Core 7			
	Proteomic &	CO7	Acquire knowledge of proteins and enzyme, role in	
	Enzymology		the living systems.	
	Core 8	CO8	Learns about the body defense system and the	
	Immunology	008	various substances involved.	
	Core 9	CO9	Describe the life cycle, morphology, infection and	
III	Parasitology	(0)	mode of control of various parasites.	
	Core 10		Describe the various principles of biological	
	Techniques in	CO10	techniques, biological databases and statistical	
	Biology		analysis.  Write the modern trends in fish taxonomy, accessory	
	DSE 1	CO11	respiratory organs and acid-base balance.	
	Fish Biology - I		Describe the (1) structure and variation of	
	DSE 1	CO12	mouthparts, antennae etc of insects. (2) various	
	Entomology - I	CO12	insect physiology.	
	DSE 2		Present the field work through PPT and submit a	
	Field Work	CO13	hard copy.	
	Core 11			
	Ecology and	0014	Write the various environmental factors, population	
	Environmental	CO14	ecology, communities and productivity and	
	Biology		anthropogenic impact.	
	Core 12	٨	Write the types of reflexes, types of learning and	
IV	Animal	CO15	communication, parental care, circadian rhythm and	
	Behaviour and	CO15	applied chronobiology.	
	Chronobiology		••	
	DSE 3		Write the wetland and estuarine fisheries, various	
	Fish Biology - II	CO16	types of fish preservation, different types of feed	
	11511 210108) 11		formulation and disease diagnostic tools.	
			Describe the mechanism of caste differentiation in	
	DSE 3	CO17	eusocial insects, life cycle of economic insect,	
	Entomology – II		concept of IPM, types of insect injury to plant,	
	DSE 4 CO18		venom and allergens.	
			Present the research work through seminar and	
	Dissertation		submit their hard copy through proper format.	

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## PROGRAMME OUTCOMES

# PO 1. Critical Thinking:

- 1. Acquire the ability to apply the basic tenets of logic and science to thoughts, actions and interventions.
- 2. Develop the ability to chart out a progressive direction for actions and interventions by learning to recognize the presence of hegemonic ideology
- 3. Develop self-critical abilities and also the ability to view positions, problems and social issues from plural perspectives.

# PO 2. Effective Citizenship:

- 1. Learn to participate in nation building by adhering to the principles of sovereignty of the nation, socialism, secularism, democracy and the values
- 2. Develop and practice gender sensitive attitudes, environmental awareness, the ability to understand and resist various kinds of discriminations and empathetic social awareness about various kinds of marginalisation.
- 3. Internalise certain highlights of the nation's and region's history. Especially of the freedom movement, the renaissance within native societies and the project of modernisation of the post- colonial society.

# PO 3. Effective Communication:

- 1. Acquire the ability to speak, write, read and listen clearly in person and through electronic media in both English and in one Modern Indian
- 2. Learn to articulate analysis, synthesis, and evaluation of situations and themes in a well- informed manner.
- 3. Generate hypothesis and articulate assent or dissent by employing both reason and creative thinking.

## PO 4. Interdisciplinarity:

- 1. Perceive knowledge as an organic comprehensive, interrelated and integrated faculty of the human mind
- 2. Understand the issues of environmental contexts and sustainable development as a basic interdisciplinary concern of all disciplines.
- 3. Develop aesthetic, social, humanistic and artistic sensibilities for problem solving and evolving a comprehensive perspective.



## PROGRAMME SPECIFIC OUTCOMES (PSOs)

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

## After successful completion of three year degree program in Chemistry a student should be able to;

PSO 1 Understand the fundamental concepts, principles and processes underlying the academic field of chemistry, its different subfields (analytical, inorganic, organic and physical), and its linkages with related disciplinary areas/subjects;

PSO 2 Demonstrate procedural knowledge that creates different types of professionals in the field of chemistry and related fields such as pharmaceuticals, chemical industry, teaching, research, environmental monitoring, product quality, consumer goods industry, food products, cosmetics industry, etc.;

PSO 3 mploy critical thinking and the scientific method to design, carry out, record and analyze the results of chemical experiments and get an awareness of the impact of chemistry on the environment and the society.

**PSO 4** Use chemical techniques relevant to academia and industry, generic skills and global competencies, including knowledge and skills that enable students to undertake further studies in the field of chemistry or a related field, and work in the chemical and non-chemical industry sectors.

**PSO5** Undertake hands on lab work and practical activities which develop problem solving abilities required for successful career in pharmaceuticals, chemical industry, teaching, research, environmental monitoring, product quality, consumer goods industry, food products, cosmetics industry, etc.

**PSO** 6Understand safety of chemicals, transfer and measurement of chemical, preparation of solutions, and find out the green route for chemical reaction for sustainable development.

PSO 7 Create an awareness of the impact of chemistry on the environment, society, and development outside the scientific community.



## **COURSE OUTCOMES (PSOs)**

#### 1B01CHE

## Theoretical and Inorganic Chemistry

- CO 1: Correlate the structure and behavior of atom
- CO2: Differentiate the various chemical interactions in molecules through bonding concepts
- CO3: Analyze and interpret the gradation in the properties of elements in the periodic table
- CO4:Predict the nuclear transmutations
- CO5: identify the role of radioactive materials in different applications

#### **2B03CHE**

## Analytical and Inorganic chemistry-I

- CO 1: Determine the error, standard deviation and relative standard deviation of analytical data.
- CO 2:Understand statistical treatment of analytical data and the principles underlying volumetric titrations.
- CO 3:Understand basic principles behind selective precipitation of cation.
- CO 4: Summarize the characteristics of s- and p- block elements CO 5: Compare the various concepts of acids and bases

#### 3B04CHE/PCH

## Organic Chemistry-I

- CO:1 ) Explain the types of electron displacement in organic moleculesand predict the properties of molecules based on electron displacement effect
- CO:2) Distinguish aromatic , anti aromatic and nonaromatic compounds and ions and analyse the mechanistic details of aromatic electrophylic substitution
- CO:3) Classify stereo isomers, understand the property of chirality , apply CIP rules to recognize the configuration and explain the stability of conformations drawing energy profile diagram
- CO: 4) Explain the mechanism of polymerization, synthesis and application of industrially important Polymers
- CO: 5) Explain the classification and the methods of preparation of important dyes
- CO: 6) Illustrate the preparative methods and synthetic applications of important synthetic reagents

#### 4B06CHE/PCH

#### Organic Chemistry-II

- CO:1) Describe mechanisms for substitution and elimination reactions, and predict theeffect of nucleophile, leaving group, and solvent on the relative rates of SN1 versus SN2 reactions, and E1 versus E2 reactions, as well as on the relative rates of substitution versus elimination.
- CO :2) Explain Chugaev and Cope eliminations and E1CB mechanism
- CO:3) Illustrate the preparative methods and important properties of Hydro carbons, halogen compounds, Hydroxy compounds and Carbonyl Compounds
- CO :4) Explain the mechanism of important name reactions including rearrangements involving hydroxyl and Carbonyl functional groups

#### 5B07CHE/PCH

### Analytical and Inorganic chemistry-II

- CO: 1 Understand the qualitative and quantitative aspects of analysis and separation techniques CO: 2 Explain instrumentation and working principle of different analytical techniques –TGA, DTA and radio chemical method of analysis.
- CO: 3 Familiarize with the preparation, properties and uses of some inorganic compounds like hydrides of boron, sulphur and silicon based inorganic polymers and understand their importance
- CO:4Explain the classification of refractories.
- CO:5Knowthe position, electronic configuration and physical properties of noble gases and explain hybridization and geometry of different xenon compounds
- CO:6Explain various steps involved in metallurgical operations and power metallurgy and understand Corrosion, theories of Corrosion and factors affecting Corrosion

#### 5B08CHE/PCH

## **Inorganic Chemistry**

- CO:1) Understand the behavior of transition and inner transition elements and explain the separation of lanthanides by ion exchange method and lanthanide contraction
- CO: 2) Understand key features of co-ordination compounds and illustrate the theories of coordination complexes, stability of complexes and explain factors affecting crystal field splitting.
- CO: 3) Explain biological functions of metal ions.

CO: 4) Familiarize new elements in periodic table and Understand recent developments in inorganicchemistry.CO7: Appreciation of human activities in conservation of useful plants from the past to the present.

#### 5B09CHE/PCH

#### Physical Chemistry-I

- CO1) Recognize and relate the properties of ideal and real gases
- CO2) Describe the properties of liquids.
- CO3) Identify and distinguish the types of solutions
- CO4) Explain colligative properties of dilute solution and determine the molecular weight of a solute
- CO5) Identifydifferent crystallographic systems and various types of crystal defects
- CO6) Describe X ray diffraction to explain internal structure of solids

#### 5B10CHE/PCH

#### Physical Chemistry-II

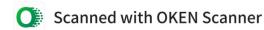
- CO 1) Identify the fundamental concepts of thermodynamics
- CO2) Relate and Interpret the various laws of thermodynamics
- CO3) Understand the concept of entropy and how the whole universe is related to it.
- CO 4) Construct phase diagrams and study the equilibrium exists between various states of matter.and apply principles phase diagram to separation processes and for property modification of different type of system.
- CO 5) Understand basic principles of surface chemistry and its application in various fields
- CO 6) Correlate the types of colloids with its properties and to explore the applications in day todaylife.

## 6B14CHE/PCH

## Organic Chemistry III

- CO1 Acquaint with the classification, structures and properties of carbohydrates, explain the configuration of glucose and fructose, their inter conversion, illustrate Killiani-Fischer synthesis and Ruff degradation
- CO2 Illustrate the preparative methods and the properties of different classes of organic acids , nitrogen containing compounds and heterocyclic compounds .
- CO3Classify amino acids and peptides and explain the synthesisof simple peptides by N- protection (t-butyloxycarbonyl and phthaloyl)
- &C-activating groups and Merrifield solid- phase synthesis. Explain the methods of determination of primary structure of peptides





Distinguish the components of nucleic acids and lipids and their roles in biological system and the biological importance of various all products. Familiarise with important drugs and their therapeutic applications

Recognisethe types and characteristics of pericyclic reaction and analyse the pericyclic reactions by FMO methods. Understand hotochemistry of carbonyl compounds

SUnderstand the principles of Green Chemistry and the importance of green synthesis and recognize the impact of green chemistry uman health and the environment

#### 6B15CHE/PCH

## **Physical Chemistry III**

- 1) Understand the mechanism of electrical conductance, theories of electrical conductance, and coductometric titrations
- 2) Understand the basic principle of ionic equilibrium and its application in laboratories
- 3) Design different types of electro chemical cell and able to calculate its potential.
- ) 4) Familiarise with electro analytical methods
- ) 5) Acquaint with kinetics of simple, complex, enzymatic and surface reactions
- D6) Understand basic principles of photochemistry and its application in spectrophotometry

#### 6B16CHE/PCH

## **Physical Methods in Chemistry**

- O 1 i) Explain the important principles of spectroscopy ii) Apply spectroscopic techniques in analyzing the structure of simple organic nolecules
- O 2 Acquainting the working principles of various instruments and their functions
- CO 3 Understand the basic principles of symmetry and group theory and its applications in chemistry
- CO 4 Study the basic principles of nanochemistry and understand the various nanofabrication methods
- 20 5 Explain the important principles for quantum chemical and molecular mechanic methods

#### 6B17CHE/PCH

## **Discipline Specific Elective Course**

- CO1 Know the importance of environmental studies and methods of conservation of natural resources.
- CO2 Describe the structure and function of an ecosystem and explain the values and Conservation of bio-diversity.
- CO3 Explain the sources, environmental effects and control measures of various types of pollutions.

CO 4: Identify the toxic chemicals in environment and understand the sources, effects and treatmentof heavy metal poisoning CO5: Understand the methods of domestic water treatment , Sewage analysis and Sewage treatment

# 1B02CHE/PCH& 2B02CHE/PCH

# Volumetric Analysis

- CO 1) Apply the theoretical concepts while performing experiments.
- CO2 ) Acquire practical skill to estimate acid, base, oxidizing agents etc by volumetric titration method
- CO3) Estimate the metallic ions by complexometric titration method
- CO4) Acknowledge experimental errors and their possible sources.
- CO5) Able to prepare inorganic complexes
- CO 6) Design, carry out, record and analyze the results of chemical experiments

# 5B11 CHE /PCH& 6B11 CHE/PCH

## **GRAVIMETRIC ANALYSIS**

- CO1: Make use of standardised procedures for the Gravimetric analysis
- CO2: learn the skills of Precipitation process, digestion, filtration, incineration etc. CO3:Aquire practical Knowledge of co-precipitation
- CO5: Acknowledge experimental errors and their possible sources.
- CO6: Able to design, carry out, record and analyze the results of chemical experiments

## 5B12 CHE/PCH& 6B12 CHE/PCH

## **ORGANIC CHEMISTRY**

- CO 1) Apply the theoretical concepts while performing experiments.
- CO2) Acquire practical skill in qualitative analysis of organic compounds
- CO 3) Acquire practical skill in preparing organic compounds and in their purification by crystallisation
- CO4) Separate organic compounds in a mixture -by steam distillation, TLC and Column Chromatography
- CO5) Acquire the habit of working safely with the chemicals and handling of equipments

#### 6B18 CHE/PCH

## PHYSICAL CHEMISTRY

- CO 1)Acquire practical skill in physical chemistry experiments such as Cryoscopy, Transition Experiments ,Phase Rule Experiments, Conductometric titrations, Potentiometric titrations, colorimetry and Chemical Kinetics
- CO2) Learn statistical approach for evaluating data

le to carry out and record these experiments in a skilful manner quire the habit of working safely with the chemicals and handling of equipments

# 5B13CHE/PCH& 6B13CHE/PCH

Project & Industrial Visit

ple to enhance the skills of managing the resources, time and team work. Eudents will be able to function as a member of an interdisciplinary problem

# **Program Outcomes**

## I. Program Outcome of Bachelor of Arts (B.A.)

Student seeking admission for B.A. programme is expected to imbue with following quality which helps them in their future life to achieve the expected Goals.

- a. Realization of human values.
- b. Sense of social service.
- c. Responsible and dutiful citizen.
- d. Critical temper
- e. Creative ability.

# Program Specific Outcomes B.A. (Hindi)

On completion of B.A (Hindi), Students are able to:

- 1. To understand the basic concept and subject of Hindi & its origin
- 2. To make or not the importance of subject Hindi & its Branches.
- 3. To understand various aspect of Hindi literature with a process to reach method and giving new mode and direction.
- 4. To make a attempt in different area and theory such as vocabulary and vice versa
- 5. To understand in the Literature more in a border areas then Mary confined to subject.
- 6. To know about Hindi literature its roots cause perspectives and methods.
- 7. Elaborating and understanding its philosophical methods of Hindi Literature.
- 8. Evaluating the concept of Hindi from past to present and making the society more closely through literature.

## Course outcomes

Class: - F.Y.B.A. (Sem. I)

Paper Name:-Optional Hindi (Paper I)

On completion of the course, students are able to

- 1. To able to understand 'Mahabharata Ki Ek Saanj' by Bharatbhushan Agrawal
- 2. To able to understand the eassy by Kubernath Roy.
- 3. To able to understand the stories by Kamaleshwar and Udayprakash.
- 4. To able to understand the stories by Sudha Arora and Yashpal

#### Class: - F.Y.B.A. (Sem. II)

## Paper Name:-Optional Hindi (Paper II)

On completion of the course, students are able to

- 1. To able to understand the eassy by Addhyapak Purnasingh.
- 2. To able to understand the one act play by Jagadishchandra Mathur
- 3. To able to understand novel by Bhagwaticharan Varma.
- 4. To able to understand the characters in Chitralekha Novel

#### Class: - S.Y.B.A.(Sem. III)

#### Paper Name:-Functional Hindi

On completion of the course, students are able to

- 1.To able to Understand the meaning, concept and importance of Functional Hindi.
- 2. To able to understand various forms of Functional Hindi according to its area of application
- 3. To able to understand the importance of translation
- 4. To able to understand various forms of writing in media

#### Class: - S.Y.B.A. (Sem. IV)

#### Paper Name:-Functional Hindi

On completion of the course, students are able to

- 1. To able to understand various forms of Functional Hindi language relating to internet.
- 2. To able to understand use of Functional Hindi language for newspaper, cinema and radio.
- 3. To able to understand the concept of Right to information.
- 4. To able to understand the concept of fundamental rights of Indian Constitution.

#### Class: -T.Y.B.A. (Sem. V)

## Paper Name:-History of Hindi literature

On completion of the course, students are able to

- 1. To able to understand the origin of Hindi language and its literature.
- 2. To able to understand Identifying the dialects of Hindi language family.
- 3. To able to Analyse the development of Khariboli Hindi.
- 4. To able to understand the concept of history of literature.

## Class: -T.Y.B.A. (Sem. VI)

# Paper Name:-History of Hindi literature

On completion of the course, students are able to

- 1. To able to understand the basis of the classification of Hindi literature.
- 2. To able to understand the importance and basis of the names given to each period of Hindi literature.
- 3. To able to understand the features of Adikal, Bhakti kal, Ritikal and Adhunikkal, in context of socio cultural and political condition of that period.
- 4. To able to understand the reason of emergence of Adhunikkal in Hindi literature.

#### Class: -T.Y.B.A. (Sem. V)

### Paper Name:-Functional Hindi

On completion of the course, students are able to

- 1. To able to understand the concept of information technology.
- 2. To able to use study material from websites of Hindi literature
- 3. To able to understand the importance and problems of information technology.
- 4. To able to understand the role of information technology in employment generation.

#### Class: -T.Y.B.A. (Sem. VI)

#### Paper Name:-Functional Hindi

On completion of the course, students are able to

- 1. To able to understand the importance of social media.
- 2. To able to understand the impact of social media on society.
- 3. To able to understand the relation between social media and law.
- 4. To able to understand the problems of social media and their remedies.

#### Class: -T.Y.B.A. (Sem. V)

### Paper Name:-Linguistic, Hindi language and Hindi grammar.

On completion of the course, students are able to

- 1. To able to understand the concepts of linguistic.
- 2. To able to understand the different flows of Hindi language (Rajbhasha, Bolibhasha)
- 3. To able to understand the introductorily concepts of Hindi grammar.
- 4. To able to understand the importance of linguistic.

Class: -T.Y.B.A. (Sem. VI)

Paper Name:-Linguistic, Hindi language and Hindi grammar.

On completion of the course, students are able to

- 1. To able to understand the ancient and medieval period languages.
- 2. To able to understand the origin and development of Hindi language.
- 3. To able to understand the different forms of Khadiboli (Hindi, Urdu)
- 4. To able to understand the introductorily concepts of Hindi grammar.

HOD

Department of Hindi

# COs, POs and POs Dept. of English

Dept. of English		
Bachelor of Arts		
PROGRAM: B.A (Engl	ish)	
	PO-1: To provide in depth knowledge of language and literary concepts.	
	PO-2: To familiarize with contemporary and recent trends and advances in	
	language and literature	
	PO-3: To improve language competence.	
<b>Program Outcomes</b>	PO-4: To introduce students to some advanced areas of language study.	
	PO-5:To appreciate and Enjoy Literature	
	PO-6:To engage self expression and creativity	
	PO-7:To improve their competence in use of English	
	PSO <sub>5</sub> 1. After completion of programme, students will be able to have in	
	depth knowledge of language and literary concepts.	
	PSO-2. They became familiarize with contemporary and recent trends and	
Program Specific	advances in language and literature.	
Outcomes	PSO-3. Language competency improved.	
	PSO-4. Students got introduced to some advanced areas of language study.	
	They become confident to prepare to go for detailed study and understanding	
	of literature and language.	
	Course Outcomes	
n n	F.Y.B.A/FYBCom	
	CO 1: Students familiarized with excellent pieces of prose and poetry in	
	English so that they realize the beauty and communicative power of English.	
	CO 2: Students got exposure to native cultural experiences and situations in	
Course Code: 11001	order to develop humane values and social awareness.	
Course Name:	CO 3: Developed overall linguistic competence and communicative skills of	
Compulsory English-I	the student	
	CO 4: To enhance employability of the students by developing their	
	linguistic competence and communicative skills	
	CO 1: Students familiarized with excellent pieces of prose and poetry in	
	English so that they realize the beauty and communicative power of English.	
G G 1 14001	CO 2: Students got exposure to native cultural experiences and situations in	
Course Code: 12001	order to develop humane values and social awareness.	
Course Name:	CO 3: Developed overall linguistic competence and communicative skills of	
Compulsory English-II	the student	
	CO 4: To enhance employability of the students by developing their	
	linguistic competence and communicative skills	
0 0 1 11001	CO 1: Students got exposure to the basics of literature and language.	
Course Code: 11331	CO 2: They familiarized with different types of literature in English, the	
Course Name:	literary devices and terms so that they understand the literary merit, beauty	
Optional English-I	and creative use of language	



Course Name: Optional English-II  Course Code: 11602 Course Name: 'D' Component: Prepration for Competitive Examinations  Course Name: 'D' Component: Prepration for Competitive Examinations  Course Code: 12602 Course Name: 'D' Component: Prepration for Course Name: 'D' Component: Prepration for Course Name: 'D' Component: Prepration for Competitive Examinations  CO 1: Introduced and guided UG students to various competitive examinations.  CO 4: To impart pre-employment skills.  CO 2: Developed self-reliant learning habits in students.  CO 2: Developed self-reliant learning habits in students.  CO 3: Enhanced communicative approach.  CO 4: To impart pre-employment skills.  CO 4: To impart pre-employment skills.  CO 4: To impart pre-employment skills.  CO 5: Introduced and guided UG students to various competitive examinations.  CO 6: Developed self-reliant learning habits in students.  CO 7: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.  CO 8: Introduced students to some of the basics of English for the purpose of Communication.  CO 9: Introduced students to some of the basics of English for the purpose of Communication.  CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.		
Course Code: 11332 Course Name: Optional English-II  Course Code: 11602 Course Name: 'D' Component: Prepration for Competitive Examinations  Course Name: 'D' Component: Prepration for Competitive Examinations  Course Code: 12602 Course Name: 'D' Component: Prepration for Competitive Examinations  Course Code: 12602 Course Name: 'D' Component: Prepration for Competitive Examinations  Course Code: 12602 Course Name: 'D' Component: Prepration for Competitive Examinations  Course Code: 12602 Course Code: 12602 Course Name: 'D' Component: Prepration for Competitive Examinations  Course Code: 12602 Course Code: 12602 Course Code: 12602 Course Name: 'D' Component: Prepration for Competitive Examinations  Course Code: 11601 Course Co		aware of the technical aspects and their practical usage.
Course Code: 11332 Course Name: Optional English-II  Course Code: 11602 Course Name: 'D' Component: Prepration for Course Name: 'D' Component: Prepration for Competitive Examinations  Course Code: 12602 Course Name: 'D' Component: Prepration for Component: Ocurse Code: 11601 Course Code: 11601		
Course Code: 11332 Course Name: Optional English-II  Course Code: 11602 Course Name: 'D' Component: Prepration for Competitive Examinations  CO 4: To enhanced and guided UG students to various competitive examinations  CO 4: To impart pre-employment skills.  CO 4: To impart pre-employment skills.  CO 2: Developed self-reliant learning habits in students.  CO 2: Developed self-reliant learning habits in students.  CO 4: To impart pre-employment skills.  CO 4: To impart pre-employment skills.  CO 5: Developed self-reliant learning habits in students.  CO 6: Developed self-reliant learning habits in students.  CO 7: Introduced and guided UG students to various competitive examinations.  CO 6: Developed self-reliant learning habits in students.  CO 7: Developed self-reliant learning habits in students.  CO 8: Enhanced communicative approach.  CO 9: Developed self-reliant learning habits in students.  CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.  CO 2: Imparted pre-employment skills.  CO 3: Introduced students to some of the basics of English for the purpose of Communication.  CO 4: Developed self-reliant learning habits in students.		CO 1: Students got exposure to the basics of literature and language.
Optional English-II  Course Code: 11602 Course Name: 'D' Component: Prepration for Competitive Examinations  CO 1: Introduced and guided UG students to various competitive examinations.  CO 2: Developed self-reliant learning habits in students.  CO 1: Introduced and guided UG students to various competitive examinations.  CO 2: Developed self-reliant learning habits in students.  CO 4: To impart pre-employment skills.  CO 2: Developed self-reliant learning habits in students.  CO 3: Enhanced communicative approach.  CO 4: To impart pre-employment skills.  CO 3: Enhanced communicative approach.  CO 4: To impart pre-employment skills.  CO 4: To impart pre-employment skills.  CO 5: Imparted pre-employment skills.  CO 6: Introduced and guided UG students to various competitive examinations.  CO 6: To impart pre-employment skills.  CO 6: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.  CO 7: Developed self-reliant learning habits in students.  CO 8: Introduced students to some of the basics of English for the purpose of Communication.  CO 4: Developed self-reliant learning habits in students.  CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.	Course Code: 11332	literary devices and terms so that they understand the literary merit, beauty and creative use of language
Course Code: 11602 Course Name: 'D' Component: Prepration for Competitive Examinations  Course Name: 'D' Component: Prepration for Competitive Examinations  CO 1: Introduced and guided UG students to various competitive examinations.  CO 3: Enhanced communicative approach.  CO 4: To impart pre-employment skills.  CO 2: Developed self-reliant learning habits in students.  CO 2: Developed self-reliant learning habits in students.  CO 3: Enhanced communicative approach.  CO 4: To impart pre-employment skills.  CO 3: Enhanced communicative approach.  CO 4: To impart pre-employment skills.  CO 4: To impart pre-employment skills.  CO 4: To impart pre-employment skills.  CO 5: Introduced and guided UG students to various competitive examinations.  CO 2: Developed self-reliant learning habits in students.  CO 4: To impart pre-employment skills.  CO 5: Introduced different methods of teaching, learning and assessment for developing appropriate communication skills.  CO 6: Introduced and guided UG students to various competitive examinations.  CO 1: Introduced and guided UG students to various competitive examinations.  CO 2: Developed self-reliant learning habits in students.  CO 4: To impart pre-employment skills.  CO 3: Introduced different methods of teaching, learning and assessment for developing appropriate communication skills.	Optional English-II	aware of the technical aspects and their practical usage.
Course Name: 'D' Component: Prepration for Competitive Examinations  CO 1: Introduced and guided UG students to various competitive examinations.  CO 2: Developed self-reliant learning habits in students.  CO 4: To impart pre-employment skills.  CO 2: Developed self-reliant learning habits in students.  CO 2: Developed self-reliant learning habits in students.  CO 3: Enhanced communicative approach.  CO 4: To impart pre-employment skills.  CO 4: To impart pre-employment skills.  CO 4: To impart pre-employment skills.  CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.  CO 2: Imparted pre-employment skills.  CO 3: Introduced students to some of the basics of English for the purpose of Communication.  CO 4: Developed self-reliant learning habits in students.  CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.		CO 4: To enhance the job potential of students by improving their language skills
Component: Prepration for Competitive Examinations  CO 1: Introduced and guided UG students to various competitive examinations.  CO 2: Developed self-reliant learning habits in students.  CO 3: Enhanced communicative approach.  CO 4: To impart pre-employment skills.  CO 2: Developed self-reliant learning habits in students.  CO 3: Enhanced communicative approach.  CO 4: To impart pre-employment skills.  CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.  CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.	Course Code: 11602	examinations.
Prepration for Competitive Examinations  Course Code: 12602 Course Name: 'D' Component: Prepration for Competitive Examinations  Course Code: 11601 Course Code: 11601 Course Name: 'D' Course Na		CO 2: Developed self-reliant learning habits in students.
Course Code: 12602 Course Name: 'D' Component: Prepration for Competitive Examinations  Course Code: 11601 Course Name: 'D' Component: Prepration for Competitive Examinations  Course Code: 11601 Course Name: 'D' Course Name: 'D' Component: ii) Component: iii) Component: iii Component: iii Course Name: Course Name: Course Name: Course Name: Course Name: Oo as Introduced students to some of the basics of English for the purpose of Communication.  Course Code: 12601	Prepration for	CO 3: Enhanced communicative approach.
Course Name: 'D' Component: Prepration for Competitive Examinations  CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.  CO 2: Developed self-reliant learning habits in students.  CO 4: To impart pre-employment skills.  CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.  CO 2: Imparted pre-employment skills.  CO 2: Imparted pre-employment skills.  CO 3: Introduced students to some of the basics of English for the purpose of Communication.  CO 4: Developed self-reliant learning habits in students.  CO 4: Developed self-reliant learning habits in students.	Competitive	
Component: Prepration for Competitive Examinations  Course Code: 11601 Course Name: 'D' Component: ii) Component: iii Communication Skills in English  Course Code: 12601		examinations.
Prepration for Competitive Examinations  CO 4: To impart pre-employment skills.  CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.  CO 2: Imparted pre-employment skills.  CO 3: Introduced students to some of the basics of English for the purpose of Communication.  CO 4: Developed self-reliant learning habits in students.  CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.		CO 2: Developed self-reliant learning habits in students.
Course Code: 11601 Course Name: 'D' Component: ii) Communication Skills in English  CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.  CO 2: Imparted pre-employment skills.  CO 3: Introduced students to some of the basics of English for the purpose of Communication.  CO 4: Developed self-reliant learning habits in students.  CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.	Prepration for Competitive Examinations  Course Code: 11601 Course Name: 'D' Component: ii) Communication Skills	CO 4: Enhanced communicative approach.
Course Code: 11601 Course Name: 'D' Component: ii) Communication Skills in English CO 4: Developed self-reliant learning habits in students.  CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.		A
Component: ii) Communication Skills in English  CO 4: Developed self-reliant learning habits in students.  CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.		developing appropriate communication skills.
in English  CO 4: Developed self-reliant learning habits in students.  CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.		CO 2: Imparted pre-employment skills.
CO 1: Adopted different methods of teaching, learning and assessment for developing appropriate communication skills.		of Communication.
Course Code:12601 developing appropriate communication skills.		
Course Name (D) CO 2: Imparted pre-employment skills	Course Code:12601	developing appropriate communication skills.
	Course Name:'D'	CO 2: Imparted pre-employment skills.
Component: ii) Communication Skills Communication Skills CO 3: Introduced students to some of the basics of English for the purpose of Communication.		of Communication.
e and the state of		
CO 1: Students realized the beauty and communicative power of English through good pieces of prose and poetry.	Course Code 111	through good pieces of prose and poetry.
Course Name: Compulsory  that they understood the importance and utility of English language.	Course	that they understood the importance and utility of English language.
English CO 3: Developed overall linguistic competence and communicative skills among the students.		

DESCRIPTION OF THE PROPERTY OF	450 70 70 70 70 70 70 70 70 70 70 70 70 70
	CO 4: Developed oral and written communicative skills among the students so that their employability enhanced and English becomes the medium of
	their livelihood and personality.  CO 1: Students realized the beauty and communicative power of English
	through and pieces of process and poster/
	through good pieces of prose and poetry.
	CO 2: They got exposure to native cultural experiences and situations so
Course Code: 121	that they understood the importance and utility of English language.
Course	CO 3: Developed overall linguistic competence and communicative skills
Name: Compulsory	among the students
English	CO 4: Developed oral and written communicative skills among the students
	so that their employability enhanced and English becomes the medium of
	their livelihood and personality.
	Course Outcomes
	S.Y.B.A./SY BSc/SYBCS/SY Biotech
	CO 1: Exposed students to the best examples of literature in English and
	anhanced their emotional quotient as well as independent unitking.
Course Code:23001	CO 2: Instilled universal human values through best pieces of literature in
Course Name:	English :
Compulsory English	CO 3: Developed effective communication skills by developing ability to
	use right words in the right context.
	CO 4: To revise and reinforce the learning of some important areas of
	grammar for better linguistic competence.  CO 1: Exposed students to the best examples of literature in English and
	enhanced their emotional quotient as well as independent thinking.
Course Code: 24001	CO 2: Instilled universal human values through best pieces of literature in
Course	English
Name:Compulsory English	CO 3: Developed effective communication skills by developing ability to
English	use right words in the right context.
	CO 4: To revise and reinforce the learning of some important areas of
	grammar for better linguistic competence.
	CO 1: Familiarized students with the various components of language.
Course Code: 23333	CO 2: Developed overall linguistic competence of the students.
Course Name:	CO 3: Introduced students to some advanced areas of language study.
Advanced Study of	CO 4: Prepared students to go for detailed study and understanding of
English Language	language.
	CO 1: Familiarized students with the various components of language.
Course Code: 24333	CO 2: Developed overall linguistic competence of the students.
Course Name:	CO 3: Introduced students to some advanced areas of language study.
Advanced Study of	CO 4: Prepared students to go for detailed study and understanding of
English Language	language.
	CO 1: Introduced Drama as a major form of literature
Course Code: 23331	CO 2: Introduced minor forms of Drama
Course Name:	CO 3: Developed interest among the students to appreciate and analyze
Appreciating Drama	drama independently.
	diama macpenaemy.

	CO 4: Enhanced students awareness in the aesthetics of Drama and to
	empower them
	CO 1: Introduced Drama as a major form of literature
Course Code: 24331	CO 2: Introduced minor forms of Drama
Course Name:	CO 3: Developed interest among the students
Appreciating Drama	
	CO 4: Enhanced students awareness in the aesthetics of Drama and to empower them
	CO 1: Students acquainted and familiarized with the terminology in poetry criticism. (i.e. the terms used in critical analysis and
Course Code: 23332 Course Name:	masterpieces of English poetry.
Appreciating Poetry	CO 3: Enhanced students awareness in the aesthetics of poetry and to empower them to read, appreciate and critically and to
	independently independently
	CO 4: exposed to a variety of experiences through poems of different mold and that their aesthetic and human sensibilities get
V-14	
	CO 1: Students acquainted and formity is a second s
C	
Course Code: 24332 Course Name: Appreciating Poetry	
	CO 3: Enhanced students awareness in the
	independently independently
	CO 4: exposed to a variety of experiences through poems of different mold and that their aesthetic and human sensibilities and the control of
1	and Human Scholling det entroped
	CO 1: Enhanced the skill of using English for everyday communication
Course Code:23334 Course Name: Skill	CO 2: Acquainted the students with the verbal and nonverbal communication
Enhancement Course	CO 3: Created opportunities to access exposure of speaking in various
	CO 1: To acquaint and familiarize the students with soft skills
	CO 1: Enhanced the skill of using English for everyday communication
	CO 2: Acquainted the students with the verbal and nonverbal
	communication
	CO 3: Created opportunities to access exposure of speaking in various
	contexts are supposed of speaking in various
	CO 4: To acquaint and familiarize the students with soft skills
Course Code: 23922	CO 1: Introduced the use of English in multimedia

Course Name: AECC English	CO 2: Acquainted the students with the language skills in multivalent contexts and enlightened them regarding the speaking skill in various contexts
	CO 3: Familiarized the students with advanced writing skills in different contexts
	CO 4: To develop interest among the students to interact in English
Prof. r	CO 1: Introduced the use of English in multimedia
Course Code: 24922 Course Name: AECC	CO 2: Acquainted the students with the language skills in multivalent contexts and enlightened them regarding the speaking skill in various contexts
English	CO 3: Familiarized the students with advanced writing skills in different contexts
	CO 4: To develop interest among the students to interact in English
3 Vo. 1	Course Outcomes
	T.Y.BA.
G G .) . 15001	CO 1: To familiarize students with some excellent pieces of prose and poetry in English so that they realize the beauty and communicative power of English.
Course Code: 35001 Course	CO 2: To enable students to become competent and effective users of
Name:Compulsory	English in real life situations.
English	CO 3: To contribute to the overall personality development of the students.
, and the second	CO 4: To instill humanitarian values and foster sympathetic attitude in the students.
C Cala: 26001	CO 1: To familiarize students with some excellent pieces of prose and poetry in English so that they realize the beauty and communicative power of English.
Course Code: 36001 Course Name:Compulsory	CO 2: To enable students to become competent and effective users of
English	CO 3: To contribute to the overall personality development of the students.
g	CO 4: To instill humanitarian values and foster sympathetic attitude in the students.
	CO 1: To introduce students to the basics of novel as a literary form
Course Code: 35331	CO 2: To expose students to the historical development and nature of novel
Course Name: Appreciating Novel	CO 3: To make students aware of different types and aspects of novel
	CO 4: To develop literary sensibility and sense of cultural diversity in
	CO 1: To introduce students to the basics of novel as a literary form
Course Code: 36331	CO 2: To expose students to the historical development and nature of novel
Course Name:	CO 3: To make students aware of different types and aspects of novel
Appreciating Novel	CO 4: To develop literary sensibility and sense of cultural diversity in
Appreciating Novel	students  CO 1: To introduce students to the basics of literary criticism

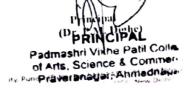
Course Name:	CO 2: To make them aware of the nature and historical development of
Introduction to	criticism 1
Literary Criticism	CO 3: To make them familiar with the significant critical approaches and
	terms
	CO 4: To encourage students to interpret literary works in the light of the
	critical approaches
	CO 1: To introduce students to the basics of literary criticism
6 6 1 4/222	CO 2: To make them aware of the nature and historical development of
Course Code:36332	criticism
Course Name: Introduction to	CO 3: To make them familiar with the significant critical approaches and
Literary Criticism	terms
Literary Criticism	CO 4: To encourage students to interpret literary works in the light of the
	critical approaches
	CO 1: To equip the students with the social skills
Course Code: 35333	CO 2: To train the students interpersonal skills
Course Name: Skill	CO 3: To build self-confidence and communicate effectively
Enhancement Course	CO 4: To Encourage the students to think critically
	CO 1: To equip the students with the social skills
Course Code: 36333	CO 2: To train the students interpersonal skills
Course Name: Skill	CO 3: To build self-confidence and communicate effectively
<b>Enhancement Course</b>	CO 4: To Encourage the students to think critically
	MASTER OF ARTS
	MASTER OF ARTS
PROGRAM: MA	PO-1. Students acquainted with major trends and writers in English
	literature through detailed study of specific literary works.
	PO-2. This programme enabled students to read and appreciate critically the
	literary works by the major English authors.
	<b>PO_3</b> It helped to cultivate among students a sense of understanding in
	order to make them better human beings by the exposure to literature.
	PO-4. Students linguistic ompetence along with the literary competence
Program Outcomes	improved.
	PO-5. To be familiarized with the major trends, ideas, genres, poetic forms
	and prose.
	PO 6 To have developed awareness of philosophical, historical,
	comparative, structural, social and psychological perspectives of language
	PO-7. To have developed the critical and analytic sensibilities.
	PSO-1. To acquaint students with major trends and writers in English
	literature through detailed study of specific literary works.  PSO-2. To enable students to read and appreciate critically the literary
Program Specific	PSO-2. To enable students to read and appreciate critically the motor English authors
Outcomes	works by the major English authors.  PSO-3. To cultivate among students a sense of understanding in order to
	make them better human beings by the exposure to literature.
	make them better numan beings by the exposure to metal-

and the second	DSO 4 Tr
- Marian	PSO-4. To improve the linguistic competence along with the literary
1-4 App	competence of students.
- Laboratory and	Course Outcomes
Course Code: ENG 50	M. A. I (Sem-I&II)  1 CO 1: Introduce major movements in literature of the world.
MJ	CO 2: Enhance & reinforce understanding of the texts.
Course	CO 4 :
Name:Background to	CO 3: Integrate knowledge of the diversity of cultures and people.
English Literature Course Code:	CO 4: Connect the timeline of literary history.
Course	CO 1: Introduce major movements in literature of the world.
Name:Background to	CO 2: Enhance & reinforce understanding of the texts.
English Literature	20 3: Integrate knowledge of the diversity of cultures and people.
	CO 4: Connect the timeline of literary history.
Course Code: ENG 502	and the major trongs in the remaindance period and the
Course Name: English	Neoclassical period.
Literature-1 (The	Transfer and the state of the s
Renaissance Period	CO 3: critically analyze the prescribed texts from different perspectives.
and	CO 4: apply the knowledge of values, culture and human relations in everyday life.
the Neoclassical	everyday nie.
Period)	P1
Course Code:	CO 1: understand the major trends in the Renaissance period and the
Course Name: English	Neoclassical period.
Literature-1 (The Renaissance Period	CO 2: appreciate and analyze the literary nuances in the prescribed works.
and	CO 3: critically analyze the prescribed texts from different perspectives.
the Neoclassical Period)	CO 4: apply the knowledge of values, culture and human relations in everyday life.
Course Code: ENG 504 MJ	CO 1: remember the critical thinkers or philosophers and their seminal works
Course Name:	CO 2: understand the significance of major critical theories
iterary Criticism and	CO 3: analyze the themes and structure of literary works
Theory	CO 4: examine dominant ideologies in a literary work
	CO 1: remember the critical thinkers or philosophers and their seminal
Course Code: Course Name:	works
iterary Criticism and	CO 2: understand the significance of major critical theories
Theory	CO 3: analyze the themes and structure of literary works
	CO 4: examine dominant ideologies in a literary work
Course Code:	CO 1: understand the newly established field of cultural studies, its concerns and approaches
Course Code: Course Name:	CO 2: know interdisciplinary approach and analysis of cultural issues
Cultural Studies	including literature and language
	CO 3: learn new possibilities of analysis that can relate them to their
	surroundings

	CO 4: know the recent developments in humanities and social sciences that
	cover several issues from
Course Code: ENG	CO 1: know the concept of Research
541 MJ	CO 2: Understand the significance of Research
Course Name:	CO 3: analyze and identify the Research problem
Research Methodology	
	CO 4: understand different tools and techniques of Research
	M.A. II (Sem-III&IV)
	CO 1: Introduced students to major movements and figures of Indian
	Literature in English through the study of selected literary texts.
Course C. L. cocce	CO 2: Created literary sensibility and emotional response to the literary text
Course Code: 30601	and implanted sense of appreciation of literary text.
Course Name: Indian	CO 3: Exposed students to the artistic and innovative use of language
Writing in English	employed by the writers.
	CO 4: To expose students to the corpus of Indian Writing in English, and
	explain the sociopolitical and cultural contexts in which the works were
	written and received.
	CO 1: Introduced students to major movements and figures of Indian
	Literature in English through the study of selected literary texts
Course Code: 40601	CO 2: Created literary sensibility and emotional response to the literary texts
Course Name: Indian	and implanted sense of appreciation of literary text.
Writing in English	CO 3: Exposed students to the artistic and innovative use of language
	employed by the writers.
	CO 4: To expose students to the corpus of Indian Writing in English, and
	explain the sociopolitical and cultural contexts in which the works were written and received.
	CO 1: Introduced students to some of the significant Indian regional language writers of various periods and to their works.
Course Code: 30604	CO 2: Acquainted students with the major ancient, medieval and modern
Course Name: Indian	literary movements in India and their influence on literature.
Literatures in English	CO 3: Enabled students to compare the features and peculiarities of Indian
Translation	_societies, cultures and languages.
	CO 4: To help students understand how English gets Indianised in
	translation.
	CO 1: Introduced students to some of the significant Indian regional language
	writers of various periods and to their works.
Course Code: 40604	CO 2: Acquainted students with the major ancient, medieval and modern
Course Name: Indian	Interary movements in India and their influence on literature
Literatures in English	CO 3: Enabled students to compare the features and neculiarities of Indian
Translation	societies, cultures and languages.
	CO 4: To help students understand how English gets Indianised in
Course Code: 20000	translation.
Course Code: 30606	CO 1: Provided students a general introduction to the major texts that led to
Course Name:	the evolution of American literature as an independent branch of literature in
American Literature	English.

7846	CO 2: Familiarized students with the issues and problems America has gone through and how they find expression in her literature.
	CO 3: Encouraged them to deal with highly intellectual and radical content
	and thereby developed their logical thinking and analytical ability.  CO 4: To familiarize students with the rich diversity of American writing
Course Code: 40606 Course Name: American Literature	CO 1: Provided students a general introduction to the major texts that led to the evolution of American literature as an independent branch of literature in English.
	CO 2: Familiarized students with the issues and problems America has gone through and how they find expression in her literature.
	CO 3: Encouraged them to deal with highly intellectual and radical content and thereby developed their logical thinking and analytical ability.
	CO 4: To familiarize students with the rich diversity of American writing
Course Code: 30608 Course Name: World Literature in English	CO 1: Introduced students to some of the important literary texts of the world
	CO 2: Helped them in gaining some insights into the socio-cultural aspects of the regions from where the texts are chosen.
	CO 3: Enableed students to compare the authors of the world with Indian writers in English or the writers in their own languages.
	CO 4: To help the students undertake research in comparative literature
	CO 1: Introduced students to some of the important literary texts of the world
Course Code: 40608 Course Name: World Literature in English	CO 2: Helped them in gaining some insights into the socio-cultural aspects of the regions from where the texts are chosen.
	CO 3: Enableed students to compare the authors of the world with Indian writers in English or the writers in their own languages.
	CO 4: To help the students undertake research in comparative literature





## Name of Course Title: Marketing Management-III

Course Code: 3726

- CO1) Knowledge of Meaning, Definition of Service Marketing, Creative Advertisement, Typography, Developing Advertising Strategy, Copy writing, Message, Social Media Marketing, Marketing control and Marketing Audit, Marketing control system, Marketing Audit, etc.
- CO2) Understand the characteristics, components, B2B and B2C Services, Important of Services, 7Ps, Challenges of Service Marketing, Importance and Myths of Social Media Characteristics of Social Media Marketer's, Various Social Media Marketing Careers, Marketing Control- Objectives, Benefits, Essential of an effective Marketing Control system, Techniques in Marketing Control, Process of Marketing Controls, Marketing Audit.
- CO3) Analyze the Characteristics, Components B2B & B2C Services, Importance of Services, 7Ps, Challenges of Service Marketing, Creative Advertisement, Principals of Design, Setting Advertising, Developing Advertising, Introduction to Copy writing, making radio commercials, television marketing, myths About Social Media Marketing, Brief History of various careers in social media marketing, benefits of Marketing Controls, essential of an effective Marketing Control System, Techniques of Marketing Control, Process Marketing Control, Marketing Audit - Meaning, characteristics, objectives, process of Marketing Audit.
- CO4) Create knowledge about the Service Marketing- Creative Advertisements, Introduction to Typography, Principles of Design, Setting Advertising, Developing Advertising Strategy, Introduction to copy writing, Message, Making Radio Commercials, Television Advertising. Myths about Social Media Marketing, Characteristics of Social Media Marketer, Various Social Media Marketing Careers in Social media marketing, Objectives of Marketing Control, Benefits of Marketing Control, essential of an effective Marketing Control System, Techniques of Marketing Control, Process of Marketing Control, Marketing Audit - Meaning, characteristics, objectives, process of Marketing Audit.

## Name of Course Title: Computer Application 1

Course Code: 3736

CO1 Get familiar with upcoming emerging technologies in IT. CO2 Get acquainted with the applications and use of new trends.

CO3 Provide upward linkages for further studies in IT.

CO4 Get knowledge of working, principles & applications of Virtual Reality and Augmented Reality

CO5 Understand the concept of Cloud Computing & Artificial Intelligence.

## Name of Course Title: Computer Application II

Course Code: 3746

CO1 Develop project by the students.

CO2 Get acquainted with web based software development process. CO3 Facilitate the students to develop the web based applications.



CO5) Evaluate the benefits of online with traditional stock trading.

CO6) Create awareness about the stock market - Functions and Trading.

## Name of Course Title: Banking and Finance - III

#### Course Code 3686

CO1) Define Cybercrimes, paying Banker, Collecting Banker, Banker, customer, Garnishee Order secured and unsecured Loan Lien, Pledge, Hypothecation and Mortgage.

CO2) Explain types of cybercrime in India and loan schemes in Banks.

CO3) Understand Precautions to be taken while doing and making payment of cheques, rights and Duties of paying and Collecting Banker.

CO4) Formulate relationship between banker and customer- as a Debtor and Creditor, Agent Mode of creating Charges: Lien, Pledge, Hypothecation and Mortgage.

CO5) Discuss Termination of Relationship, Causes of loan recovery problems, recovery Measures and Reasons of Cyber Crimes in Banking.

## Name of Course Title: Cost & Works Accounting II

#### Course Code: 3696

CO1) Understand the various methods of costing

CO2) Develop the ability to prepare a job cost sheet

CO3) Acquaint the concept of contract costing

CO4) Prepare Contract Account and calculate profit on incomplete contracts

CO5) Know the basic concept of CAS 19: Joint cost and Prepare process accounts

CO6) Draw a cost sheet for transportation services, hospital and hotel organization.

## Name of Course Title: Cost & Works Accounting-III

## Course Code: 3706

CO1) Understand about Standard Costing, Variance Analysis, Cost Accounting Standards, Procedures & Provisions of Cost Audit.

CO2) Knowing about pricing policy and Solving Various Problem on Pricing Methods.

CO3) know about Cost Management practices in specific sectors.

C04) Solve Various Problem on Material Variance & Labour Variance.

## Name of Course Title: Marketing Management- II

## Course Code: 3716

CO1) Get knowledge about concept of Agricultural Marketing, E-NAM, Global Marketing & CyberSecurity Marketing

CO2) Acquaint Definition, Nature of Agri-Products, National Agriculture Market & Global Market.

CO3) Analysis Marketing Regulations in Marketing Relevance CO4) Create impart knowledge about the new concepts in Global Marketing Strategies & Cyber Security Marketing Challenges

CO5) Apply knowledge about tactics used by Cyber Security Marketers



CO5 Get knowledge of list in python.

Name of Course Title: Business Regulatory Framework-II

Course Code: 3636

- CO2) Understand the emerging issues relating to contracts, e commerce and e-transactions.
- CO3) Create awareness among customer relating to new customer protection act, 2019.
- CO4) Explain the role of supplier and customers in selling and buying transaction. CO5) Prepare the various Negotiable instruments in the transaction with validity.
- CO6) Analyze the benefits of novelty and examine which type of intellectual work comes under IPR.

Name of Course Title: Advanced Accounting-II

Course Code - 3646

CO1) Evaluate the legal provisions regarding preparation and presentation of final accounts of Co-operative Societies.

CO2) Define the concept of branch accounting

- CO3) Explain the procedure and methods of analysis of financial statements
- CO4) Know the conceptual aspects of various recent trends in the field of accounting especially forensic accounting, accounting of CSR activities, accounting of derivative contracts and Artificial Intelligence in Accounting.

Name of Course Title: Auditing & Taxation II

Course Code: 3656

CO1) Understand the basic concepts of Income Tax Act, 1961 and create awareness of direct taxation among the students.

CO2) Know the income tax rules and regulations and its provisions.

- CO3) Get comprehensive knowledge of calculation various types of income.
- CO4) Recognize the recent changes made by the finance bill (Act) every year and its impact on taxation of person.
- CO5) Acquaint the students on Income tax department portal (ITD), e-filing and e-services mechanism relating to Assesse.

Name of Course Title: Indian and Global Economic Development-II

Course Code: 3666

CO1) Understand the concept of Human Resource Development and the role of foreign capital in Economic Development.

CO2) critically evaluate the Indian Foreign Trade Policy.

- CO3) Analyze the role of International Financial Institutions.
- CO4) Evaluate the success of Regional Economic Cooperation's.

Name of Course Title: Banking and Finance - II

Course Code 3676

- CO1) Define the various basic concepts of the stock market.
- CO2) Analyze the types and process of stock trading.
- CO3) Understand the role of Non-Banking Financial Institutions in India.
- CO4) Analyze the role of Regulatory Bodies in India.

Course Code: 3585

- CO1) Understand the basic techniques in Cost Accounting like Marginal Costing, Budgetary Control, Uniform Costing & Interfirm Comparison & Solving Various Problem On it.
- CO2) Prepare various types of Budgets & Compare with each other.
- CO3) Distinguish between Uniform Costing and Inter-firm comparison.
- C04) Enhance the knowledge about MIS and Supply Chain Management.

## Name of Course Title: Marketing Management- II

Course Code: 3595

- CO1) Get knowledge about concept of Marketing Management and its applications in decision making under various environmental constraints
- CO2) Acquaint Definition, Nature of Market demand and Sales forecasting, types of Marketing Organizations and Non-Profit Organizations.
- CO3) Analysis Marketing Management theory applied in business.
- CO4) Create impart knowledge about the new concepts in Brand Building Strategies
- CO5) Apply knowledge about key concepts of Brand Building Strategies.

## Name of Course Title: Marketing Management-III

Course Code: 3605

- CO1) Knowledge of meaning, definition and concept of Advertising, Advertising media, Media Mix, E- Advertising, Appeals, Advertising message, Direct indirect appeals, buying motive, positive Negative Approaches to Advertising, Economic aspects, production cost, distribution cost, consumer prices, monopoly, social aspects, truth in advertising, Brand, Brand extension, Brand identity, Symbols, Logos, Trademarks, Brand loyalty, Brand management, etc.
- CO2) Understand Objectives, functions, Types, Benefits -Limitations and Role of advertising in Modern Business. Marketing mix, classification and characteristics of advertising media, factors affecting on selection of advertising media, Different appeals and significances, positive -negative approaches to Advertisement, Economic, social, Regulatory aspects of Advertising, Role of ASCL Types of Brand, Identity sources...
- CO3) Analyze the Role, types of advertising, interrelation between Advertising Appeals and Baying Motive, Positive and Emotional Approaches, Waste in advertising, truth in Advertising, aspect of ASCI, Types of Brand, Brand management process, Challenges in new branding.
- CO4) Create knowledge about Advertising, advertising media, Different appeals Baying motive, Various approaches in Advertising, Economic, Social and Regulatory Aspects of Advertising, challenges of new branding, advertising and branding, brand extension and identity, Identity sources, brand management process.

## Name of Course Title: Computer Application:-I

Course Code: 3615

- CO1 Explain characteristics, features, applications of python programming. CO2 Get acquainted with Python Programming.
- CO3 Develop Python programming skills.
- CO4 Understand the Basics of Python Programming & concept of decision making, loop control statements

Course Code: 3545

CO1) Understand the Industry, Agriculture sector and service sector and its relation to various economic issues and challenges.

CO2) Identify the practical and the applied aspects of Indian Economy.

CO3) Discuss major industrial Scenario of Indian Economy as well as World Economy.

CO4) Compare the Indian Economy with World Economy

CO5) Interpret Industry, Agriculture sector and service sector productivity & growth.

Name of Course Title: Banking and Finance II Course Code 3555

CO1) Define the concepts of the Indian Financial system and its various segments, various concepts in money market share market and foreign exchange market.

CO2) Create awareness about the structure of Indian banking system, Indian Money market, capital market and Foreign market and latest developments in Indian financial markets [Money market, Capital market].

CO3) Analyze and understand the functions of Indian Financial Markets.

CO4) Get knowledge of working of foreign exchange market

CO5) Evaluate the role of the Indian financial system in the development of the economy.

Name of Course Title: Banking and Finance III Course Code 3565

CO1) Define Banking Regulation Act 1949, Board, THE BANNING OF UNREGULATED DEPOSIT SCHEMES ACT, 2019 Corporate Person, Corporate debtor, Creditor, default, Financial Information, Insolvency Professional, Corporate applicant, corporate Guarantor, Insolvency and Bankruptcy, Banking Ombudsman, Appellate Authority, Authorised Representative, Complaint, Secretariat.

CO2) Understand the Selective Provisions of Banking Regulation Act 1949 like capital, P&L account and Balance sheet, Power of RBL, Voluntary Amalgamation, and Banking Regulation act 1949 applicable to Cooperative Banks.

CO3) Explain the features, Objectives Offences and Punishment regarding banning of deposit Scheme act, Objectives of Insolvency and Bankruptcy Code, 2016, and Objectives of BOS, 2006

CO4) Applicability of Insolvency and Bankruptcy Code, 2016, Corporate Insolvency Resolution Process, Moratorium and Liquidation Process (Sec 12)

CO5) Express Appointment and tenure, Power and duties and Procedure for redressal of Grievance.

Name of Course Title: Cost & Works Accounting II

Course Code: 3575

CO1) Know the concepts and principles of overheads.

CO2) Understand the cost accounting standards and the cost accounting standard board.

CO3) Acquaint the knowledge about stages involved in the accounting of overheads.

CO4) Build an ability towards strategic overhead accounting under Activity Based Costing.

Name of Course Title: Cost & Works Accounting-III

#### Course Outcomes

### Faculty - Commerce

## Department of Commerce

## Name of Course Title: Business Regulatory Framework-I

Course Code: 3515

- CO1) Define the various concepts under Indian Contract Act, 1872, Indian Partnership Laws, The Sale of Goods Act, 1930, The Arbitration and Conciliation Act.
- CO2) Explain the role of partner in the formation of traditional partnership and LLP. CO3) Use of various way to recover the loss and completion of transaction.
- CO4) Examine the types of transaction of the moveable property under the Sale of Goods Act, 1930.
- CO5) Create the various valid and proper agreement documents before the transaction.
- CO6) Analyze benefits of Arbitration and Conciliation system (ADR System) other than Court.

## Name of Course Title: Advanced Accounting-I

Course Code: 3525

- CO1) Know the concept of Accounting Standards.
- CO2) Familiar with applicability of Accounting Standards in Advanced Accounting. CO3) Develop Conceptual understating about Capital Restructuring.
- CO4) Prepare a Banking company final accounts.
- CO5) Solve the Practical Application of financial statements along with various adjustments. CO6) Know the concept of Classification of Investments.
- CO7) Discover the Calculation of Profit/loss on disposal of investments.

## Name of Course Title: Auditing

Course Code: 3535

- CO1) Define Auditing, Errors, Frauds, Audit Program, Audit Notebook, Working Paper, Internal Control, Internal Check, Statutory Audit, Government Audit, Private Audit, Annual Audit, Joint Audit, Interim Audit, Company Audit, Internal Audit, Complete Audit, Partial Audit, Annual Audit, Continuous Audit, Cost Audit, Vouching, Verification of Assets & Liability, Valuation of Assets, Tax Audit and Forensic Audit.
- CO2) Explain the concept of Checking, Vouching, Verification and Valuation, Types of Audit Report, Auditing Assurance Standard, Types of Errors, Types of Frauds, Objective and Advantages of Auditing, Liabilities of Company Auditor.
- CO4) Distinguish between valuation and verification, Accounting and Auditing, Annual Audit and Continue Audit.
- CO5) Understand the provision related Qualification, Disqualification, Appointment, Removal, Rights ,Duties and Liability of Company Auditor and Provisions regarding Tax Audit as per Income Tax Act 1961 (Section 44 AA to 44AE).
- CO6) know the various new concepts in computerized system and Forensic Audit.

Name of Course Title: Indian and Global Economic Development- I

# Programme Outcomes (POs) POs for M.Com. (PG)

Tos for M.Com. (1 G)				
PO	Nature of Knowledge	Commerce Post graduates will be able to :		
PO1	Subject related knowledge	Post Graduate students will be able to recall various concepts and theories related to subject under study.		
PO2	Analytical knowledge	Analyse Relationship among Commerce, trade Industries, Services, Management and Administration.		
PO3	Creative Knowledge	Apply their Knowledge in finding solutions to various business problems and gain the abilities to help the management in decision making research techniques and methods of different form organisations		
PO4	Application oriented Knowledge	Apply various accounting, Costing, administrative and research techniques and methods of different form organisations		
PO5	Research related Knowledge	Will be able to create research Project based on knowledge Gained in the relevant specialisation subject.		
PO6	Environment & sustainability	Understand Application of Knowledge of Cost Audit, Management Audit Tax Audit and human resource management in business service sector, finance sector Entrepreneurship development et		
PO7	Individual and Team work	Develop business and social Communications kills, Managerial Skills, Human resource Manager Skills, Banking skills, and rules and Regulation of Prevalent Income Tax Act.		
PO8	Life-long learning	Gain their Knowledge of trade and commerce and can start his own venture on the basis of the knowledge.		

# Programme Outcomes (POs) POs for B.Com. (UG)

POs	Nature of Knowledge	Commerce Graduates will be able to :			
PO1	Subject related knowledge	Commerce Graduate demonstrate will be able to understand the basic concepts of the commerce Management Accounting economics, finance and Tax and Audit			
PO2	Analytical knowledge	Analyse Relationship among Commerce, trade Industries, Services, Management and Administration.			
PO3	Creative Knowledge	Develop Communication, Managerial Skills, Marketing skills, Banking skills, computer awarene and rules and Regulation of Prevalent Income Tax Act.			
PO4	Application oriented Knowledge	Apply various accounting techniques and methods of different form of Business organisations and non Profit making Organisations.			
PO5	Application area of service	Understand Application of Knowledge of commerce in business service sector, marketing, finance Entrepreneurship development etc.			
PO6	Ethics	Able to Understand the legal framework related to caring on of various business organisations			
PO7	Individual and Team work	Will be able to calculate production cost and various costing methods and techniques useful for managerial decision Making.			

#### **6B14BOT**

## **CORE PRACTICAL II**

CO1: Learning the fundamental techniques used in a botany lab related to Mycology, Microbiology, Angiosperms systematics CO2: Understands the working of science by first-hand experience.

CO3: Comaprison skill is attained by comparing different plants and their vegetative and reproductive structures.

CO4: Incuclation of practical skills for further application in free, independent, individual needs and helps in designing scientific

#### **6B16BOT**

## Project, Field study and Viva voce

CO1: Learning the fundamental techniques used in a research

CO2: First-hand experience in doing science.

CO3: Development of the skill to communicate science.

CO4: Internalisation of skills for further application in designing scientific experimentation.

CO8: Reflect critically about their roles and identities as citizens, consumers and environmental actors in a complex, interconnected world.

#### **6B11BOT**

## Genetics, Molecular Biology and Plant Breeding

- CO1: Identify the basic principles and current trends in classical genetics.
- CO2: Recognise the historical process of the evolution of molecular genetics from classical genetics.
- CO3: Review the relevance of the application of genetic principles in agriculture, medicine, research and industry.
- CO4: Outlining the use of genetic principles for conservation, defining and better understanding of nature.
- CO5: Develop theoretical background on molecular genetics to provide a strong support for the student for future research and employability.
- CO6: Appreciate the way scientists work in understanding biological processes and the organization of cell.
- CO7: Cite examples for scientific interventions to human and plant life through brief exposure to plant breeding principles.
- CO8: Modify the concept on gender, human diseases and their management based on the study of genetic principles of human beings.

#### 6B12BOT

## Biotechnology and Bioinformatics

- CO1: Develop knowledge of the fundamental techniques of biotechnology and the history of its development.
- CO2: Recognise theoretical knowledge on the equipments used in biotechnology which will give a support during future prospects.
- CO3: Connect the genetic engineering principles in agriculture, medicine, research and industry for a better world.
- CO4: Identify the significance of nanobiotechnology results for updated knowledge in that field.
- CO5: Appreciate and criticise the information technology aided advancements in biology.
- CO6: Develop awareness on the economic, social and environmental problems of gene manipulation.

#### 6B13BOT

#### **Evolution and Palaeobotany**

- CO1: Understand the basic principles and current trends in classical evolution.
- CO2: Develop awareness on the historical process of plants and animals with an emphasis on human beings.
- CO3: Relate the evolutionary principles with agriculture, medicine, research and industry.
- CO4: Apply the principles of genetics and evolution in conservation, defining and better understanding of nature.

#### 5B08BOT

# Microbiology, Mycology, Lichenology and Phytopathology

- CO1: Understanding and appreciating the unity and diversity of microbes and fungi,
- CO2: Understanding the significance of microbes in nature's dynamicity.
- CO3: Develop skill in studying the fungal diversity through the study of representative taxon and methodology.
- CO4: Understanding the inter-relationship between plants and microbes both beneficial and harmful.
- CO5: Skill development to diagnose plant disease and to apply general control measures.

#### **5B09BOT**

## Research Methodology, Instrumentation and Biostatistic

- CO1: Learning of the fundamental characteristics of science as a human enterprise, product and intellectual process
- CO2: Understanding the working of science for further application in free, independent, individual needs and in designing scientific experimentation.
- CO3: Appreciation of several scientific works and assessment of its influence on society.
- CO4: Acquire knowledge on the principles, components and applications of various scientific equipments in biology.
- CO5: Foundation knowledge in the basic concepts, components and functions of informatics.
- CO6: Appreciate the importance of statistical principles in biological research.

#### **6B10BOT**

## **Environmental Science and Phytogeography**

- CO1: Understanding the fundamental concepts in ecology, environmental science and phytogeography.
- CO2: Concept development in conservation, global ecological crisis, Sustainable development and pros and cons of human intervention.
- CO3: Enable the student to appreciate bio diversity and the importance of various conservation strategies, laws and regulatory authorities.
- CO4: Recognition of the need for more research to create a baseline data for sustainable exploitation- Think globally and Act locally
- CO5: Analyse the interrelationship between the geography and pattern of distribution of plants.
- CO6: Appreciate key concepts from economic, political, and social analysis as pertained to the design and evaluation of environmental policies and institutions.
- CO7: Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems.

CO4: Skill development in collection preservation and studies in diversity studies of pteridophytes and gymnosperms.

#### 4B05BOT

## **CORE PRACTICAL I**

CO1: Learning the fundamental techniques used in a botany lab.

CO2: Understands the working of science by first-hand experience.

CO3: By comparing different plants and their vegetative and reproductive structures a generalisation in evolutionary concept is attained.

CO4: Internationalisation of practical skills for further application in free, independent, individual needs and helps in designing scientific experimentation.

#### **5B06BOT**

# Angiosperm Systematics and Ethnobotany

CO1: Understanding the main features in Angiosperm evolution.

CO2: Skill development in identification and classification of flowering plants.

CO3: Ability to identify, classify and describe a plant in scientific terms, thereby.

CO4: Identification of plants using dichotomous keys.

CO5: Recognition of locally available angiosperm families and plants.

CO6: Recognition of economically important plants.

CO7: Appreciation of human activities in conservation of useful plants from the past to the present.

## **5B07BOT**

# Plant Physiology and Metabolism

CO1: Preliminary understanding of the basic functions in a plant body.

CO2: Awareness on the interdisciplinary nature of botany, chemistry and physics by studying the principles of plant life, growth and

CO3: Recognising the wonderful mechanism of transport and the Interrelationships existing between metabolic pathways thereby gaining and idea about the importance of plants in the dynamicity of nature.

CO4: Enhance research interest among students by introducing the historical aspects of physiological research.

## **COURSE OUTCOMES (PSOs)**

#### **1B01BOT**

## Cytology and Angiosperm Anatomy

- CO1: Knowledge on general terms with updated information used in cell biology.
- CO2: Observation of variations that exist in internal structure of various parts of a plant and as well as among different plant groups in support for the evolutionary concept.
- CO3: Skill development for the proper description of internal structure using botanical terms, their identification and further classification.
- CO4: Induction of the enthusiasm on internal structure of locally available plants.
- CO5: Understanding various levels of organization in a plant body with an outlook in the relationship between the structure and function through comparative studies.

#### **2B02BOT**

## Reproductive Botany

- CO1: Observation and classification of the floral variations from the premises of college and house.
- CO2: Understanding the various reproductive methods sub-stages in the life cycle of plants
- CO3: Observation and classification of the morphological variations in fruits and seeds of angiosperms.
- CO4: Enthusiasm to understand evolution based on the variations in reproduction among plants.

#### **3B03BOT**

## Plant Diversity I- Algae and Bryophytes

- CO1: Understanding diversity in morphology, anatomy, reproduction and life cycle in lower groups of plants, algae and bryophytes.
- CO2: Skill Development in collection and preservation of algae and bryophytes.
- CO3: Realizing the economic/ecological importance of Algae and Bryophytes.
- CO4: Understanding the evolutionary lineages in algae and bryophytes

#### **4B04BOT**

## Plant Diversity II - Pteridophytes and Gymnosperms

- CO1: A comparative knowledge of lower vascular plants and lower group of flowering plants.
- CO2: Skill development for the proper description, identification and classification through morphological, anatomical and life cycle studies.
- CO3: Awareness on the morphological, anatomical and reproductive features of primitive and advanced plants with an evolutionary link between them.

# PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1: Skill development for the proper description using botanical terms, identification, naming and classification of life forms especially plants and microbes.

PSO2: Acquisition of knowledge on structure, life cycle and life processes that exist among plant and microbial diversity through certain model organism studies.

PSO3: Understanding of various interactions that exist among plants, animal and microbes; to develop the curiosity on the dynamicity of nature.

PSO4: Understanding of the major elements of variation that exist in the living world through comparative morphological and anatomical study.

PSO5: Ability to explain the diversity and evolution based on the empirical evidences in morphology, anatomy, embryology, physiology, biochemistry, molecular biology and life history.

PSO6: Skill development for the collection, preservation and recording of information after observation and analysis- from simple illustration to molecular database development.

PSO7: Making aware of the scientific and technological advancements- Information and Communication, Biotechnology and Molecular Biology for further learning and research.

PSO8: Internalisation of the concept of conservation and evolution through the channel of spirit of inquiry

## **PROGRAMME OUTCOMES**

# PO 1. Critical Thinking:

- 1. Acquire the ability to apply the basic tenets of logic and science to thoughts, actions and interventions.
- 2. Develop the ability to chart out a progressive direction for actions and interventions by learning to recognize the presence of hegemonic ideology within certain dominant notions
- 3. Develop self-critical abilities and also the ability to view positions, problems and social issues from plural perspectives.

## PO 2. Effective Citizenship:

- 1. Learn to participate in nation building by adhering to the principles of sovereignty of the nation, socialism, secularism, democracy and the values that guide a republic.
- 2. Develop and practice gender sensitive attitudes, environmental awareness, the ability to understand and resist various kinds of discriminations and empathetic social awareness about various kinds of marginalisation.
- 3. Internalise certain highlights of the nation's and region's history. Especially of the freedom movement, the renaissance within native societies and the project of modernisation of the post- colonial society.

## PO 3. Effective Communication:

- 1. Acquire the ability to speak, write, read and listen clearly in person and through electronic media in both English and in one Modern Indian Language
- 2. Learn to articulate analysis, synthesis, and evaluation of situations and themes in a well- informed manner.
- 3. Generate hypothesis and articulate assent or dissent by employing both reason and creative thinking.

## PO 4. Interdisciplinarity:

- 1. Perceive knowledge as an organic comprehensive, interrelated and integrated faculty of the human mind
- 2. Understand the issues of environmental contexts and sustainable development as a basic interdisciplinary concern of all disciplines.
- 3. Develop aesthetic, social, humanistic and artistic sensibilities for problem solving and evolving a comprehensive perspective.

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