2.6 Student Performance and Learning Outcomes (2018-2019)

Department of Chemistry

B.Sc. Chemistry

Outcome of the course

B-106: Inorganic Chemistry I

The students will know the different aspects about the structure of the atom, their classification of the different scientific basis. How atoms combine each other to make compounds and what are the tendencies of the atoms towards chemical combinations. The students will be made conversant towards simple elements of periodic table belonging to s- and p- block and their compounds.

B-107: Organic Chemistry I

This course will educate the students about the formation of organic compounds and their structural attributes. The students will know the mechanisms governing the chemical combinations leading to the organic compounds. Their scientific system of naming according to IUPAC will be introduced to the students. The students will know the able to know the stereochemistry in the space and the naming of the different stereoisomers. Simple alkanes and arenes will be introduced.

B-108: Physical Chemistry I

The course will begin from the simple introduction of the mathematical concepts involved in the different aspects of the physical chemistry curriculum. The course will make the students aware of the different states of the matter viz. gaseous, liquid and solid. A primary idea of the kinetics of the chemical reactions will be introduced to the students.

P-407: Chemistry Practical

This course will enable to understand the necessary laboratory techniques and customs. It will also make them conversant to analyze the inorganic mixtures. The students will understand the purification of the compounds, the determination of characteristic constants of the compounds. It will also enable the students to understand the practical conduct of the kinetic studies and determination of the surface and flow properties of the liquids and the solutions.

B-206: Inorganic Chemistry II

This course will enable the students to know the chemistry of rare earth elements. The students will have the introductory idea about the coordination compounds and the preliminary theories governing the formation of complex compounds. This course will also enable the students to understand the detail idea of the oxidation, reduction, acids & bases and the non-aqueous solvents.

B-207: Organic Chemistry II

This course will explain the students the chemistry of organic compounds of oxygen containing functional groups. The compounds such as alcohols, phenols, carbonyl compounds (aldehydes and ketones) and carboxylic acids and their derivatives will also be discussed in details with respect to their preparation and properties.

B-208: Physical Chemistry II

This course mainly focuses on the thermodynamics and chemical kinetics. The students will be made conversant with the intricate laws of thermodynamic processes and laws. The students will know the chemical equilibrium and the thermochemistry. This will be connected, in turn with, the chemical kinetic concepts. The students will know the concept of the solutions, phase rules and the electrochemical laws of the solutions.

P-507: Chemistry Practical

This course will enable the students to understand the preparations of the solutions and their standardizations. The volumetric analyses will be discussed in details. Quantitative determinations by volumetric method will be given as on hand experience. Different types of chromatographic techniques will be practiced by the students. A detail analysis of organic compounds will be done by the students.

B-306: Inorganic Chemistry III

This course will enable the students to understand the detailed chemistry of complex compounds and the organometallic compounds. Their spectroscopic, kinetic and structural details will be discussed. The students will be introduced the concepts of hard and soft acids and bases. A brief view of bio-inorganic chemistry will be introduced to the students.

B-307: Organic Chemistry III

The course will study in details the natural products such as carbohydrates, amino acids, peptides, proteins, nucleic acids, fats, oils, detergents and synthetic polymers. Their detailed chemistry will be discussed. An introductory concept of the spectroscopy of organic compounds will be explained to the students.

B-308: Physical Chemistry III

This course will discuss in details the introductory quantum chemistry involving the hypotheses, the discussion of simple model systems such as a particle in a box, simple harmonic oscillator and the hydrogen atom. This course will also discuss the colligative properties of the solutions and the principles of the photochemistry.

P-607: Chemistry Practical

This course will mainly focus on the art of synthesizing the complex compounds of the transition elements. The course will discuss the laboratory techniques of separation and purification of the organic compounds such as steam distillation, chromatography. The course will also discuss the techniques of molecular weight determination and refractometry and the colorimetry.

Course outcome of M. Sc. Chemistry

Semester 1

The understanding of chemical phenomena at the microscopic level requires a knowledge of the principles of quantum mechanics. These principles and their application to chemistry are presented in this course work. Laws of thermodynamics are very simple yet can explain feasibility of every physical and chemical process. Understanding the laws and their application to understand processes are the objectives of this course. The students will be able to learn reaction mechanism of transition-metals complexes as well as metal-ligand bonding on the completion of this course.This course reviews the stereochemistry of organic compounds and organic reaction mechanisms at an advanced level. He/she will also understand the stereo chemical implications on the structure, and reactivity of organic molecules. This module will help the students to learn to learn the basic concepts of computers.

Upon completion of this course the students will have the knowledge and skills to understand the laboratory methods and skills to understand the laboratory methods, tests related to inorganic mixtures and organic compounds such as - identification of acidic and basic radicals, separation of organic mixtures, elemental analysis in organic compounds, identification of functional group in organic compounds, identification of organic compounds.

Semester 2

This course will help the students to understand electronic spectra and magnetic properties of transition metal complexes, metal clusters and nuclear chemistry. Successful completion of this course enables the learner to identify and explain the reaction mechanisms in organic chemistry. Chemical dynamics and reaction dynamics is concerned with the 'how, why, when' of chemical reactions. It is central to the discipline of chemistry and yet is of enormous practical importance. Understanding the facts and theories relating to the rates at which chemical reactions occur in the gas phase, liquid phase and on surfaces is the objective of this course. Students will be able to gain knowledge on group theory, spectroscopy, diffraction methods and solid state on successful completion of this course. Upon completion of this course the students will have the knowledge and skills to - to separate and analyze binary organic mixtures, to prepare organic compounds in two steps, to do various types of titrations eg. acidimetry-alkalimetry, oxidation-reduction, silvernitrate, complexometric-EDTA, pH-metry, to estimate copper and nickel, iron and nickel in the given solution, to find out the surface tension of the given liquid and to determine parachor value of given liquid etc.

Semester 3

With the help of this course the student will gain an understanding of photochemistry, spectroscopy, analytical and bioorganic chemistry. In photochemistry the student will learn basics of photochemistry and photochemical reactions. Students will learn the fundamental principles of instrumental measurements and applications of these principles. He/she will have the knowledge of error evaluation, radiochemical methods, thermal methods of analysis, DSC, chromatographic and electroanalytical techniques used in analytical chemistry. This course enables the student to understand the chemical principles of living cells, their biomolecules and biocatalytic reactions. This course aims at educating the students about enzymes and biocatalysis with their applications in various industrial processes.

Practicals include various experiments of analytical and biochemistry. These experiments will expertise the students in performing the qualitative tests of carbohydrates, lipids and amino acids, determination of saponification value, iodine number, acid value of fats. The students will also learn to estimate glucose in urine, sugar in blood, amylase in saliva, ketone bodies in urine, separate plant pigments by TLC and much more.

Semester 4

The course of this semester is designed in a way to give student a specialization in a particular branch of chemistry – inorganic, organic or physical. Environmental chemistry which is studied by all students of all branches of chemistry on compulsory basis prepares students for understanding and addressing complex environmental issues from a problem-oriented, interdisciplinary perspective. Opting three

special papers of branch given in syllabus gives mastery to the students of that particular branch. In inorganic chemistry selection of any three of the following five – Inorganic chemistry special I, inorganic chemistry special II, advanced inorganic chemistry, advanced spectral techniques in inorganic chemistry, chemistry of materials makes the students specialized in inorganic chemistry. He/ she will get a specialization in organic chemistry after opting any three of the following five – organic synthesis, medicinal chemistry, polymers, chemistry of natural products, heterocyclic chemistry. On successful completion of the following three out of the following four – solid state chemistry, liquid state, physical chemistry in organic reactions, computational chemistry, will give the students a specialization in physical chemistry. The experiments of each branch are designed in a way to make a student work effectively in a laboratory environment, make him/her think critically and analyze chemical problems, work in teams as well as independently, to apply modern methods of analysis to chemical systems in a laboratory setting, to use technologies/instrumentation to gather and analyze data and to use the power of computers in applications in chemistry. On successful completion of the practicals in this way will make the students specialized in their selected branch of chemistry.

Department of Mathematics

Courses	Course Title	Outcomes
B.A./B.Sc. I	**Trigonometry and Algebra** **Calculus** **Geometry and Vectors**	One of the foundations of modern algebra is group theory. The goal of this course is to introduce students to the fundamental concepts of group theory and ring theory, as well as their properties. A student who completes this course understands the concepts of group, ring, and integral domain, as well as their properties. This course will prepare students for basic advanced mathematics and algebra courses. The course gives emphasis to enhance students' knowledge of functions of two variables, Laplace Transforms, Fourier Series. On successful completion of the course students should have knowledge about higher different mathematical methods and will help him in going for higher studies and research. The subjects learn and visualize the fundamental ideas about coordinate geometry and learn to describe some of the surface by using analytical geometry. On successful completion of the course students have gained knowledge about regular geometrical figures and their properties. They have the foundation for higher course in Geometry.
B.A./B.Sc. II	**Advanced Calculus** **Differential Equations** **Mechanics**	The goal of this course is to familiarise students with several methods for solving differential equations, partial differential equations of first and second order, and qualitative applications. This course prepares students to solve differential equations and model natural issues using ordinary differential equations. After finishing this course, students will be able to enrol in other courses on wave equations, heat equations, diffusion equations, gas dynamics, and non-linear evolution equations, among other topics. These full courses are crucial in solving boundary value problems in engineering and industrial applications. The purpose of this paper is to teach students basic mechanical concepts such as simple harmonic motion, motion under other laws, and forces. After completing the course, the student can pursue more advanced mechanics problems, such as hydrodynamics, which will aid in obtaining job in industry.
B.A./B.Sc. III	**Analysis** **Abstract and Linear Algebra** **Linear Programming**	The learner will be able to solve a variety of convex set and linear programming issues. Students will be able to apply the basic concepts of transportation difficulties and related challenges to additional concepts and applications of operations research after successfully completing this paper. The subjects of the course are designed in such a way that they focus on developing mathematical skills in algebra,

		calculus and analysis and give in depth knowledge of geometry, calculus, algebra and other theories. The student will be able to find the rank, eigen values of matrices and study the linear homogeneous and non-homogeneous equations. The course in differential equation intends to develop problem solving skills for solving various types of differential equation and geometrical meaning of differential equation Students will be able to know the concepts of metric space, basic concepts and developments of complex analysis which will prepare the students to take up further applications in the relevant fields.

M. Sc. / M. A Mathematics

Course	Semester	Title	Outcomes
M.A./	**Semester: First**	Advanced Abstract Algebra Real Analysis Differential Equations Metric Space	• Abstract Algebra is one of the twin pillars of modern mathematics. This course will provide essential background in one of the areas essential for a modern mathematics major. The focus of the course will be the study of certain structures called groups, rings, fields and some related structures. This course helps to gain skill in problem solving and critical thinking. • Students will be able to demonstrate basic knowledge of key topics in classical real analysis. The course provides the basis for further studies within functional analysis, topology and function theory. • The course in differential equation intends to develop problem solving skills for solving various types of differential equation and geometrical meaning of differential equation. • This module introduces students to the concept of a metric space and presents the ideas of open and closed sets, convergence, continuity, completeness and compactness in this context. It provides a foundation for more advanced courses in Mathematical Analysis and a new perspective on many of the ideas studied in Real Analysis.

M.Sc. I	**Semester: Second**	Topology Measure Theory and Integration Advance Discreate Mathematics Operations Research	• Demonstrate an understanding of the concepts of metric spaces, topological spaces, and their role in mathematics.Apply the theory in the course to solve a variety ofproblems at an appropriate level of difficulty. Demonstrate skills in communicating mathematics orally and in writing. • Measure Theory and Integration is exposed with the clear aim to help beginning learners to perfectly master its essence. In opposition of a delivery of the contents in an academic and vertical course, the knowledge is broken into exercises which are left to the learners for solutions. • To learn a mathematical topic, a person needs to actively construct mathematical arguments on this topic. A major goal of this course is to teach the students how to understand and construct correct mathematical arguments. • Identify operational research models from the verbal description of the real system. Understand the mathematical tools that are needed to solve optimisation problems. Use mathematical software to solve the proposed models. Describes the model and the solving technique, analyse the results and propose recommendations in language understandable to the decision-making processes in Management Engineering.
M.A./ M.Sc. II	**Semester: Third**	Numerical Analysis Complex Analysis MathematicalMethods MathematicalStatistics	• Demonstrate understanding of common numerical methods and how they are used to obtain approximate solutions to otherwise intractable mathematical problems. Apply numerical methods to obtain approximate solutions to mathematical problems. Analyse and evaluate the accuracy of common numerical methods. • In this course students will learn the algebra and geometryof complex numbers, mappings in the complex plane, thetheory of multi-valued functions, the calculus of functions of single complex variable and the Fourier transform.. • to solve unseen mathematical problems involving understanding of these concepts and application of these methods; explain how mathematics can be used to solve problems in economics and related subjects; demonstrate knowledge and understanding of the underlying mathematical principles. • To develop the students ability to deal with numerical and quantitative issues in business.To enable the use of statistical, graphical and algebraic techniques wherever

			relevant.To have a proper understanding of Statistical applications in Economics and Management.
	Semester :Fourth	Number Theory Fluid Dynamics Differential Geometry Functional Analysis	• In this course, we will use a foundation of paradigmatic algorithms to underpin our understanding of the integers, focussing on their properties and representations and howthat informs our understanding and intuition of the mathematical world. This course provides an introduction to the important basic topics of number theory: prime numbers, factorisation, congruence and representation of numbers and Diophantine equations – via the use of fundamental algorithms. • The course on fluid mechanics is devised to introduce fundamental aspects of fluid flow behaviour. Students will learn to develop steady state mechanical energy balance equation for fluid flow systems, estimate pressure drop in fluid flow systems and determine performance characteristics of fluid machinery. • The student will be able to compute quantities of geometric interest such as curvature, as well as develop afacility to compute in various specialized systems, such as semigeodesic coordinates or ones representing asymptotic lines or principal curvatures. The student will also be introduced to the method of the moving frame andoverdetermined systems of differential equations as theyarise in surface theory.

Department of Botany

M.Sc. Botany

Objectives and outcomes of different courses

Course I/ H1001

Angiosperm Taxonomy, Plant Resources and Utilization

Objectives of this course

-deals with naming and classification of plants their interrelationships and evolution.
-deals with recent developments in plant systematic and phylogenetics
-criteria used for classification; phases of plant classification and brief history
-Botanical Nomenclature: Concept of nomenclature, Binomial nomenclature and its advantages.
-Taxonomic literatures and Use of computers in angiosperms taxonomy.
-Taxonomic evidences: Morphology, anatomy, embryology, palynology, cytology, phytochemistry and numerical taxonomy

Outcomes-

After successful completion of this course, students will be able to:
Study plant morphology
Describe of a plant specimen scientifically.
Study of at least 20 locally available families of flowering plants.
Identification of genus and species of locally available wild plants.
Preparation of botanical keys at generic level by locating key characters.
Knowledge of at least 10 medicinal plant species.
Knowledge of secondary metabolites and its use in taxonomy.

Course II/ H1002 Biology and Diversity of Viruses and Bacteria

The objectives of this course are to introduce field of microbiology with special emphasis on microbial diversity, morphology, physiology and nutrition; methods for control of microbes and host -microbe interactions.
Student Learning Outcomes
Students should be able to:
• Identify major categories of microorganisms and analyze their classification, diversity, and ubiquity;
• Identify and demonstrate structural, physiological, genetic similarities and differences of major categories of microorganisms;
• Identify and demonstrate how to control microbial growth;
• Demonstrate and evaluate interactions between microbes, hosts and environment.

Course III/ H1003 Biology and Diversity of Algae and Bryophytes

Objectives
To acquaint the students about the morphology, biology and importance of Algae and Bryophytes.
Outcomes
Comprehend the diversity of lower cryptogams (Algae and Bryophytes).
Collection and study of algae, Bryophytes from different localities, Identification up to generic level.
Recognize the morphology, anatomy, physiology, reproduction and lifecycle pattern.
Knowledge of their diversification and familiarize with various ecological niche.
Positive and negative values.

Course IV/ H1004 Biology and Diversity of Pteridophytes, Gymnosperms and Palaeobotany

Objectives
To acquaint the students about the morphology, biology and importance of Peridophytes and gymnosperms
Outcomes
The course will enable students to know the earlier plants, their vegetative and reproductive structures and their importance.

Practical -I (H501) Based on Courses I-IV

Objectives The objective of this laboratory course is to provide practical skills on basic microbiological techniques, morphology and anatomy of algae, bryophytes, pteridophytes, gymnosperms and angiosperms.
Student Learning Outcomes Students should be able to: • Isolate, characterize and identify common bacterial organisms; • Determine bacterial load of different samples; • Perform antimicrobial sensitivity tests; • Preserve bacterial cultures.

Course V/ H 2001 Fungal Biodiversity and Elementary Plant Pathology

Objectives

To introduce concepts and principles of plant pathology. Study of interaction between plant and pathogen in relation to the overall environment and mechanism of disease development by pathogens.

Outcomes

Students will know about concept of diseases, knowledge and awareness of diseases, causal agents of plant diseases, identification methods and management of crop diseases.

Course VI/ H 2002 Cell and Molecular Biology

The objectives of this course are to sensitize the students to the fact that as we go down the scale of magnitude from cells to organelles to molecules, the understanding of various biological processes becomes deeper and inclusive.

Student Learning Outcomes

Student should be equipped to understand fundamental aspects in biological phenomenon.

Course VII/ H2003 Genetics, Cytogenetics and Plant breeding

The objectives of this course are to take students through basics of genetics and classical genetics covering prokaryotic/ phage genetics to yeast and higher eukaryotic domains. On covering all classical concepts of Mendelian genetics across these life-forms, students will be exposed to concepts of population genetics, quantitative genetics encompassing complex traits and genetics of evolution.

Student Learning Outcomes

On successful completion of this course, student will be able:

• Describe fundamental molecular principles of genetics;
• Understand relationship between phenotype and genotype in genetic traits;
• Describe the basics of genetic mapping;
• Understand how gene expression is regulated.

Course VIII/H2004 Anatomy and Reproduction in Angiosperms

Objectives- to enable the students:

• To understand the various aspects of plant floral parts, development and reproduction
• To understand the various aspects of embryology and apomixis

Outcomes- on completion of this course, the students will be able to:

• Discuss the structural elements of plants floral parts and reproduction
• Discuss the Pollination, embroyology and apomixis
Practical II (H 601) Based on Courses V-VIII

Course IX/ H3001 Plant-Soil-Water relations; Growth and Development

The objectives of this course are to cover all essentials required to appreciate physico-chemical principles underlying biological processes.
Student Learning Outcomes Students should be able to have a firm foundation in fundamentals and application of current chemical and physical scientific theories.

Course X/H3002 Phytochemistry and Metabolism

The objectives of this course are to build upon undergraduate level knowledge of biochemical principles with specific emphasis on different metabolic pathways. The course shall make the students aware of various pathways within the context of each topic.
Outcomes
On completion of this course, students should be able to:
• Gain fundamental knowledge in biochemistry;
• Understand the molecular basis of various pathways from the perspective of biochemical reactions.

Course XI/H3003 Plant Ecology and Phytogeography

Objective-To Distinguish between species, populations, communities, ecosystems biomes and understanding the factors that affect population size, density, distribution, and dynamics.
Outcome-
By understanding the concepts of ecological principles and environmental issues, the student will be able to develop attitude, value system and ethics towards environment related issues.

Course XII/H3004 Elementary Biotechnology

The objectives of this course are to introduce students to the principles, practices and application of biotechnology, plant tissue culture, plant genomics, genetic transformation and molecular breeding of plants.
Student Learning Outcomes
Students should be able to gain fundamental knowledge in plant biotechnology and their applications.

Practical III (H 701) Based on theory courses IX-XII 100

Course XIII/H4001 Modern Phytotechniques and Biostatistics

The objective of this course is to give conceptual exposure of essential contents of statistics to students.
Student Learning Outcomes On completion of this course, students should be able to:
• To elaborate concepts of biochemistry with easy to run experiments;
• To familiarize with basic laboratory instruments and understand the principle of measurements using those instruments in biochemistry • Gain broad understanding in statistics; • Recognize importance and value of statistical thinking, training, and approach to problem solving, on a diverse variety of disciplines.

Course XIV/H4002 Biodiversity conservation and Plant Resources

Objectives-to enable the students:
• To understand the economic importance of different plants
• To understand the various threats of biodiversity and the strategies for conservation
Outcomes-
On completion of this course, the students will be able to:
•Understand the various uses of plants; biodiversity status, loss and management strategies. •Describe economically important plants with binomial names, family and uses
• Analyse the biogeography, status and loss of biodiversity, initiatives for biodiversity conservation
Elective Courses

Course XV /H4003 Recombinant DNA technology

The objectives of this course are to teach students with various approaches to conducting genetic engineering and their applications in biological research as well as in biotechnology industries. Genetic engineering is a technology that has been developed based on our fundamental understanding of the principles of molecular biology and this is reflected in the contents of this course.
Student Learning Outcomes
Given the impact of genetic engineering in modern society, the students should be endowed with strong theoretical knowledge of this technology. In conjunction with the practicals in molecular biology & genetic engineering, the students should be able to take up biological research as well as choosing career in the relevant biotech industry.

Course XVI /H4004 Plant Tissue Culture

1. To study different sterilization technique.
2. To study preparations of culture media (MS)
3. To study sterilization of seeds.
4. Enplant preparations.
5. Study of different techniques in plant hybridization.

Course XVII /H4005 Microbial Biotechnology

Course Objectives

The objectives of this course are to introduce students to developments/ advances made in field of microbial technology for use in human welfare and solving problems of the society.

Student Learning Outcomes

On completion of this course, students would develop deeper understanding of the microbial technology and its applications.

Course XVIII /H4006 Environmental Biotechnology

Course Objectives

This course aims to introduce fundamentals of Environmental Biotechnology. The course will introduce major groups of microorganismstools in biotechnology and their most important environmental applications. The environmental applications of biotechnology will be presented in detail and will be supported by examples from the national and international literature. Student

Learning Outcomes

On completion of course, students will be able to understand use of basic microbiological, molecular and analytical methods, which are extensively used in environmental biotechnology

Course XIX /H4007 Stress Physiology of Plants

Course XX /H4008 Applied Plant Physiology

Outcomes-

Students will understand the importance of photosynthesis in plants. They will also understand photosynthesis is one of the most important processes that allow plants to Live.

Students will come to know that, energy produced by respiration is essential for normal functioning of body.

Student will understand importance of metabolism to maintain living state of cells. They will also understand role of nitrogen cycle in environment.
Students will understand how enzymes serve important function in body, in digestion and metabolism. They have developed knowledge about pathways of water through xylem and phloem.

Course XXI /H4009 Diversity in Plants, their origin and evolution

• Acknowledge the economic uses of plants in modern society.
• Acquire an increased awareness and appreciation of plants & plant products encountered in everyday life.
• Develop scientific insights into the development of many plant products that have shaped our society.
• Appreciate the diversity of plants and the plant products in human use;
• Understand the biological reasons why certain plant resources are important;

Course XXII /H4010 Elementary Computer Knowledge and Bioinformatics

The objectives of this course are to provide theory and practical experience of the use of common computational tools and databases which facilitate investigation of molecular biology and evolution-related concepts.
Student Learning Outcomes
Student should be able to:
• Develop an understanding of basic theory of these computational tools;
• Gain working knowledge of these computational tools and methods;
• Appreciate their relevance for investigating specific contemporary biological questions;
• Critically analyse and interpret results of their study
Course XXIII/H4011 Plant Pathology
Practical IV (H801) Based on theory courses XIII-XIV and two out of XV-XXIII

Laboratory VII: Bioinfor- matics

Course Objectives The aim of this course is to provide practical training in bioinformatic methods including accessing major public sequence databases, use of different computational tools to find sequences, analysis of protein and nucleic acid sequences by various software packages.
Student Learning Outcomes
On completion of this course, students should be able to:

• Describe contents and properties of most important bioinformatics databases;
• Perform text- and sequence-based searches and analyse and discuss results in light of molecular biological knowledge;
• Explain major steps in pairwise and multiple sequence alignment, explain principle and execute pairwise sequence alignment by dynamic programming;
• Predict secondary and tertiary structures of protein sequences.

Department of Physics

B. Sc. Physics

Course Outcome:

This undergraduate course in Physics would provide the opportunity to the students:

- To understand the basic laws and explore the fundamental concepts of physics
- To understand the concepts and significance of the various physical phenomena.
- To carry out experiments to understand the laws and concepts of Physics.
- To apply the theories learnt and the skills acquired to solve real time problems.
- To acquire a wide range of problem-solving skills, both analytical and technical and to apply them.
- To enhance the student's academic abilities, personal qualities and transferable skills this will give them an opportunity to develop as responsible citizens.
- To produce graduates who excel in the competencies and values required for leadership to serve a rapidly evolving global community.
- To motivate the students to pursue PG courses in reputed institutions.
- This course introduces students to the methods of experimental physics. Emphasis will be given on laboratory techniques specially the importance of accuracy of measurements.
- Providing a hands-on learning experience such as in measuring the basic concepts in properties of matter, heat, optics, electricity and electronics.

Paper Specific Outcome

BSc I

Paper 1: Mechanics and Wave Motion

- The students would learn about the behaviour of physical bodies it provides the basic concepts related to the motion of all the objects around us in our daily life.
- The course builds afoundation of various applied field in science and technology; especially in the field of mechanical engineering.
- The course comprises of the study vectors, laws of motion, momentum, energy, rotational motion, gravitation, fluids, elasticity and special relativity.

Paper 2: Kinetic Theory and Thermodynamics

- The course makes the students able to understand the basic physics of heat and temperature and their relation with energy, work, radiation and matter.
- The students also learn how laws of thermodynamics are used in a heat engine to transform heat into work.
- The course contains the study of laws of thermodynamics, thermodynamic description of systems, thermodynamic potentials, kinetic theory of gases, theory of radiation and statistical mechanics.

Paper 3: Circuit Fundamentals and Basic Electronics

- It gives an opportunity for the students to learn about one of the fundamental interactions of electricity and magnetism, both as separate phenomena and as a singular electromagnetic force.
- The course contains vector analysis, electrostatics, magnetism, electromagnetic induction and Maxwell's equations.
- The course is very useful for the students in almost every branch of science and engineering.

BSc II

Paper 1: Physical Optics and Lasers

- Student get to learn the basics of superposition and interference of light and various phenomenon related to it. Application and use of interference in various interferometers.
- The course comprises of the study of diffraction and polarization.
- The course is important for the students to make their career in various branches of science and engineering, especially in the field of photonic engineering.

Paper 2: Electromagnetics

- To understand Coulomb law and electric field
- Different type of quadrupole and field developed due to it.
- Study of magnetic field and its use in different type of motions.

Paper 3 Quantum Mechanics, Atomic and Molecular spectra

- Inadequacy of classical mechanics and development of quantum mechanics.
- Schroedinger equation in different potential barrier.
- To study atomic spectra and x-ray spectra
- B.e ntialake students familiar with reference frames and inertial frames.
- To study Lorentz transformations
- To know about different type of crystals and their arrangements
- To understand nuclear force and its properties

B. Sc. III

- The student can study different types of accelerators and detectors.
- Classification of elementary particles and studying different type of interactions of nature.
- To know about different type of diodes and their uses
- Studying different type of amplifiers, FETs and MOFETs
- Power supplies and their uses.

M. Sc. Physics

Course Outcome M.Sc. 1st Semester

H-1027

- Solve differential equations like Legender, Bessel, Hermite, Leguerre.
- Solve laplace and inverse laplace transforms
- Find fourier series
- Study of complex variables

H-1028

- Understand the concepts of generalized coordinates and D'Alembert's principle.
- Understand the Lagrangian dynamics and the importance of cyclic coordinates.
- Comprehend the difference between Lagrangian and Hamiltonian dynamics.
- Study the important features of central force and its application in Kepler's problem
- Study the concept of small oscillations and normal modes

H-1029

- Difference between classical and quantum mechanical theory and approach.
- Linear Vector Space, operators and tools to calculate eigen values.

- Various techniques to solve time dependent and time independent Schrodinger equations using different coordinate systems
- Connection between symmetry and conservation laws, commutation relations, tools to calculate components and total angular momentum.
- Various approximation methods utilized in Quantum Mechanics.

Course Outcome M.Sc. 2nd Semester

H-2027

- Scattering theory and validity of Born approximations, partial wave analysis.
- Importance of relativistic quantum mechanics compared to nonrelativistic quantum mechanics.
- Various tools to understand field quantization and related concepts.
- Exposure to quantum field theory and universal interactions.
- In quantum mechanics we deal the problem in micro scale which gives the result accurate then the classical physics.
- Quantum mechanics is future of physics its mathematical calculations are complicated but give accurate results.
- for theoretical result quantum mechanics is very important

H-2028

- Recognize the difference between macrostate and microstate.
- Comprehend the concept of ensemble
- Understand the classical and quantum statistical distribution laws.
- Study the application of statistical distribution laws
- Study the motion due to fluctuating force
- Comprehend the concept of phase transition

H-2029

- Apply the principles of Electrostatic to solve the problems relating electric field, electric potential, bound value condition and electric energy density
- Apply the principles of electromagneto statistic to solve the problem relating magnetic field, magnetic potential, bound conditions and magnetic energy density, magnetic flux
- Understand the concept related to the Feraday's laws, induced emf and maxwell's equations.

- Apply Maxwell's equations solutions relating to transmission line and uniform plane wave propagation.

  Apply the polarization phenomena

H-2030

- explain the spectra of different atoms and the behavior of atoms in external electromagnetic field.
- understand the principles and theories of rotational, vibrational and electronic spectra of molecules
- understand the principle and experimental arrangement of Raman spectra. Raman effect is important tool for determining information regarding the structure of diatomic and polyatomic molecules.
- They also explain the NMR spectroscopy. NMR spectroscopy is the use of NMR phenomena to study the physical, chemical, and biological properties of matter. Chemists use it to determine molecular identity and structure. Medical practitioners employ magnetic resonance imaging (MRI).
- explain the ESR spectroscopy. It is used examination of free radicals and others paramagnetic centers. ESR measurements reveal applications in medicine.

Course Outcome M.Sc. 3rd Semester

H-3027

- explain the classification of crystals and also explain the properties.
- Explain different experimental methods the crystal structure like X-ray diffraction, powder method etc.
- They also explain defects and dislocations in crystals.
- explain about experimental determination of the atomic scattering factor.

H-7028

- Explain various properties of metals i.e. electrical and thermal conductivities, heat capacity and their dependence on temperature.
- Explain theoretical and experimental determination of these properties.
- Understand various quantum mechanical models to explain the existence of energy bands in solids.
- Explain Josephson tunneling, low and high Tc superconductivity in solids, Hall effect in metals and semiconductors, SQUIDS.

- Understand Integral and fractional Quantum Hall effect, its application in various kinds of solids e.g. Topological Insulator, MOS.

H-7029

- This papers helps students to learn classification of different elementary particles.
- Recent studies about high energy particles is discussed.
- The different conservation laws are studied and quark confinement is discussed.
- The student will be able to understand deuteron problem and tensor courses.
- How the matter interacts with nuclear radiations and photoelectric effect is discussed. Nuclear potential and range of nuclear courses is also discussed.

H-7031

- Distinction between crystalline/non crystalline and polycrystalline material. Uses of all these in electronics industry.
- Methods to grow single crystal substrate of Si and GaAs etc. which are widely used for device fabrication.
- Defects which are introduced in the crystalline material at various stages viz. during growth. Nature of the defect and how they are beneficial in certain applications.
- Crystallography which makes possible the study of crystalline material via various experimental techniques like diffraction method in which crystal is taken in powdered form.
- Various rules of symmetry which make study of crystal possible.

H-7033

- explain the behaviour of molecular systems in external electromagnetic field.
- understand the principles and theories of rotational and vibrational spectra of molecules.
- interpret the molecular spectra and find molecular properties from molecular spectra.
- interpret the Symmetry elements and symmetry operations applicable for molecular structures and explain the group theory and multiplication tables for various point groups.
- explain the spectra of symmetric, asymmetric and linear polyatomic molecules and the Stark's effect in molecules.

H-7034

- Discuss the important areas of interference with many experiments associated with it.
- Apply Einstein's coefficients and define their relationships.
- Describe the different types of Lasers and their principles.

- Define laser rate equations of two, three and four level systems and the derivation of optical pumping term for the respective systems.
- Apply the construction and define the working principles of different types of lasers- Solid state laser, Gas laser and Carbon Dioxide laser wherever needed.

Course Outcome M.Sc. 4th Semester

H-4028

- explain the classification of nanomaterial. Size dependance of physical properties.
- explain the effects of quantum confinement on the electronic structure and corresponding physical properties of materials at nanoscale.
- discuss various characterization techniques such as electron microscopes, atomic force microscopes.
- choose appropriate synthesis technique to synthesize quantum nanostructures of desired size, shape and surface properties.
- Explain about carbon nanotubes, their properties, synthesis and emerging possible application in science and technology.

H-8028

- Explain various kinds of magnetic resonances in solids e.g. NMR, QMR, FMR, AFMR etc.
- Understand the monoatomic and diatomic lattice vibrations.
- Explain Mossbaur effects in solids and its applications.
- Understand distinction among metal, semiconductor and insulator, determination of dielectric constant of solids and explanation of various properties of solids.

H-8031

- Basic structure which should be studied foremost in order to understand other complex devices.
- Their operating conditions limitations and high frequency operation.
- Particular junction devices JFEET, MOSFET, HET, TFT etc. which have different configuration.
- Fabrication processes for different devices following certain commonly used steps for all the devices.
- Oxidation, diffusion, ion- implantation, photolithography, metallization to name of fuel.
- Process, furnishes and different tools which are utilized in above steps.
- Optical devices where light energy is converted in to electric energy LEDs, where electric energy is converted light energy.

H-8032 (Nuclear Physics IV)

- The student learns multipole radiation and multipole moments.
- The transition probability of Gamma decay is discussed.

- The students can understand the difference between relativistic and nonrelativistic theory of beta decay.
- Nuclear matrix elements or different polarized and unpolarized nuclei are discussed and different selection rules for beta decay are studied.
- Different type of reactors in India are studied and their working. If any student chooses this field in future he will be highly benefited in experimental field.
- Highly encouraging for research oriented students.
- Students can gauge themselves what they have learnt in previous classes and their abilities as different branches of physics which they have read earlier are used in this course as a tool.
- Being one of the toughest branch of Physics, the students become ready to studytougher things which can help them in research and also in every walk of life.
- What is radioactivity and all about alfa ,beta and gamma decays is discussed.

H-8034

- Define the principle of Holography and its theory.
- Record and reconstruct an image from a holograph.
- Discuss the application of Laser in Atomic energy like nuclear fusion and also define the technique of isotope separation by Laser.
- Discuss and apply extensively Rayleigh and Raman Scattering.
- Discuss multi-photon processes and its effect.

Department of Statistics

Under Graduate Statistics Programme Course Objectives and Outcomes

Course Code	Course Name	Course Objectives	Course Outcomes
B-194	Descriptive Statistics	To enhance the ability to collect, analyse, interpret andpresent the data and bring the meaning.	*Understand statistics and its scope *Understand different graphical representation *Understand measure of Central tendency and dispersion *Understand correlation, regression analysis.
B-195	Probability Theory	To provide basic probability Principles to solve real lifeproblems.	*Understand random variable. *Understand probability with different approaches *Understand concept of Baye's Theorem
B-196	Probability Distributions	To understand discrete and continuous distributions with their properties.	*Understand important discrete and continuous distributions, their different properties such as mean, variance etc
P-494	Practical	Based on B-194, B-195	*Problems based on graphical representation of data, calculation of measures of central Tendency dispersion, Moments, problems of Baye's Theorem.
B-294	Statistical Inference	To understand parameter and statistic, S.E, Concepts of point are interval estimation and discuss characteristicsof a good estimater.	*Understand difference between parameter and statistic *Understand point estimation, testing of hypothesis, Interval estimation. *Understand various method of Estimation
B-295	Survey Sampling	*To understand the concept of sampling, probability sampling, non – probability sampling. *To identify the situation where the various sampling techniques shall be used.	*Understand sample and complete enumeration sampling frame. *Understand various statistical sampling schemes such as simple, stratified and systematic sampling.
B-296	Analysis of variance and design of experiment	*To understand the concepts of ANOVA *To understand basic. *Principle of Design of Experiment and learn different tests for comparing treatment mean	*Understand ANOVA *Understand basic principal of Design of Expt. *Understand CRD, RBD and LSD *Understand concept of factorial expt.
P-594	Practical	Based on B-294, B-295, B-296	*Problem based on sampling. *Problem based on CRD, RBD, LSD *Problem based an factorial experiment. *Problem based on missing observation in CRD, RBD &

			LSD
B-394	Non – Parametric methods and Numerical Analysis	To understand distribution free tests (non- parametric method) for one and two sample cases.	*Apply different non-parametric tests on set of real data. *Understand Interpolation and Extrapolation.
B-395	Applied Statistics	To familize with different aspects of applied statisticsand their use in real life.	*Understand the concept of Time series, Index number andtheir applications *Understand the concepts of life table and its construction.
B-396	Linear programming and computational Technique	To develop the optimization techniques that will be useful in professional life.	*Understand basics and formulation of linear programming problems assignments and transportation problem.
		To introduce the basic know how of hardware as wellas software and learn C language	*Learn C language
P-694	Practical	Based on B-394, B-395, B-396	*Problem based on Non – parametric test *Problem based on interpolation and extrapolation *Problem on time series, index number *Problem on programming based on C language

M.Sc Statistics Programme Course Objectives and Outcomes

Course Code	Course Name	Course Objectives	Course Outcomes
H-1032	Probability Theory	To understand the uncertain occurrence situation with logical manner, to develop knowledge of fundamental probability tools for quantitively determining risk	*Students able to distinguish between probability models appropriate to different chance events *Understand the concepts of convergence *Understand the central limit theorem and large sample approximations for common statistics.
H-1033	Statistical Distributions	To provide the detail knowledge of the discrete and continuous distributions	*Recognize common probability distributions for discreteand continuous variables *Apply methods from Algebra and calculus to derive the mean and variance for a range of probability distributions.

H-1034	Sampling Techniques	*To learn scientific view to conduct the survey in proper way to collect the data about specific prospective *Learn variety of probability and non – probability sampling methods for selecting a sample from a pop^{n}	*Understand the basic principles underlying survey designand estimation *Apply different sampling methods of designing and selecting a sample from a population *Implement cluster sampling ratio and regression estimation in real life problems
H-1036	Computer fundamentals and programming in C language	To introduce with basic know how of hardware as wellas software and to train them C language	*Learn basics of computer fundamentals *Understand basic of C language *Perform programming in C
H-532	Practical	Based on H-1033, H-1034, H-1036	*Fitting of statistical distribution to a real life data *Perform sampling methods analysis *Perform programme on C language
H-2032	Design of experiments and linear estimations	*To learn the basic principles in the design of simple experiments *To learn different tests for comparing pairs of treatment means, ANOVA factorial experiments *To learn the applications of different designs in agriculture	*Compare the pairs of treatment means using different methods when null hypothesis is rejected in ANOVA *Analyze the data using CRD, RBD, LSD split plot and general factorial expectation.
H-2033	Inference I	*To learn the development of null and alternative hypothesis. *To learn types of errors *To learn various methods of estimations of parameters *To perform test on hypothesis as well as obtain MP, UMP tests	*Able to formulate statistical hypothesis and to use theoryto estimate mode parameter. *Understand UMP and UMPU test with their application
H-2034	Matrices and Linear difference equations	*To imparts the knowledge of mathematics and mathematical tools aid in statistical theory	Understand the basic concepts of matrices their types andtheir mathematical operations
H-2035	Real and Complex Analysis	To introduce fundamental concepts of real analysis such as sequences, series of real numbers and their convergence, continuity	*Describe fundamental properties of the real numbers thatlead to the formal development of real analysis *Understanding of limits and how they are used in sequences, series, differentiation and integration.
H-632	Practical	Based on H-2032, H-2033, H-2034	*Apply CRD, RBD, LSD on real life set of data *Solve the matrix problems. Obtain MP and UMP test

H-3032	Inference II	Aim to provide deeper knowledge of the inferential statistics such as sequential estimation, OC and ASN functions, two and samples non – parametric tests	*Ability to formulate statistical hypothesis and to use theory of estimate model parameter *Apply non – parametric tests on set of real data
H-3033	Engineering Statistics	*To learn the statistical quality control techniques usedin industries as such as control charts, acceptance sampling plans etc. *To learn the reliability theory	*Understand basic of production process monitoring and apply concepts of control charts on it. *Apply the acceptance sampling plans in production process * Understand the elements of reliability hazard function and its applications
H-3034	Operations Research I	*To develop the optimization techniques that will be useful in personal and professional life. *To help industrialist to take optimum decisions to executive type of problem	*Understand basics and formulation of linear programmingproblems *Understand assignments and transportation problem
H-3036	Stochastic process & Survival Analysis	*To learn and to understand stochastic processes predictive approach *To develop an ability to analyze and apply some basicstochastic processes for solving real life problem *To learn analysis of survival data	*Understand the stochastic processes markov chain, poisson process in real life. *Understand concepts of survival analysis
H-732	Practical Based on H-3032, H-3033, H-3034, H-3036		*Draw control charis and apply acceptance sampling plansin industry point of view. *Apply operation research techniques to solve real life problems
H-4032	Multivariant Analysis	To learn and develop scientific view to deal with multidimensional data sets and its uses in research data	*Understood multivariate normal distribution and their reallife application *Understand Wishart distribution, Hoteling, T^2- statistic *Understand principal component, discriminant analysis
H-4032	Economic statistics and demography	*To study various models and components of time series analysis for forecasting purposes *To learn the main theories used to understand population studies and societal change	*Understand time series analysis, Moving average spencersformulae and effects. *Understand the measure of mortality and fertility
H-4034	Operation Research II	To develop the ability to formulate optimization problem in real life problem	*Understand the concepts of PERT/ CPM, simulation with real life application.

H-4036	Advance experimental Design	To apply the technique of advance design in biological and agriculture research	*Understand Galva field construction and analysis of BIBD, PBIBD and their applications in agriculture
H-832	Practical	Based on H-4033, H-4034	*Apply time series analysis on real life data. *Apply spensers formula *Apply different design on agriculture data. *Solve real life problem using integer programming.

Department of Zoology

Under Graduate Programme (B. Sc.)

Programme Objectives (POs)

1. The course outcomes have been designed in such a way so that the students get the grasp of both classical and modern aspects of Animal Sciences.
2. It enables the students to study animal diversity in Indian subcontinent, environmental science and behavioral ecology.
3. The modern areas including cell biology and genetics, molecular biology, biochemistry, physiology followed by biostatistics, Evolutionary biology and genetic engineering have been included to make the study of animals more interesting and relevant to human studies which is the requirement in recent times.

B.Sc. I

PSO 1 B-121 Lower Non-Chordata (Protozoa- Helminths)

- ✓ This Course aims to introduce students to animal diversity of invertebrates and in understanding the progressive development of animal structure and the concepts of development of Coelom, Polymorphism, division of labour and various reproductive strategies.

PSO 2 B-122 B-122 Higher **Non-Chordata (Annelida- Echinodermata)**

- ✓ This course enables the students in understanding the basic concept of pseudocoelom, true coelom, functional morphology and physiology of higher invertebrates.

PSO 3 B-123 Cell Biology and Genetics

- ✓ This course enables the students in understanding the basic design of life based on the structure and function of the Cell and Cell organelles.
- ✓ It helps the students in differentiating between the prokaryotic and eukaryotic cells.
- ✓ The course enables the students in understanding the basic principles of heredity based on the Mendelian Genetics.
- ✓ It will provide an understanding of the concept of alleles, multiple alleles, sex determination and differentiation together with a basic knowledge of role of DNA in heredity, its causes and impact of chromosomal aberrations.

B.Sc. II

PSO 4 B-221 Chordata

- ✓ This course enables the students in understanding the classification and diversity of chordates, evolution of chordates together with the morphological and physiological differences of various classes of chordates.

PSO 5 B-222 Animal distribution, Evolution and Developmental Biology

- ✓ This course enables the students in understanding the concept of species, origin of life, theories of evolution, like Lamarckism and Darwinism or Natural Selection and the concept of mutations
- ✓ Developmental biology enables the students in understanding the process of gametogenesis, fertilization, cleavage, blastulation, gastrulation,fate maps, development of chick and the various types of Placenta.

PSO 6 B-223 Animal Physiology and Biochemistry

- ✓ This program enables the students in understanding the physiology of digestion, respiration, blood and circulation; excretion and osmoregulation, neural transmission, muscles, endocrine system and thermoregulation.
- ✓ The students learn the general chemistry and classification of carbohydrates, lipids and proteins together with enzyme action.

B.Sc. III

PSO 7 B-321 Applied and Economic Zoology

- ✓ This programme enables the students in understanding the biology and epidemiology of parasites responsible for diseases of domestic animals and man.
- ✓ The students also learn about the lifecycle, methods for controlling some vectors and pests.
- ✓ This course also throws some light on animal breeding, culture techniques of some economically important insects and other animals.

- ✓ Students also learn about the wildlife of India, important sanctuaries, National parks, different projects launched for the preservation of animals and in-situ and ex-situ conservation of wild animals.

PSO 8 B- 322 Biotechnology, Immunology, Biological Tools & Techniques and Biostatistics

- ✓ This program enlightens the students regarding concepts of recombinant DNA technology and its application in fields of agriculture, medical field and food processing etc.
- ✓ The students also learn about the concept of active and passive immunity, antigen, antibodies, development of vaccines of various diseases and immunological reactions.
- ✓ Students also learn the theoretical concept behind various tools and techniques like pH meter, Colorimeter, Spectrophotometer, Centrifuge, Microscopy, chromatography and electrophoresis.
- ✓ Knowledge of Biostatistics enables the students in understanding the methods of sampling, measures of central tendency, dispersion, Correlation and Regression.

PSO 9 B-323 Ecology, Microbiology, Animal Behaviour, Pollution and Toxicology

- ✓ This course enables the students in understanding the concepts of Ecosystem, energy flow, food-chain, food webs and trophic levels, ecological niche, abiotic and biotic factors, the concept of population. Ecological succession and adaptation.
- ✓ The study of microbiology enables the students in understanding the morphology and physiology of infection.
- ✓ Study of Animal Behaviour enables the disciples in understanding the concept of ethology, patterns of behaviour, biorhythms, learning, memory and migration.
- ✓ The study of pollution and toxicology enlightens the students about the concept, sources, types and control of environmental pollution. Exposure of toxicants dose -response relationship categories of toxic effects.

Post Graduate Programme (M. Sc.)

The knowledge of the students is enhanced regarding various classical and modern concepts of Zoology.

- The students learn the fundamental and advanced concepts of origin and evolution of life and the fundamentals of animal science.
- The students are able to understand complex interactions among living organisms at organisational level.
- Students are sensitised to the environment and related issues.
- Skill-based hands-on training on techniques helps students in making a judicious career choice.
- Training and hand on training to acquire understanding of biodiversity. Students get aware of their own health and are able to mitigate lifestyle disorders through a better understanding of circadian rhythms.

• **Animal Taxonomy and Economic Zoology**

- ✓ The students learn the basic principles of animal systematics, theories of classification and the concept of speciation together with the rules of zoological nomenclature (ICZN).
- ✓ Economic importance of animals as food, culture of beneficial animals and integrated pests management together with biological control and biological indicators are also understood.

• **Evolutionary Biology**

- ✓ The students learn the concepts and various theories behind origin of life of natural selection, together with the zoogeographical and geological distribution of animals. Various classical and modern concepts of evolution are also explored.

• **Non-Chordata**

- ✓ Helps in understanding the organizational complexity of non-chordates in stepwise manner.

• **Cell and Molecular Biology**

- ✓ Helps in understanding the difference between prokaryotic and eukaryotic cells together with their organization, cell membranes, cytoskeleton, cell communication, division and commitment.

• **Biostatistics and Bioinformatics**

- ✓ The students learn the fundamentals of data collection and classification, central tendency, measures of dispersion, correlation and tests of significance.
- ✓ The students learn the basics of computer, operating systems, internet, primary and secondary sequence database and databases.

• **Genetics**

- ✓ The students learn the classical and modern concepts of genetics. They study about the methods of genetic transfer, structure and alterations of chromosomes, special chromosomes.
- ✓ A hands-on technology, principle of various techniques *viz.*, cloning, PCR, DNA sequencing, FISH DNA fingerprinting etc. organization of genetic material is also understood in this course

• **Mammalian Physiology**

- ✓ Student is able to understand comparative mammalian physiology through the study of various organ systems.

• **Biochemistry**

- ✓ The students learn the structure, function and metabolism of various biomolecules, together with the enzyme action and various metabolic disorders.

• **Chordata**

- ✓ Students learn the origin and evolution and affinities of chordates together with the general organization of various chordate classes and a comparative study of the integumentary and urinogenital system of chordates. Various adaptive modifications of mammalian orders are also understood.

• **Developmental Biology**

- ✓ Prenatal life with new natal complications besides cleavage and development of zygote into a complete organism helps student to understand life as a biological process

• **Environmental Biology**

- ✓ Students unravel the organization of various ecosystems and biomes, the complexity and simplicity of web of life and various inter and intra-specific interactions among organisms and their abiotic environment.
- ✓ Applied ecology and conservation biology addresses the negative impact of human intervention on the biodiversity together with the principles of conservation and various wildlife projects for conservation of animals.

• **Animal behaviour**

- ✓ Helps in understanding the neurobiological mechanisms that make insights and complex life processes with mutual interactions among organisms helping in organism survival.

- **Fish and Fisheries**

- ✓ The course aims at making the students understand the general fish biology including classification, geographical distribution, migration, locomotion, diversity of body form and biological significance of endoskeleton. musculature and electric organs of fish.
- ✓ The students also learn the morphology and physiology of various organ systems of fish together with various specific adaptations of fishes and fish venoms.
- ✓ Students also learn the principles and practices behind fish culture in riverine, reservoir and cold-water environment.
- ✓ Applied fisheries enables the students in understanding the aspects of fish pathology, processing for storage, by products, Genetic Improvement, feed formulation and fishery management.

Department of Defence Studies

B. A. Ist Year

Program specific outcomes (PSOs)

After undergoing this course a student will be in a position to –

1. Become familiar in evolution of art of warfare in India (upto 1947 A.D.). He/She will learn and understand the strategy, tactics, application of principles of war & causes of defeat and victory of war fought before 1947 A.D. in India.(Ist paper)

2.Become familiar in evolution of western art of warfare. He will learn and understand the strategy, tactics application of principles of war and evolution of armament.(IInd paper)

B.A. Ist year

1. Art of war in India (upto 1947 A.D.)
2. Evolution of Armament and western art of warfare.

B.A. IInd Year

Program specific outcomes (PSOs)

After undergoing this course a student will be in a position to –

1. Become familiar in evolution of art of warfare in India after 1947 A.D. He will learn and understand the strategy, tactics, application of principles of war and causes of defeat and victory in India. (Ist paper)

2. Develop core competencies in national security affairs by building his/her capacity on essentials of National Security through theory and practice. Understand the national and external a country face and understand the contemporary security environment in the world. (IInd paper)

B.A. IInd year

1. Art of war in India after 1947.
2. National Security

B.A. IIIrd Year

Program specific outcomes (PSOs)

After undergoing this course a student will be in a position to –

1. Acquaint them with the concept of strategic thinking as propounded by prominent classical and modern thinkers. Students will also develop analytical thinking regarding relevance of such thought to contemporary period. (Ist paper)

2. Understand the definition , meaning and distinguish basic concepts of war, various types of war and its various typologies, techniques and characteristics and grasp the concept and theories of war in detail. (IInd paper)

B.A. IIIrd year

1. Evolution of strategic thought
2. Study of war.

M. A

MA 1st Semester

Program Specific Outcomes (PSOs)

After undergoing these courses students will be in a position to:

1. Acquaint them with the concept of strategic thinking as propounded by Machiavelli, Jomini, Clausewitz, Marx and Engles, Moltke, Schlieffen and Foch.
2. Understand the different theories of International Relation. Rise of Hitler and failure of League of Nations. World War-II and UNO. Nature and different types of war, Diplomacy and India's approach to maintain peace in the contemporary world.
3. Understand the concept of Defence Economics, Internal and External Preparations, Pre-War, During War and Post War.
4. Understand the difference between Revolt and Insurgency, Guerilla Warfare and Revolutionary Wars. Strategic and Tactics of Insurgency and Counter Insurgency. Philosophy given by Mao-Tse-Tung, Lenin and Chi- Guevara.
5. Understand the importance of Himalayan Kingdom. The International Policies of Nepal and Bhutan. Their economic importance to India.

Semester-I

Paper-I	Strategic thought (Compulsory)-I
Paper-II	War and International Relation (Compulsory)-I
Paper-III	Economic Aspects of War (Compulsory)-I
Paper-IV	Insurgency and Counter Insurgency
	Or
	Himalayan Kingdom (Nepal-Bhutan)

MA 2nd Semester

After undergoing these courses students will able to:

1. Acquaint them with the concept of strategic thinking as propounded by Ludendorff, Hitler, A.T.Mahan, Halford Mackinder, Douhet, Mitchel, Seversky, Gandhian and Nehruvian approach to peace and National Security.
2. Understand the National Power, National Interest, Balance of Power, Collective Security, Non-Alignment, Peace-Keeping in International Politics. India's Relations with USA, Russia and China. Humanitarian Issues and Human Rights.
3. Understand War Potential of a Nation, India's Nuclear and Space Program and Energy Resources, Economic Constraints in Defence Planning and Management. Impact of Economic Liberalization and Globalization on India. Defence Production in India and Transfer of Defence Technology.
4. Understand the Indian Ocean Region its political, strategic, economic and military importance. Interest of External Power in the region. Maritime Strategy of India, Impact of the Globalization on the Indian Ocean.
5. Understand the concept and nature of war. Nuclear Deterrence and Nuclear War. Terrorism as a mode of conflict and Cyber-Terrorism.

Semester-II

Paper-I	Strategic thought (Compulsory)-II
Paper-II	War and International Relation Since 1945 (Compulsory)-II
Paper-III	Economic Aspects of War (Compulsory)-II
Paper-IV	India Ocean Or Theories of War and Peace

MA 3rd Semester

After undergoing these courses students will be in a position to:

1. Acquaint them with the concept of National Security, Elements of National Power, Role of Military Intelligence Services, Military Balance, Non-Military/Non-Traditional Dimensions.
2. Understand International Law, Sources of International Law, Relation between International Law and Municipal Law. Intervention, Recognition, Subjects of International

Law, Settlement of International Dispute.

3. Understand Disarmament and Arms Control, History of Disarmament before World War-II, Washington Naval Agreement 1922, Disarmament Policies and approaches of Britain and France before World War-II, Disarmament Policies and approach of Germany before World War-II and Path of Peace before World War-II.
4. Became familiar in evolution of art of art of warfare in India. They will learn and understand the strategy, tactics, application of principles of war and causes of defeat and victory in war fought in India.
5. Understand about Disaster about Disaster Management and learn about different types of disaster. Students will also aware of NDMA and India's Disaster Management Planning.

Semester-III

Paper-I	National Security (Compulsory)-I
Paper-II	International Law- Laws of Peace (Compulsory)-I
Paper-III	Disarmament and Arms Control (Compulsory)-I
Paper-IV	Indian Military History-I Or Disaster Management-I

MA 4th Semester

After undergoing these courses students will able to:

1. Understand India's Geo-strategic setting, its land and sea frontiers, Problems of India's Internal Security Threat. India's Defence and Foreign Policy. Role of Indian Ocean and Himalayan in India's Security Considerations.
2. Understand, Definition and Kinds of War, Enemy Character, War at Sea and Air Warfare, Rights and Duties of Neutral and Belligerent States, War Crimes, Blockade, Contraband, Refugee Problems in the World and Refugee Law and Conventions.
3. Understand the Disarmament and Arms Control efforts and Agreement after 1945 A.D. Disarmament policies USA, Russia, China and India. Problems of Inspection and verification of Nuclear Weapons. Peace and its Maintenance.
4. Understand the Military History from Maratha Period till date, Political and Military

Lessons learnt from Battle of 1962, 1971, and Kargil Conflict. National Security Management and the Higher Defence Organizations.

5. Understand the different types of Disaster, Management of Emergencies in Nuclear/ Chemical Industries, Financing, and Relief Operations, Legal Aspects, Role of Armed Services, Role of IGON and NGOs.

Semester-IV

Paper-I	National Security (Compulsory)-II
Paper-II	International Law- Laws of Peace (Compulsory)-II
Paper-III	Disarmament and Arms Control (Compulsory)-II
Paper-IV	Indian Military History-II Or Disaster Management-II

Department of Drawing and Painting

B. A.

S. NO	Course Title of the Paper	Paper Code	Objective & Course Out Comes
1	Fundamental Of Art & Indian Folk Art	103(Theory)	The Objective of the Teaching Visual Art: drawing and painting is to achieve overall referencement of the students perception not confined to the skills of the profession alone but also to create the right kind of intellect as well as emotional cultivation to composite creativity and thought it gives complete knowledge of art in the field of theory as well as in practical. **Course out comes:** student get information above Definition of arts and meaning of art the Arts language is based on concepts called the elements of painting (line , Form , Colour , Tone , Texture and Space) Principals of Painting Composition - (Proportion , Rhythm , Dominance, Harmony , Unity , Balance . Introduction of the medium in technique :- (1) Dry Medium - Powder Colour, Pastel Colour (2) Wet Medium - Water, Oil, Acrylic. Technique :- Pastel Colour , Water Colour, Tempro Colour and Acrylic Colour etc Introduction of the Indian Folk Art :- Types - Rangoli , Mandna , Alpna , Sanjhi , Apna, Leela Gudwana , Ahpan. उक्त सभी रूपप्रद कला के मूल आधार अथवा कला सिधान्तो एवं चित्रण विधा को समझना और जानना कला विद्यार्थियों के लिए आवश्यक है क्यों की कलाकृति के सृजन प्रक्रिया में ये सभी मुख्य रूप से सहायक होते है।
2	Creative Designing	703 A (Practical)	Course Out Comes :- Student Will Learn the Ornamental , Geometrical ,Folk Form & Computer Design
3	Still Life Painting	703 B (Practical)	Sketch and Render Objects : Fruits , Vegetables Leaf and Geometrical Shapes etc सृजनात्मक एवं अलंकारिक बढ़ावा देने व् सीखने के लिए कला विद्यार्थियों के लिए यह पाठ्यक्रम में उपयोगी है तथा ज्यामितीय एवं लोक आयाम को सीखना परखना है उसे कंप्यूटर डिज़ाइन स्वरुप में

			चित्रण करना कौशल विकास की ओर सहायक है विभिन्न प्रकार की वस्तुए स्थिर चित्रण विधा को जानना विद्यार्थियों को लाभप्रद है।
4	Histrory of Indian Painting (Premitive Art and 1st Century to 17th Century A.D	203 (Theory)	**Course Out Comes: -** Learning the three painting style of Indian heritage, students will be able to differentiate them easily how they are different due to their cultural and regional changing it will help the students enhancing their art approach how the cultural set up is important to make a distinctive identification. प्रागैतिहासिक भारतीय चित्रकला जैसे सिंधु घाटी की सभ्यता एवं जोगीमरा गुफा से परिचित होना और विभिन्न कला शैलियों (राजस्थानी शैली , मुग़ल शैली एवं पहाड़ी स्कूल), को समझना उसे बनाना विद्यार्थियों को ज्ञानवर्धन हेतु पाठ्यक्रम उपयोगी है ।
5	Copy from old masters (One Figure Composition)	803 A (Practical)	**Course Out Comes: -** Students will learn the anatomical structure of human body to beautify their art work with expression movement and rhythm sketching and drawing of hand and leg movement sketching and drawing of body movement with Rhythm.
6	Cast Study Bust:	803 B (Practical)	सम्बंधित पाठ्यक्रम के द्वारा विद्यार्थियों के लिए शरीर रचना विधान चित्रकला व् मूर्तिकला के आरम्भिक अभ्यासों में सर्वाधिक महत्वपूर्ण अभ्यास जिसके अंतर्गत कला छात्र को मानव शरीर या किसी भी जीव के शरीर की आंतरिक रचना और गठन का अध्ययन करना पड़ता है व्यक्ति चित्रण अभ्यास से पोर्ट्रेट स्टडी सीखना आदि
7	Philosophy of art and modern Indian painting (18th centuary AD upto present Age)	303 (Theory)	**Course Outcomes:** it will develop a careful investigation of the qualities belonging to the objects and event students will be able to response the objects and event authentically thought and feeling coloured in on aesthetic response will enrich the knowledge of the students to the realm of art. Simple Study :- Definition and meaning of Arts & Philosophy of Arts concept of Beauty according to Indian Philosopher and Western Philosopher Modern Arts and Artists : (Style of Life) Patna School /Company School and Bangal School / Renaissance period (Raja Ravi Verma ,

			Abnindra Nath Tagore , Asit Kumar Haldar , Nand Lal Bose , Kchitindra Nath Mazumdar. New Trends in Modern Indian Painting Life and Style Jamini Ray, Ravindra Nath Tagore , Gagendra Nath Tagore, Amrita Shergill Contemporary Indian painting after independence upto present age (Life and style) Satish Gujral , M.F Hussain , K.S Kulkarni , K.K Habber N.S Bendra , B Prabha , Sailoz Mukharji ,B.C Sanyal , Ramkumar विद्यार्थियों के मन में सौंदर्य परख मूल्यांकन करने की क्षमता एवं कला दर्शन के प्रति रुचि पैदा करना और आधुनिक कला शैली एवं समकालीन कलाकारों के जीवन व् कलाकृतियों के बारे में जानना उक्त पाठ्यक्रम का मुख्य स्रोत बिंदु है।
8	Pictrorial Composition with minimum two human figure are compulsory	903 A (Practical)	**Course Out comes:-** The Artwork will be Produced in the studio of the department under the direction of the teacher (in this section , students will to the work of decorating them with colours by making the selected subjects on the paper sheet ,in the form of subjects such as market scene , Festival , Waiting , Working Women or Men , Rural Life Boys and Girls Playing etc can be given in composition two auxiliary elements with at least three figure must be in the pictures.
9	Landscape (any style)	903 B (Practical)	Land Scape Painting, the depiction of natural scenery in art Landscape Paintings may Capture Mountains, Valleys, and bodies of Water. Fields, Forest and Coasts and may are may not include man-made structures as well as people. उक्त प्रयोगात्मक पाठ्यक्रम कला छात्र छात्राओं को चित्र संयोजन (मानव आकृति) को रचनात्मक भाव भंगिमाओं के द्वारा भावाभिव्यक्ति देना सीखना प्रारम्भ करता है और साथ ही प्राकृतिक सौंदर्य का चित्रांकन सुन्दर वातावरण के प्रति समझ और चित्रण करना सीखता है छात्र अथवा कला विद्यार्थी नवउदीये मान कलाकार की ओर धीरे धीरे अग्रसर होने लगता है अथवा कलाकृति की रचना हेतु प्राकृतिक स्त्रोत को समझने परखने लगता है जो कला सृजनात्मक के लिए एक कलाकार को अत्यंत महत्वपूर्ण है

M. A

S.N	Course title of the Paper	Paper code	Course Outcome:-(I[st] Semester)
1.	Indian Painting (Prehistoric to pahari)	G-1000 (Theory)	Students will recognize and understand major monuments artists, methods and Theories and be able to assess the qualities of work of and architecture in their Historical and cultural setting how the them social problems should become subjects of Art.
2.	Philosophy of Art (Indian)	G-1001 (Theory)	It will develop a carful investigation of the qualities belonging to the objects and events students will be able to response the objects and event aesthetically Thoughts and felling coloured in an aesthetic response will enrich the knowledge of the students to the realm of art.
3.	Composition Based in Indian miniature	G-500A (Practical)	सम्बन्धित पाठ्यक्रम प्रागैतिहासिक युग की कला एवं कला दर्शन (सौन्दर्य शास्त्र) की समुचित अध्ययन हेतु विद्यार्थियों के लिए उपयोगी है।

4.	Portrait Painting in Western style (Portrait Study)	G-500 B (Practical)	व्यवसायिक एवं परम्परागत स्वतंत्र कलाकार उक्त पाठ्यक्रम से सीखा कर बनाया जा सकता है। व्यक्ति चित्र शैली कला सृजनात्मकता से विद्यार्थियों को अपने प्रतिभा को एक नया आयम दे सकते है।
5.	Professional application (Instant sketching/ Computer Design/Botik-Tie and Dry/Screen Painting/ Photography)	G-500 C (practical)	व्यवसायिक दृष्टिकोण से प्रयोगात्मक कोर्स भी महत्वपूर्ण भूमिका में है। उक्त के अतिरिक्त कला विद्यार्थियों के लिए नौकरी हेतु TGT & PGT, NET Exam के अनुरूप भी है।
	SEMESTER-II		**OUT COMES**
6.	Indian Painting: (Company School up to Contemporary Period)	G-2000 (Theory)	History of Modern Painting: Company school to contemporary period and life style artists (MS. Bendra, K.K Hebbar, M.F Hussian, RamKumar Tayab Mehata,Satish Gugaral)
7.	Philosophy of Art (Western)	G-2001 (Theory)	Study of Philosophy of western art and relationship between aesthetics principles and concepts (Early Greek, Roman Medieval Renoissonce Classical

			and Modern) Thinkers. Plato, Aristotle, Kant, Hegel Etc.)
8.	Thematic Composition	G-600 A (Practical)	प्रयोगात्मक पाठ्यक्रम में विद्यार्थियों द्वारा Thematie Composition और Life study (full figure) एवं रंग योजना के द्वारा और लोक कला शैली के प्रति जागरूक रहना एवं अपने संस्कृति एवं कला के प्रति लगाव-परिचित बने रहने की पूर्ण क्षमता है।
9.	Life study (Monochrome)	G-600 B Practical	----------do----------
10.	Indian folk Art. (Any Style)	G-600 C (Practical)	----------do----------
	SEMESTER III		**OUT COMES**
11.	History of European Painting (Classical to Early Renaissance)	G-3000 (Theory)	निम्नलिखित सभी पाठ्यक्रम योरोपियन चित्रकला (पाश्चात्य) और आधुनिक कला प्रवित्तियों के बारे में छात्र- छात्राओं को TGT, PGT,एवं NET के लिये अधिक उपयोगी सिद्ध हुई है।
12.	History of Modern Painting (Background &	G-3001 (Theory)	आधुनिक कला और आधुनिक कला वाद के प्रयोगात्मक शैली से भारतीय (पूर्वी) एवं योरोपिय कला प्रवित्तियों से एक नयी

	Impressionism to Cubism)		कला शैली का विकास करना कला छात्र-छात्राओं के लिए उक्त कोर्स काफी हद तक सहायक रही है।
13.	Creative Composition (Figurative)	G-700 A (practical)	The purpose of the study of European Art is to enable the students to see the wood rather than the trecs.
14.	Land scape Painting (Any Style)	G-700 B (practical)	Study of history of Modern painting is to enable the students for technical and stylistic characteristics of main movements in the history of modern painting with the importance and contribution of important masters.
15.	Mural/Graphic Design	G-700 C (practical)	Creation of thematic idea with creative technique in oil. Acrylic, mix medium, pastel and the student should initiates to develop their on individual technique and style.
			(Mural) to acquaint the students with different techniques in different medium, clay, terracotta, glass, tiles, metals, POP, resin etc.

			(Graphic Design) Since art students express their feeling through brushes but in this modern west era student also should know now to work through various software with the help of computer.
	SEMESTER IV		**OUT COMES**
16.	History of European painting High Renasense to Rococo	G-4000 (Theory)	The main purpose to include this paper of European Painting in curriculum is to give the knowledge of great art and artists from high Renaissance to Rococo. (Leonardo da vinci, Raphel, Michelangelo)
17.	History of Modern Painting (Western) Expressionism to Abstract Art	G-4001 (Theory)	The study of the art History Con not be completed without the knowledge of western modern Art it will. Suffice the purpose of Making. Students aware of different movements in modern Art. (Expressionism, Fauvism Dadaism, surrealism & Abstract Art.)
18.	Creative composition (Abstract)	G- 800 A (Practical)	Developing the creative power of the students and make them

			able to work as professional Artist.
19.	Collage/Clay Modelling Installation	G- 800 B (Practical)	The aim of this paper is developing the skill of a student to project their feeling with the help of various materials instead of brush and colour.
20.	Dissertation/Exhibition and viva-vice	G- 800 C (Practical)	these papers are introduced to give knowledge about thesis work, display of an Exhibition along with preparing catalogue as well as viva-voce is designed to evaluate the overall general knowledge of candidate related to method and materials, practical handling of various media & grounds i.e. painting. Computer Graphic, mural, sculpture, applied art, contemporary Art activities along with artist, of India.

Department of English

B. A.

Programme Objective (Pos)

1. The prescribed syllabus has been designed with the aim to develop an appreciation for the English language, its connotations and to interpret the didactic purpose of literature. It also sensitizes students to the aesthetic, culturaland social aspects of literature.
2. It makes the students aware of the literature written and translated in English speaking countries like the UK and USA.

B.A. I

Paper I A-109 – POETRY

Þ This course aims to introduce students to the basic terminology and elements ofpoetry and to help them examine the difference between Shakespearean and Miltonic sonnet forms. It enables students to analyze the underlying meaning ofa poem by using the elements of poetry and to identify the representative poets from 16^{th} – 20^{th} century.

Paper II A-110 - PROSE

Þ The purpose of this course is to help develop an understanding for both languageand literary development. It helps acquaints students to the different styles of essay writing.

B.A. II

Paper I A-209 – DRAMA

Þ This course helps develop an understanding of various types of drama and relatedliterary terms. It also enables students to trace the origin and growth of drama inEngland and to analyze and appreciate the representative works of British drama.

Paper II A-210 – FICTION

Þ This course enhances the student's reading skills through developing and understanding of the growth of novel form and its various types.

B.A. III

Paper I A-309 – HISTORY OF ENGLISH LITERATURE

Þ This course helps develop an appreciation for the western classical literature. Italso supports the development of an acquaintance with major religious, social,

and political movements from 15^{th} – 20^{th} century and their subsequent influence on English Literature.

Paper II A-310 – INDIAN WRITING IN ENGLISH

Þ This course helps develop an understanding of the growth of Indian Literature inEnglish and to appreciate the evolution of Indian culture from traditional to modern. It enables the students to develop an understanding of themes, styles, and poetic sensibilities of the Indian English writers.

M.A. English

Programme Objective – The prescribed syllabus has been designed with the aim to develop an appreciation of English Literature. English Literature is very wide as it is written in almost every country of the world. Therefore, we have British Literature, American Literature, Canadian Literature, Australian Literature, African Literature, Indian writing in English and so on. The syllabus of M.A. English introduces all these different types of literature written in English language to students and aims to sensitize them to the aesthetic, cultural and social aspects of literature. Its objective is to develop a thorough knowledge of literary history, theory and criticism also.

Semester I

PG – 1 – Chaucer to Milton – This paper gives the students a first hand knowledge of the major literary works of the period. The students develop an understanding of the political, economic, social and intellectual background of the period. The students are also acquainted with the literary movements, favoured genres and the evolution and development of literary forms to encourage further reading.

PG – 2 – Restoration to 1798 – This paper further gives the students a first hand knowledge of the major literary works of the Restoration period and pre – romantic era. When they study the writers and their works of this era, they understand the political, economic and social aspects of the age. They also get acquainted with the literary movements of this period and compare it with other ages to have a better understanding of English literature.

PG – 3 – Shakespeare – Shakespeare is the greatest dramatist of English Language. This paper enables the students to understand and appreciate the reasons of Shakespeare's greatness as a dramatist and his universal appeal. The first-hand knowledge of Shakespeare's great dramas enable the students understand the social, political and intellectual background of the age. The students are also acquainted with Shakespearean criticism including Indian response to Shakespeare.

PG – 4 – Fundamentals of Literary Criticism – This paper acquaints the students with the works of significant critics of Indian criticism and Greek and Roman criticism. It further gives them first hand knowledge of English criticism from the Renaissance age to the late Victorian period. Having read the major works of great literary critics, students are acquainted with the fundamentals of Literary Criticism.

Semester II

PG – 5 – Romantic Literature – In continuation with the previous papers studied by students in Semester I, Semester II makes them understand the growth of English literature further. The first hand knowledge of the major works of the Romantic literature enables the students to understand the social, political, economic and intellectual background of the period. They develop a very good understanding of all the important genres of the period and are able to appreciate the aesthetic beauty of the literature of the period.

PG – 6 – Victorian Poetry – The literary trends of the Romantic Movement changed gradually with the passage of time. This paper gives the first hand knowledge of the Victorian poetry to the students and enables them to understand how it is different from the Romantic poetry. It also acquaints the students with the major changes in the social, political and economic background of the age. They study the various types of poetry written in Victorian age and understand how it represents its age.

PG – 7 – English Linguistics and Phonetics – This paper enables the students to understand the basic tools essential for a systematic study of English language including grammar. It helps them understand

advanced linguistic or functional skills also. The paper gives the students a fairly good command of the English language skills and ability for in depth study of literary texts in English.

PG – 8 – American Literature – This paper enables the students have a first hand knowledge of the wide range of English literature. It provides them with a broad perspective of the development of American literature in the nineteenth and twentieth centuries in relation to American experience. It acquaints them with the American Literature through the close reading of the selected texts and makes them understand the social, cultural, intellectual background of America.

M. A. English

Semester III

PG – 9 – Victorian Fiction and Prose – In Semester II students study Victorian poetry and in Semester III they study the fiction and prose of this age. The exposure to the great novels and prose works of the Victorian age not only enables the students to understand these genres better, but also makes them understand the turbulent Victorian Age better. They have a fair knowledge of the major changes in the social, political and cultural life of this era in Britain.

PG – 10 – Twentieth Century British Poetry – Twentieth century British Poetry represents a major change in the thematic patterns, style and approach towards life. This paper enables the students understand these changes and gives them a first-hand knowledge of the major works of the period. They are acquainted with the influences which shaped the poetry of this age. As this age is complex, so is the poetry of this age. After reading the poetry of twentieth century, students develop a better understanding of the complexities, struggle, psychological stress of this period

PG – 11 – Twentieth Century British Fiction and Drama – As the poetry of the twentieth century is complex, so is the fiction of this age. The fiction and drama of the twentieth century give voice to the complicated life of this age and the first-hand knowledge of the major works of this age enables students develop a better understanding of this era. They understand how the political, social and cultural life of this period was greatly influenced by world war I and world war II, decolonization and technological advancement etc. They also understand the psychological and spiritual crisis through which the people of this age were passing.

PG – 12 – Translation Studies – This paper acquaints the students with the major literary works across the cultures. They understand the theories of translation and make an in – depth study of the texts. The study of the classical writers from Sanskrit language, Greek language and other rich languages of the world translated into English language gives the students a very good understanding of world literature. They understand the reasons of the popularity of the works written thousands of years ago and are able to appreciate the beauty of these works.

Semester IV

PG – 13 – Indian Literature in English (Poetry and Drama) – This paper exposes the students to the major Indian writers in English and their works. They understand how Indian writing in English (especially poetry and drama) has grown gradually and has made itself a world class literature. The first hand knowledge of great Indian writers in English and their works makes the students appreciate how Indian themes and Indian sensibility have been portrayed beautifully in English language by these writers. The students are able to relate themselves to these works of Indian writers in English as they voice their own Sentiments and thoughts.

PG – 14 – Indian Literature in English (Fiction and Prose) – Just like PG – 13, PG – 14 also exposes the students to the major Indian writers in English and their works. They understand how Indian writing

in English (especially fiction and prose) has given voice to the Indian social, political, economic and cultural issues of the contemporary India. The students are able to appreciate the greatness of Indian writing in English as it has become a world class literature. As the students relate to the characters of the fiction by Indian writers in English, they enjoy it thoroughly and develop a very good understanding of the major changes happening in India.

PG – 15 – New Literatures in English – This paper familiarizes the students with New Literatures in English across the world. They study major works of modern era written by great writers from different countries. This exposes the students to the different cultural and social background of various countries. They are acquainted with the literary movements, favoured genres and evolution and development of literary forms in various countries. The paper helps the students develop great understanding of world literature written in English language.

PG – 16 – Modern Literary Criticism – This paper acquaints the students with the works of significant literary critics of the 20th century. It familiarizes them with important critical movements and enables them to apply the principles of criticism to literary texts. Modern literary criticism is often influenced by literary theory, literature's goals and methods and this papers helps students understand this literary criticism. They are able to appreciate the works of the writers studied by them in other papers, after studying the paper of Modern Literary Criticism.

Department of Economics

DEPARTMENT OF ECONOMICS

B.A. Economics

Programme Objectives

The course is designed for the students pursuing graduation with Economics at graduation level in regular mode. The programme aims to inculcate economic thinking among the students in economic decision making by comprehending economic theory.

B A I

PSO 1 A-145 Micro Economic Theory

- This course aims to introduce students to the concepts of consumer behaviour, Producer's behaviour and the behaviours of the firm.
- demonstrate an understanding and application of basic economic principles.
- Analyze the behavioral patterns in different market situations such as perfect competition, monopolistic competition, monopoly and oligopoly market.
- To deal with the advanced theoritical issues and their practical applications of distribution theories.

PSO 2 A-146 Macro Economic Theory

- The course aims to:
  - Explain national income, methods of its calculations and various concepts related to it
  - Interpret various macroeconomic issues such as money, foreign exchange, inflation, unemployment and economic growth.
  - Explain the meaning and functions of commercial banks and their process of creating credit.
  - Analyze different phases of trade cycle and its impact on the growth business.

B A II

PSO 3 A-245 Elementary Quantitative Methods

The course aims to:

- Demonstrate the role of quantitative techniques in the field of business.
- Illustrate different types of equations and explain basic elements of Algebra, differential and integral calculus.

- explain the basic statistical concepts such as measures of central tendency, dispersion, correlation, index numbers and Time series.
- introduce the statistical system in India, the working of Central Statistical Organisation (CSO) and National Sample Survey Organisation (NSSO).

PSO4 A-246 Public Finance

The course aims to:

- Introduce the benefits and distribution of various types of taxes among various classes of people.
- Demonstrate the role of government in expenditure and public debt.
- Explain the concept, objectives, components and preparation of various government budgets in India and fiscal policies.

B.A III

PSO5 A-345 Indian Economy

The course aims to:

- throw some light on the nature and structure of Indian Economy and explain the issues like sectoral development, population migration, poverty and unemployment.
- explain the structure and growth of agriculture in India, demonstrate the various issues related to agriculture such as productivity, technology credit, marketing and pricing
- explain the structure and growth of Industry and Service Sector.
- Introduce the economy of Uttar Pradesh and local area

PSO6 A-346 Economic Growth and International Trade

The course aims to:

- demonstrate an understanding of economic growth theory, development and policy implications.
- apply empirical analysis of growth models to developing regions and draw appropriate policy recommendations.
- throw some light on the concepts related to international trade

such as terms of trade, reciprocal demand, free trade, protection, and balance of payments
- Explain the functions, achievements and failures of international economic organisations like WTO, IMF and Word Bank.

M.A. Economics

Micro Economics I

- The course aims to:
  - analysis the economic behaviour of individuals, firms and markets
  - equips the students with various aspects of consumer behaviour, production theory, product pricing and market behaviour.
  - explain the concepts related to welfare economics, general equilibrium and analysis of economic behaviour under uncertainty and game theory.

Macro Economics

The course aims to:
- analysis and establishes the functional relationship between large aggregates.
- equips the students not only understanding of systematics facts and their empirical analysis but also latest development in the field of macro economics

Quantitative Methods

The course aims to:
- help students understand economic concepts with the help of mathematical methods
- equip the students to use the techniques of mathematical and statistical analysis to understand and analyse economic problems..

Labour Economics

The course aims to:
- explain issue pertaining to the labour market, wage theories, employment policies and trade unions.
- exposes students to theoretical as well as empirical issues relating to the labour market with special reference to India.

Micro Economics II

The course aims to:

- deal with the micro and macro theories of distribution, welfare economics general equilibrium in closed and open systems and analysis of economic behaviour under uncertainty.

Macro Economics II

The course aims to:

- help students understand concepts related with monetary economics and banking theory
- analyse the interconnection between the monetary forces and real forces, their developmental role and limitations in shaping the economy

Economics of Growth and Development

The course aims to:

- familiarise the students with various concepts and theories of growth and development and also various measurement of development at world level with special reference to India.

Industrial Economics and Entrepreneurship

The course aims to:

- provide basic knowledge to the students on key theoretical concepts and issues related to market structure, firms motivations, productivity and efficiency.

Public Economics

The course aims to:

- orient the students with basic theories of public finance with focusing on government of India's expenditure, budget and revenue aspect along with fiscal policy.

Department of Geography

B.A. Ist Year

Physical Geography

1. The Earth's geomorphic transition from beginning to present day.
2. Plate tectonics and related movements
3. Landforms carved by various agents of erosion
4. Earth's climate and the factors that influence it
5. Oceans system and biogeography of the world.

Human Geography

1. Gain knowledge about major themes of human Geography.
2. Acquire knowledge of the history and evolution of humans.
3. Understand the approaches and processes of Human Geography as well as the diverse patterns of habitat and adaptations.
4. Develop an idea about space and society

Practical

1. Comprehend the concept of scales and representation of data through cartograms.
2. Interpret geological and weather maps.
3. Learn the usages of survey instruments.
4. Brings direct interaction of different types of surveying instruments like Dumpy level and Theodolite with the environment.
5. Develop an idea about different types of thematic mapping techniques.

B.A. II

Geography of India

1. Students will get an introduction to the main regions of India in terms of both their uniqueness and similarities.
2. Students will be exposed to the historical, economic, cultural, social, and physical characteristics of India. 3. Students will learn the relationships between the global, the regional, and the local, particularly how places are inserted in regional and global processes.
3. In addition to the ability of understanding and read maps, students will develop cartography skills and will be able to create maps on their own.
4. Students will be introduced to demographic, social, and cultural attributes such as migration, social relations, and cultural identity.

Economic Geography

1. Understand the concept of economic activity, and factors affecting the location of economic activity. Gain knowledge about different types of Economic activities
2. Assess the significance of Economic Geography, the concept of economic man, and theories of choice.
3. Analyze the factors of the location of agriculture and industries.
4. Understand the evolution of varied types of economic activities.
5. Map and interpret data on production, economic indices, transport network, and flows.
6. Provide a broad background on the occurrence, use, management, and conservation of water and water resources worldwide.

Practical

1. Learn the significance of statistics in geography. Understand the importance of use of data in geography
2. Recognize the importance and application of Statistics in Geography
3. Interpret statistical data for a holistic understanding of geographical phenomena. Know about different types of sampling.
4. Develop an idea about theoretical distribution.
5. Learn to use tabulation of data. Gain knowledge about association and correlation.

B.A. IIIrd Year

Southeast Asia

1. South East Asian region provides knowledge of the eleven dynamic economies which are of growing international importance strategically as well as their physiography, economy, soil, agriculture and industries, trade and transport as well as the demography patterns and trends.
2. Since the region is geopolitically holding significance in the Indian Ocean, it is important for students to know the region's dynamics as the world nations have an eye on this resource region.
3. The social and political geography provides an insight into the most accessible tropical region on Earth.

Environmental Studies

1. Students will enhance their knowledge by learning about the environmental system, ecology and ecosystem.
2. They may understand how man interacts with the environment and how it makes changes and areas affected by the environment.
3. Students will learn about causes of environmental degradation, be it air pollution water pollution, and new techniques of solid waste disposal.
4. This study will make students understand and learn about innovative ideas on how to conserve the environment and maintain ecological balance at local regional and at the national level.
5. It will enhance their thoughts and also aware them of new emerging issues like population explosion, food security global warming, biodiversity, and its conservation, and sustainable development in near future.

Practical: Field Work and Field Study Report

1. Students will learn how to measure/survey the land and related features on the ground and how they are plotted on the sheet of paper by using alidade, radiation method, prismatic compass, and elimination of error by Bowditch method.
2. Students will learn how to calculate the height of buildings or other elevated objects using an Indian Clinometer.
3. Field Study Report will enable students to prepare the report based on their village, ward, city and in what manner they are going to collect the primary data from the field either by discussion and interviewing people, tabulating data, and preparing a final report summary using both primary as well as the secondary data using various maps and diagrams. They also summarized the report and have question hours discussions with the external examiner.

M.A. I st Sem.

Advanced Geomorphology Code: G-1018

1. The Students will be beneficial to the understanding of the conceptual and dynamic aspects related to landforms.
2. The Students will be beneficial to the Development and the relevance of applied aspects of Geomorphology related to the different fields.
3. They can understand the all-natural process related to the Earth. The students can understand the relief features of the Earth.

Natural Resource and
Management Code: G-1019

1. Students will become sensitized to the concept of resources.
2. Students will become sensitized to the classification of resources.
3. Learn about the use and misuse of resources.
4. Showing awareness and responsibility for the environment
5. They will learn some strategies for water and soil resource management.
6. They will learn some strategies for forest resource management.
7. They will learn some strategies for Minerals resource management.
8. Water scarcity is a global problem in the present century.
9. Students will be able to synthesize geographic knowledge and apply innovative research strategies to solve problems in resource conservation, environmental change, and sustainable development within the community, region, and world.
10. Provide a broad background on the occurrence, use, management, and conservation of water and water resources worldwide.

Advanced geography of India

1. The geography of India in the curriculum makes the students aware of the physiographic divisions, climate, soil, drainage, agriculture, industries, and ports on which the economy of the nation thrives.
2. It provides knowledge of the economic development that is taking place as a result of the resource-rich regions.

History of Geographical Thought

1. Students will learn the history of Geography in the ancient era.
2. Students will gain knowledge about the various rulers of India.
3. Students will gain knowledge about the various parts of the world.
4. They will learn about the various Geographical discoveries which have been discovered by the various geographers of India as well as the world.

5. Students will gain knowledge about the various development in Geographical Thought.
6. Students will learn Geography from a different angle.

Practical: Statistical Techniques (Code – G-518)

1. The course will be helpful in developing an understanding of the statistical tools in geography.
2. To present data in graphical and diagrammatic formats.
3. It helps to make the map with various methods eg. Choropleth & isopleths maps.
4. To understand the Sampling methods for data collection.
5. It's helpful to prepare field Reports.
6. Students will be able to understand how to prepare Survey Reports and Interaction with people of different Nature and cultures.

M.A. IInd Sem

Climatology and Oceanography Code: G-2018

Learning Outcomes: Students should be able to understand the classification of climate in the world, Climatic variability, and change. Students can be understood the fundamentals of the atmospheric phenomenon, and issues of current and future global environmental change.

Climatology and Oceanography Code: G-2018

1. Students should be able to understand the classification of climate in the world.
2. Students should be able to understand Climatic variability and change.
3. Students can be understood the fundamentals of the atmospheric phenomenon.
4. Students should be able to understand the issues of current and future global environmental change.

Laws Models and Theories in Geography Code: G-2019

1. The students will be able to understand the methods.
2. Students should be able to understand the techniques in the geographical system through Models, Theories of different Geographers.
3. Students should be able to understand and makes new assumptions in industrial and economic implications of theories for the planning in a future context.

Regional Planning and Development (code – 2021)

1. To understand the concept of Region and Regional planning.
2. To understand the Various Theories or Models in Regional Planning.
3. To develop an understanding of the concept of development, sustainable development, and multilevel planning.

M.A.III-Sem

Recent Issues in Geography (Code – 3018)

1. Understand the concept of evolution of Geographical Thought.

2. To understand the evolution and development of Geography in India.
3. Understand the history of the subject:
4. Overviewing ancient and contemporary geographical thought and its relationship with modern concepts of empiricism, positivism, radicalism, behaviorism, and idealism.
4. To understand the development and future of Geography in India.

Advanced Geography of Uttar Pradesh (G-3020)

1. Students will know about their state and it will enhance their knowledge and perceptions about the state and the world.
2. Students will learn about different available resources and their management.
3. They also understand how to make better use of their resources and about sustainable development.
4. Students will also learn about indicators of human resources development and also various programs initiated by state governments to eradicate the poverty of poor people.
5. Also know about state soil problems, surface and groundwater resources, forests, wildlife and drought, and flood-affected areas of the state.

Applied Geography (G-3020)

1. Develop critical thinking and skills that train students to analyze problems and validate real-life solutions.
2. Prepare an objective scientific approach so that students can address research problems in Applied Geography and allied fields.
3. Strive towards making enlightened citizens with commitment and empathy to social concerns.
4. Inculcate a sense of environmental ethics that focuses research and concerns on sustainability.
5. Inculcate strong moral and ethical values and a sense of discipline among the students.
6. Ensure that the lessons are self-directed and lead to lifelong learning.
7. Establish the position of Geography as a subject and its importance and interrelationships that reiterate and validate the Man Environment relationship.
8. Computer-based techniques (RS & GIS) are incorporated in the syllabus which prepares the students for further analytical studies.
9. In the course of field surveys, students acquire a greater understanding of the socio-economic and cultural dimensions of the populations with a greater focus on a marginalized section of society.

Ecology and Environment Code: G- 3022

1. The students can examine critically, problems solving and methodological approaches of the social sciences.
2. Students become good planners to formulate policies for the conservation of the Environment.
3. Understand and evaluate the problems on a global scale of environmental problems.

Inter-Disciplinary Research Methods & Techniques

1. Students will learn a brief knowledge about research.
2. They will learn the different tools of research.
3. They will learn the different types of Data.
4. They will gain knowledge about the sampling technique for the data collection.
5. They will learn how we prepare the questionnaire.

6. They will learn the data interpretation.
7. They will learn report writing.

M.A.IV-Sem

Geography of Rural Settlements Code: G-4019

4. Students can understand the morphology of rural settlements.
5. Students should be able to understand the perform the other functions, growth of markets, Impacts of weekly market, religious and social activities around the rural settlements
6.

Urban Geography

1. Students will learn the meaning of the Urban Word.
2. They will learn about the different types of settlements.
3. They will learn about the development of society.
4. They will learn the difference between the town and Cities, Cities and Metropolitan Cities.
5. They will learn the different parameters for the development of Cities.
6. They will gain knowledge about the shape, size, and pattern of the Cities.

Population Geography

1. Population geography makes the students aware of the demographic patterns and trends depicting the increase or decrease in the population of a region and the prevalent sex ratio as well as literacy rate which predicts the condition of women in the society.
2. The students get to know about the occupational structure and the mobility of the population and how migration comes with its own consequences.
3. It gives an insight into the way in which the people and places react to population phenomena i.e. immigration.
4. This discipline introduces them to the Dot map which is depictive of the population distribution in the region.
5. Students learn in which stage of the demographic transition a country falls in and is helpful in framing population policies

Agriculture Geography

1. Students will know about their state and it will enhance their knowledge and perceptions of the world
2. They will learn about different available resources and their management.
3. They will learn about the different types of agriculture practised in our society.
4. Students will learn about different technology and techniques of production
5. Students will also learn about how to be a good human in the known world

They will also understand how to make better use of their resources and about sustainable development.

हिन्दी विभाग

स्नातक (विषय- हिंदी)

स्नातक प्रथम वर्ष

1.प्राचीन एवं मध्यकालीन काव्य-

इस प्रश्नपत्र के अध्ययन से विद्यार्थियों को प्राचीन एवं मध्यकालीन हिंदी साहित्य एवं भाषाओं का आधारभूत ज्ञान प्राप्त होगा|

2. हिंदी नाटक एवं रंगमंच-

इस प्रश्नपत्र के अध्ययन से संवाद शैली तथा तत्कालीन परिस्थितियों एवं राजनैतिक दशा दिशा का ज्ञान प्राप्त होगा|

स्नातक द्वितीय वर्ष

1. आधुनिक हिंदी काव्य-

इस प्रश्नपत्र के अध्ययन से प्रगतिशीलता एवं वैज्ञानिकता के दृष्टिकोण, संवेदनाओं एवं नूतन विचारों के उन्मेष के साथ यथार्थ का बोध होगा|

2. हिंदी कथा साहित्य-

कथा साहित्य के अध्ययन से विविध सामाजिक आयामों, रचना कर्म की भाषाशैली का ज्ञान प्राप्त होगा |

स्नातक तृतीय वर्ष

1.अद्यतन हिंदी एवं कौरवी लोक काव्य-

हिंदी काव्य साहित्य का सामयिक ज्ञान, अपने क्षेत्र की लोक परंपरा तथा संस्कृति से विद्यार्थी अवगत होंगे|

2. हिंदी निबंध एवं अन्य गद्य विधाएँ-

निबंध लेखन से छात्रों में मौलिक सोच का विकास होगा तथा विविध गद्य विधाओं से कथेतर साहित्य के ज्ञान से लाभान्वित होंगे|

एम० ए० हिंदी पाठ्यक्रम

प्रथम सेमेस्टर

1 .हिंदी साहित्य का इतिहास-

हिंदी साहित्य के आदिकाल से लेकर आधुनिक काल तक की विविध धाराओं, परिस्थितियों,

कवियों तथा उनकी रचनाओं का ज्ञान प्राप्त होगा।

2.प्राचीन एवं पूर्व मध्य कालीन काव्य-

प्राचीन भाषाओं अपभ्रंश, अवहट्ट तथा देशी भाषा के रचना कर्म का ज्ञान एवं मध्यकालीन साहित्य लोक जागरण, लोकमंगल तथा सांस्कृतिक परम्परा को सुरक्षित रखने में महत्वपूर्ण सिद्ध होगा।

3.नाटक एवं रंगमंच-

आचार्य भरत के नाट्य चिंतन से लेकर आधुनिक भारतीय तथा पाश्चत्य नाट्य चिंतन के प्रसिद्ध चिंतकों का तथा विभिन्न नाट्य शैलियों के ज्ञान से विद्यार्थियों में बहुमुखी अभिनय कला का विकास होगा।

4.प्रयोजन मूलक हिंदी-

यह प्रश्नपत्र कार्यालयी भाषा एवं कार्यशैली का संज्ञान कराकर विद्यार्थियों को रोजगार से जोड़ने का उपक्रम है। विभिन्न कार्यालयों में लिपिक, भाषा अधिकारी तथा अनुवादक हेतु इस प्रश्नपत्र का अध्ययन अपेक्षित है। यह व्यवहारिक तथा बोलचाल की भाषा का ज्ञान कराने में भी सहायक है।

द्वितीय सेमस्टर-

1.उत्तरमध्यकालीन काव्य-

भक्ति के साथ-साथ श्रृंगारिक काव्य रीतिकाल की विशेषता थी। जीवन के मधुर पक्ष को समझने में सहायक यह साहित्य रसिकता और शास्त्रीय ज्ञान प्रदान करने वाला है।

2.कथा साहित्य-

समयावधि के रचनाकर्म के अध्ययन से जीवन के विविध पहलुओं तथा राजनैतिक व सामाजिक दशा-दिशा का संज्ञान होगा।

3.कथेतर गद्य साहित्य-

कथा साहित्य के अतिरिक्त विविध साहित्यिक विधाओं में रूपायित जीवन चित्रों की जानकारी।

4.विशिष्ट रचनाकार- जयशंकर प्रसाद के रचनाकर्म के माध्यम से उनका चिंतन तथा उनकी साहित्यिक दृष्टि को समझना।

(जयशंकर प्रसाद)

तृतीय सेमेस्टर-

1.आधुनिक काव्य-

इस पाठ्यक्रम के अध्ययन से 19 वीं शती के उत्तरार्द्ध से अघवधि तक की संवेदनाएं, भावनाएँ एवं नूतन विचारों से छात्र अवगत होंगे।

2.काव्य शास्त्र-

साहित्य का सिद्धांत पक्ष जिसमें काव्य निर्माण एवं काव्य अनुभूति के विभिन्न सिद्धान्तों, भिन्न-भिन्न काव्य रूपों के विभिन्न रचना तत्वों आदि का विवेचन करना स्पष्ट हो सकेगा।

3.पत्रकारिता प्रशिक्षण-

इस पाठ्यक्रम के अध्ययन से विद्यार्थियों को पत्रकारिता के इतिहास व विकासक्रम के साथ पत्रकारिता से संदर्भित गुणों का ज्ञान होगा जो इन्हें रोजगार से जोड़ने में सहायक होगा।

4.प्रस्तुतिकरण एवं मौखिकी-

वाककौशल,लेखनक्षमता, तथा अभिव्यक्ति क्षमता का विकास।

चतुर्थ सेमेस्टर-

1.छायावादोत्तर हिंदी काव्य-

वैज्ञानिक दृष्टिकोण, बौद्धिकता के विकास के साथ नए-नए बिम्ब, प्रतीक एवं अभिव्यंजना रूपों का ज्ञान होगा।वर्तमान समस्याओं, व्यापक संवेदना और वैश्विक- संदर्भ की जानकारी और समझदारी के लिए इस प्रश्नपत्र का अध्ययन अपेक्षित है।

2.हिंदी आलोचना-

इसका विस्तृत ज्ञान प्राप्त करके विद्यार्थी सफल आलोचक हो सकता है जो साहित्य के पठन-पाठन का मूल प्रयोजन है।

3.कौरवी लोक साहित्य

अथवा भारतीय साहित्य-

कुरु प्रदेश की सांस्कृतिक विरासत एवं लोक कलाओं तथा सामाजिक ताने-बाने का ज्ञान।

भारत के विभिन्न क्षेत्रों प्रदेशों की भाषा उसके साहित्य और संस्कृति का ज्ञान।

Department of History

B. A History

B.A History **Course Outcome**

Program Specific Outcome

After completing this three-year degree students will have a thorough understanding of the notion of history, historical sources, methodology, social, political, economic, and archaeological elements of history. Students gain a thorough understanding of the three branches of Indian history: ancient, mediaeval, and modern. Students also learn about the history of the modern world's development. Socio-political, cultural, art, architecture, literature, dance, drama, social, and political institutions all changed and grew during the Renaissance in Europe. All of these features would be conveyed to students.

Paper Code	Title of Paper	Course Outcome
A-115	Political History of Ancient India [B.C. 600-A.D. 606]	This course introduces to the students a gradual evolution of ancient Indian polity from the age of Mahājanapadas to the age of foreign incursions during the Gupta period. Beginning with a general description of the political condition in the sixth century B.C., emergence of Magadhan empire and the origin, development and decline of Mauryan empire are dealt in the first two units. The foreign incursions of this period and political history of Gupta Period are the subject matters of the last two units. After completion of this course the student gets full knowledge of Ancient History of India from 600 BC to 600 AD. Political, Social and Cultural history of India is taught in this course.
A-116	Political History of India [Form A.D. 606 upto A.D. 1206]	Second phase of Ancient India from Harsh to early medieval era is taught in this paper. This course discusses the political history of India from the Harsha and his contemporaries' period to Muslim Invasions. The course also describes the - Origin of Rajputs, Gurjara Pratiharas, Chandellas, Paramaras etc. The Kalachuris with the Western Chaulukyas are dealt the fourth unit. Student learns all details of this periods.

A-215	Political History of Medieval India 1206 - 1526 A.D.	This course develop knowledge and understanding of ideas, movements, people and events of Medieval Indian History. This course starts with introduction of sources and further elaborate Polity, Society, Culture, Archaeology, literature and Historiography. Unit II and III throw light on Slave Dynasty and Tughlaq Dynasty. The last unit states different theories of kingship cause nature of downfall of Delhi Sultanate, Central and provincial administration, army organization, Development of literate and architecture.
A -216	Political History of Medieval India 1526 - 1740	After completion of this course student gets complete knowledge of Mughal period political, economic, social, archaeological, literary and other elements. Unit II describes those circumstances in which the foundation of Mughal power was laid. In the last unit students studied Maratha leadership and Shivaji. The unit also inculcate the knowledge of rising of Maratha power.
A -315	Political History of India 1740 -1947	This paper introduces the students with tactics how English power became paramount in India and how they established their administration and various institutions to strengthen it. India's resistance to this, by the Marathas, the Sikhs, and especially the events of 1857, help understand not only the Indian response but also how and why the Indians failed to put up a consolidated effort. After completing this course students gets information about the British Relations with Princely States, Policies of Lord Canning, Lytton, Ripon & Curzon, trends till 1919, different phases of National Movement and Development of Science and Technology in Modern India.
A -316	History of Indian Culture	At the end of the course, the students will be able to recognize the history of Indian culture as part of the large story of humankind and civilisation over the ages. After completion of this Course student will get to know the Vedic Period Culture, Rise and Growth of Jainism and Buddhism, Art Architecture, Literature, Social System, Classes and culture and different social movements. The course explains the diversity of our cultural

		heritage, understand and appreciate the legacy. It will also provide them Social and Religious Reformation Movements, Development of Modern Education, social Legislation passed by the British Govt and about Colonial Architecture.
A -316	History of Modern World 1453 -1950	This course seeks to provide students a better understanding of Renaissance, Reformation and counter reformation, rise of nation states, French Revolution, Napoleonic Era etc. It explores the stormy periods when totalitarianism arose as an alternative to democratic and liberal ideals, the Nazi Germany, causes of rise of Fascism in Italy, Rise of Japan and China etc. The students will be able to know in detail about the European History right from the Renaissance to the Second Word War and the establishment and formation of UNO. This course will develop an attitude amongst the student to understand International relations.

M.A. HISTORY

SL	Course code	Course name	Course outcome
1.	G-1037	Historiography: concepts, methods, Approaches and Tools	Develop a sense about what is history. Paper is designed in such a way that student can understand nature and scope of history. Enhance the understanding of history and its relations relations with literature, science and humanities. It imparts knowledge about the European concept of history writing and basic difference with Indian history writing. This paper make acquainted students with major approaches and theories with special reference to Indian historiography.
2.	G-1038	History of Ancient India (From earliest times to Post Harapan Settlement)	This paper is designed to cover the era of stone age. Its tells students how homo sapiens came into present form. Simply it covers the entire story of stone age and metal age. This course unable students to undersand how early Harrapan, Harrapan and Post Harrapan civilization settled.
3.	G-1039	History of Ancient India (From vedic age to Mauryan kingdom)	This course has been construced in such a way that student will get acquainted to ancient history, culture and civilization. It studies the Vedic culture and formation of early states in India. Furthe it trained students about the centralization of the Mauryas and their administration. It also teach students the importane of Kautilya and his Arthshastra.
4.	G-1040	History of Ancient India (From Shunga dynasty to Rajput era)	This course will be useful inproviding historical knowledge about the post Mayrayan age. It encompasses the entire Shunga period, Kushanas and Satvahanas. This paper will help students to understand the formation of Gupta empire and the achievements of Samudragupta. This paper evolves a sense of glory among students about ancient India and its great culture.
5.	G-2037	Socio-Economic and cultural history of Ancient India (from	This paper is designed to develop the understanding of varna and jati system, It further studies the Ashram, Purusarth and sanskar.

		earliest times to 1200 A.D.)	It gives philosophical knowledge abour Shad-Darshanas and the ancient education system. Student will get an idea about ancient trade routes, Guilds and the usage of Iron technology.
6.	G-2038	History of Modern Europe (1789-1919)	This paper is designed to develop the understanding of modern Europe after the great French revolution. It imparts knowledge about the all kind of development of France as a democracy and republic. It gives student a basic idea of the formation of the modern countries on European map. It surveys the scientific and technical advancement and stages of the industrial revolution.
7.	G-2039	History of Modern World (1920-1960)	It is designed to help students to understand how Europe interected with other powers of the world. This paper covers First World War and League of Nations following the rise of Fascism in Italy and Nazism in Germany. Student will also be acquiring knowledge regarding the role of USA in Second World War. It also gives knowledge about the India's relations with USA, USSR and China.
8.	G-2040	Tourism in India	Tourism is a growing industry worldwide India is no exception. This paper helps to understand the tourism industry, its concepts and meaning. This paper enables student in becoming a tourist guide. Student will be having an idea what is the basic difference amongst historical and religious tourism and adventure and cultural tourism. It further trains students for medical tourism also.
9.	G-3037	History of Medieval India (till 1526 AD)	This paper is designed to develop the understanding of India with the advent of Turks. Student will be learning about the causes of the defeat of Rajputas and how Delhi Sultanate came into existence. It also covers the Indian resistance to Muslim invaders. It teaches students how Babar came into India and killed the last muslim Sultan of Delhi- Ibrahim Lodi.
10.	G-3038	History of Medieval India (1526-1707)	This paper starts with the initiation of Mughal period in India and the importance of the first battle of Panipat.

			It helps student to understand how Afghan threw Mughals from India Under the leadership of Shershah Suri. This paper throws light on the hindu resistance to mughals in the form of Hemu Vikrmaditya, Maharana Pratap, Shivaji, Churaman and Gokla Jat. Student will be benefitted by having the knowledge about Bhakti Movement.
11.	G-3039	History of Modern India (1707-1885)	This course covers the story of British Raj in India. How British established them in different centers in India and how they expanded gradually in this country. It gives students a basic idea about the constitutional history of India. Student can learn how the administrative structure came into being. It teaches the Land Revenue Policy under British rule.
12.	G-4037	History of Modern India (1885-1950)	This paper is designed to give knowledge how modern India came as it is today. Student will be acquiring knowledge regarding the formation of INC and rise of nationalism. It throws light on the Gandhian movements and freedom struggle. It gives student knowledge regarding tribal and peasant movements and revolutionary movement. Students will be having an idea about the independence and partition of India.
13.	G-4038	Research Methodology	This paper inculcates the research aptitude in students. It trains them about the research and its different dimensions. It teaches them how to select a topic for research and how to write a thesis. It imparts knowledge about sources, collection of data, synthetic operation, analytical operation and concluding operation.
14.	G-4039	Socio-Cultural History of Modern India (1757-1947)	This paper is designed to cover the socio-cultural era of modern India. It helps students to understand the modern Indian society and the position of woman. It teaches how economic reforms during British period molded Indian economy. Through this course student can understand the Indian renaissance.

Department of Philosophy

B. A.

Specific Outcome for 1st Year

By studying this course of one year:

1. A student will be able to develop his/her understanding about classical Indian philosophy as well as Plato and Aristotle, the two leading thinkers of western philosophy and modern western philosophy.
2. In this way, after one year of study, he/she would learn about both Indian and Western streams of Philosophy.
3. Moreover, Study & practice of this course will provide a stressless and effortless life, expansion of consciousness, regulation of the nervous system etc.

Specific Outcome for 2nd Year:

By studying the course of one year,

1. A student will be able to develop his/her understanding about Ethics (Indian & Western) and Logic.
2. In this way, after one year of study, he/she will be able to understand the moral concepts, principles and logical reasoning of Indian or Western Logic (whichever he/she chooses).
3. Moreover, Study & practice of Yoga will provide better stamina, clarity for thoughts, a sense of inner peace, calmness, and stability in the body, Discipline their thoughts and improved concentration.

Specific Outcome for 3rd Year:

By studying this one year course,

1. A student will become aware of Indian and Western Philosophical Problems.
2. He/She will develop an understanding of various epistemological and metaphysical concepts. He/She will understand many theories related to Philosophy of Religion, which will be helpful in solving many misconceptions related to Religion.
3. Student will have a better understanding by studying various Social and Political concepts and theories.
4. The student will learn various issues of Applied Philosophy which are very important in contemporary world.
5. Moreover, study of Yoga will provide improved attention in studies, better stamina and co-ordination for sports and a heightened awareness and balanced attitude for social activity and by the study & practice of project work student would be able to learn tools, techniques and skills regarding the research-oriented activities.

M.A. in Philosophy

Programs Outcomes :

The course will nurture the systematic awareness of spirit of inquiry. Which will lead to the culturation of life i.e. the culturation of individual, society and the globe, which will ensure the path of human prudence. Post Graduate Programme in Philosophy encompasses outcomes as under :

PO1. : The basic outcome of the PG department is to inculcate in-depth knowledge ofphilosophy.

PO2. : This in-depth knowledge will include the entire discourse of Indian and WesternPhilosophy.

PO3. : It will provide the potentiality of the student to philosophize and to make themself-reflexive.

PO4. : The demand of self reflexivity will lead to consistent and critical spell of thoughtwhich will navigate the hard core of student's thinking and reflecting.

PO5. : The PG Department has chosen its research domain which would concentrate onthe philosophical thought that has been develop in Gujarat.

PO6. : To make philosophy a life learning process so that one can envision one's ownlife systematically and sincerely.

Program Specific Outcomes :

PSO1. : Post Graduate Programme in Philosophy will enrich the potential of knowledge by creating a critical, comprehensive and will ensure the capacity of inquiring mind.

PSO2. : A skill of critical inquiry which is necessary and should be inevitably attained for the philosophical discourse. The skill of critical inquiry gives an insight to generate creative thought.

PSO3. : Philosophy is not only an abstract thinking but it preludes the potential of thinking beyond the structural boundaries. The skill

of philosophizing will develop the potential to create an out of box thinking.

PSO4. : Philosophical thinking is not an alienated discourse which subjugates life. Life is panorama of philosophical thinking. Philosophy cannot exclude life as Dr. Radhakrishnan has rightly said "That philosophy is alive it can not be remote from the life of the people." In this respect the skill of philosophizing connect and substantiate life.

PSO5. : The programme has been covered by the domain of society, religion, ethics and aesthetics. With the special focus on the present day problematics of life and living in society.

PSO6. : The domain of the history of Indian and Western Philosophy is an aspiring and inspiring discourses on thought and life.

PSO7. : The study of reasoning provides the anatomy of examining thought and argument and will provide an essential skill of reasoning.

Course Outcomes: (M.A. Program)

CO1. : G-1045 Classical Indian Philosophy

The outcome of the course is to understand the distinct features of various Indian philosophical schools, which includes Charvaka, Jainism, Buddhism, Sankhya, Yoga, Nayaya, Vaisheshika, Purva Mimansha, Advaita Vedanta and Vishistadvaita.

CO2. : G-1046 Classical Western Philosophy

The outcome of the course is to understand the foundation and development of Western Philosophy whichincludes primary understanding of philosophical problem explained by Thales, Heraclitus, Parmenides, Democritus, Sophist, Socrates, Plato, Aristotle and Augustine etc.

CO3. : G-1047 Modern Western Philosophy

The outcome of the course is to increase the horizon of Western Philosophical thoughts of Descarts, Spinoza, Leibnidz, Lock, Berkeley, Kant and Hegel.

CO4. : G-1048 Ethics (Indian and Western)

The outcome of the course is to understand the ethical issues dealt by Indian and Western Philosopher. 3

CO5. : G-2045 Indian Epistemology

The outcome of the course is to understand the distinct features of Indianepistemology.

CO6. : G-2046 Indian Metaphysics

The outcome of the course is to understand the problematic of Indian Epistemology which deals with Nyaya, Mimansha and Buddhist theory of Truth and the understanding the theory of errors particularly Nyaya, Mimansha, Baudha and Jaina.

CO7. : G-2047 Logic

The outcome of the course is to understand the valid argument form whichincludes propositional and predicate logic.

CO8. : G-2048(i) Philosophy of Plato

The outcome of the course is to understand the philosophy of Plato i. e. Idealism.

CO9. : G- 2048(ii) Philosophy of Shankara

The outcome of the course is to have in-depth understanding Shankara and Post-Shankara Vedanta.

CO10. : G-2048(iii) Philosophy of Kant

The course outcome is to give an in-depth knowledge of Kantian Philosophy which is the most vital thread of Western Philosophy.

CO11. : G-3045 Contemporary Indian Philosophy

The outcome of the course is to understand the development and it contextualty that has determine modern Indian Thought and to makes students aware about Vivekanand, Sri Arvindo, R. N. Tagore, Gandhi, K.C. Bhattacharya, S. Radharkshnan.

CO12. : G-3046 Social and Political Philosophy

The outcome of the course is to create critical insight in socio-political ideas of governance and ideals about socio-political system and idealism.

CO13. : G-3047 Concepts of Western Philosophy

The outcome of the course is to understand the metaphysical and epistemological theories of Western Philosophy.

CO14. : G-3048 Contemporary Western Philosophy-I

The outcome is to increase the horizon of Western Philosophical Thoughts particularly contemporary western philosophy.

CO15. : G-4045 Philosophy of Religion

The outcome of the course is to understand the critical examination of religion and to understand contemporary challenges to religion.

CO16. : G-4046 Problem of Western Philosophy

The outcome of the course is to understand the metaphysical and epistemological problems of Western Philosophy mainly i. e. nature and definition of knowledge, skepticism theories of truth substance and its properties causation space and time etc.

CO17. : G-4047 Contemporary Western Philosophy-II

The outcome of the course is to aware students to learn outstanding contemporary western thinkers particularly Wittgenstein, Husserl andExistential thinkers.

CO18. : G-4048(i) Applied Ethics

The outcome of this course, is to understand and resolve various ethical issues in contemporary world.

CO19. : G-4048(ii) Advance Ethics

The outcome of the course is to make students aware about the ethical issues of ethics of Hume, G.E. Moore, A.J. Ayer, Prichard, W.T. Ross, Stevenson and Hare.

CO20. : G-4048(iii) Advanced Logic

The outcome of the course is to understand the technique of axiomatic method in logic. It enables the students the essential of meta theorems of propositional and first order predicate calculus.

CO21. : G-545 Bibliography Preparation (Practical)

The outcomes of this course is, to understand the importance of the study material. The student can learn how to write a independent research papers and this regards how to make a concern bibliography.

CO22. : G-645 Book Review (Practical)

The outcomes of this course is to understand how to judge a quality book. The student can learn what are the criteria of a reference books and textbooks.

CO23. : G-745 Paper Presentation (Practical)

The outcome of the course is to make students familiar with research methodology and to makes students aware about research writings.

CO24. : G-845 Viva and Dissertation

The outcome of the course is to make students to write and contemplate on some basic themes and thinkers of philosophy. This will provide a preparatory ground for research in Philosophy.

Department of Political Science

B.A. FIRST YEAR 2018-2021

- Political Theory-After completion of this course the students shall understand, comprehend and analyze various aspects and dimension of Political Theory.
- National Movement and Constitution of India- After completion of this course the students shall understand, comprehend and analyze various aspects and dimension of Indian Constitution and National Movement.

B.A. SECOND YEAR 2018-2022

- An Outline History of Western Political Thought- After completion of this course the students shall understand, comprehend and analyze various aspects of Western Political Thought.
- Comparative Government- After completion of this course the students shall understand, comprehend and analyze various aspects and dimension of Governments of different countries on comparative basis.

B. A. THIRD YEAR 2018-2022

- Principles of Public Administration- After completion of this course the students shall understand, comprehend and analyze various aspects and dimension of Public Administration
- Indian Political Thought- After completion of this course the students shall understand, comprehend and analyze various aspects of Indian Political Thought.
- International Politics- After completion of this course the students shall understand, comprehend and analyze various aspects and dimension of International Politics.

M.A. POLITICAL SCIENCE

FIRST SEMESTER

- **Traditions of Political Thinking-**After studying this Course students should be able to comprehend and critically analyse major themes and aspects of Traditions of Political Thinking.
- **Comparative Politics** -After studying this Course students should be able to comprehend and critically analyse major themes and aspects of Comparative Politics
- **Indian Political System-** After studying this Course students should be able to comprehend and critically analyse major themes and aspects of Indian Political System.
- **International Relations--** After studying this Course students should be able to comprehend and critically analyse major themes and aspects of International Relations.

SECOND SEMESTER

- **Administrative Theory-** After studying this Course students should be able to comprehend and critically analyse major themes and aspects of Administrative Theory.
- **Ancient Indian Political Thought**- After studying this Course students should be able to comprehend and critically analyse major themes and aspects of Ancient Indian Political Thought.

- **Comparative Political Theory--** After studying this Course students should be able to comprehend and critically analyse major themes and aspects of Comparative Political Theory.
- **Research Methodology**-This course will widen the horizon of knowledge and sharpen the analytical rigour of students with regard to the works and studies on Research Methodology

THIRD SEMESTER

- **Western Political Thought**- After studying this Course students should be able to comprehend and critically analyse major themes and aspects of Western Political Thought.
- **Indian Administration--** After studying this Course students should be able to comprehend and critically analyse major themes and aspects of Indian Administration.
- **State Politics in India-** After studying this Course students should be able to comprehend and critically analyse major themes and aspects of State Politics in India.
- **Viva-Voce-**

FOURTH SEMESTER-

- **Modern Indian Political Thought**- After studying this Course students should be able to comprehend and critically analyse major themes and aspects of Modern Indian Political Thought.
- **India and the World Order**- After studying this Course students should be able to comprehend and critically analyse major themes and aspects of India and the World Order.

Local Government in India- After studying this Course students should be able to comprehend and critically analyse major themes and aspects of Local Government in India.

Department of Psychology

B.A.-I Year I Sem.

A-740 Basic Psychology Processes

- ☆ To learn the basic concept of the discipline of psychology.
- ☆ The student will gain knowledge of the basic concepts of psychology. How the conceptual frame work forms the discipline of psychology

A-741 Basic Research Methodology and Statistics

- ☆ To learn the research methodology applied in psychology
- ☆ The student learns how the subjective behaviour is measured in objective manner. How scientific research methodology is developed for social science and also learns the role of statistics in presenting and understanding data.

A-740 Practical

- ☆ To learn measurement and interpretation of tenets of behaviours.
- ☆ Student learns the basic objective of measurement for understanding, explaining, controlling and predictive behaviour. At the same time to learn measurement of Behaviour and interpreting it for future.

B.A.-II year

A-240 Psychopathology

- ☆ To get the students acquainted with the nature of psychological disorders, classification of psychological disorder, Indian perspective on sufferings and various psychological approaches to management.
- ☆ Students learn the concept of psychopathology and how it beings about devotion in behaviour.

A-241 Social Psychology

- ☆ To understand social behaviour in relation to social, cultural and environmental phenomenon.
- ☆ Students are able to understand the course and congruence of social problem in life scenario. They also prepare themselves to reduce the psycho-social pathology with the help of psychological strategies.

A-840 Practical

- ☆ To learn the measurement of deviant behaviour.

- ☆ Students learn how deviant behaviour is measured.

B.A.-III

A-340 Measurement & Statistics

- ☆ To learn the research methodology applied in psychology
- ☆ The student learns how the subjective behaviour is measured in objective manner. How scientific research methodology is developed for social science and also learns the role of statistics in presenting and understanding data.

A-341 Counselling & Guidance

- ☆ To learn relevance and necessity of counselling for dealing maladaptive behaviour. To learn different therapeutic techniques and therapies for bringing clients back on healthy and adoptee behaviours.
- ☆ Students learn the meaning, relevance and importance of health counselling. Students learn therapeutic way and different therapies to deal with maladaptive health issues.

A-940 Survey/ field work/ project work

- ☆ To learn application and skills of counselling.

Students learn to measure prevalence and treatment skill through psychological tests.

Year / Sem.	Course Code	Paper Title	Objective	Outcomes
M.A.-I Sem.	G-1077	Research Methods	To understand the methods applied in social sciences research.	Student learns the methods of coring out scientific social research. Statistical Methods and Experimental Design
M.A.-I Sem.	G-1078	Statistical Methods and Exp. Design	To find out numerical findings for Socio-Psychological Studies	Students learn how to get qualitative and quantitative findings regarding socio-psychological researches.
M.A.-I Sem.	G-1079	Social Psychology	To understand social behaviour in relation to social, cultural and environmental phenomenon.	Students are able to understand the course and congruence of social problem in life scenario. They also prepare themselves to reduce the psycho-social pathology with the help of psychological strategies.
M.A.-I Sem.	G-1080	Biological Foundation of Behaviour	To understand the physiological base of behaviours.	Students learn the mind body relationship particularly neurological basis of psychological behaviour. The role of nervous system in controlling and regularly behaviours.
M.A.-II Sem.	G-2077	Positive Psychology	This course is aimed at presenting the	Student learns the concepts of positive psychology and its

			positive outlook and approaches to behavioural aspects of people, basic concepts and criteria of positive health and happiness and emotional competence in human life.	application in daily life for self-growth and promotion.
M.A.-II Sem.	G-2078	Fundamental of Psychometric	To measure psychological characteristics and individual differences.	Students learn how to use different psychological measurements (teats) and also how to prepare and standardized a measurement.
M.A.-II Sem.	G-2079	Cognitive psychology	To gain knowledge of higher mental process.	Students learn the mechanism of information processing by human brain and the elaboration and enhancement of knowledge.
M.A.-II Sem.	G-2080	Theories of personality	This course is intended to present the knowledge about nature and issues of personality, different approaches such as cognitive, effective, and conative.	Students learn different personality and personality dynamics.

M.A.-III Sem.	G-3077	Health psychology	To gain familiarity with meaning of health in social culture context, stress and coping behaviour, behaviour health, resources promoting and maintaining mental health, behaviour and chronic diseases, future of health psychology.	Students learn the concept of health in its complete and holistic form. Also maintenance and promotion of health.
M.A.-III Sem.	G-3078	Guidance and counselling	Fundamental of guidance and counselling. Method of assessing the personality, characteristics and purpose of various types of counselling. Importance of counselling in real life.	Students learn to apply principles, of psychology a order to counsel and guide individual alleviating distress.
M.A.-III Sem.	G-3079	School of Psychology	To study fundamental of psychology.	Students learn theoretical perspectives forms school of psychology. Students earn to apply theoretical concepts into real life

				setting of human behaviour.
M.A.-III Sem.	G-3080	Indian Psychology	To gain familiarity with Indian psychological concept, the core and context of Indian psychology, trends of research and ontological and epistemological premises of Indian psychology.	Students learn in understand basic concept of psychology in term of Indian theoretical perspective. The Learn to develop deep insight into principals of Vedas, pyrana, bhagwatgita and meditation yoga psychology.
M.A.-IV Sem.	G-4077	Clinical Psychology	To get the students acquainted with clinical assessment, meaning of psycho-diagnosis prognosis and techniques, clinical psychology as a profession.	Students learn psycho diagnostic methods. Their application and application of psychotherapy.
M.A.-IV Sem.	G-4078	Organizational Psychology	The goal of this course is to create awareness and understanding about general concept of organization behaviour as	Students learn and awarded about understanding explaining and predicting general principles, structure, factors and organizational strategies for

			well as the structure and dynamics of organization and its impact on human behaviour.	explaining dynamics and various facets of work life in organisation.
M.A.-IV Sem.	G-4079	Industrial Psychology	The goal of this course is to create awareness about the nature of fundamental issues related to human behaviour and industrial environment.	Students learn how to develop industrial productivity and worker efficiency. They also learn to make working environment better and solve the problem like industrial, accident, fatigue and minatory.
M.A.-IV Sem.	G-9080	Psychopathology	To get the students acquainted with the nature of psychological disorders, classification of psychological disorder, Indian perspective on sufferings and various psychological approaches to management.	Students learn the concept of psychopathology and how it beings about devotion in behaviour.

Year / Sem.	Course Code	Paper Title	Objective	Outcomes
M.A.-I Sem.	G-1077	Research Methods	To understand the methods applied in social sciences research.	Student learns the methods of coring out scientific social research. Statistical Methods and Experimental Design
M.A.-I Sem.	G-1078	Statistical Methods and Exp. Design	To find out numerical findings for Socio-Psychological Studies	Students learn how to get qualitative and quantitative findings regarding socio-psychological researches.
M.A.-I Sem.	G-1079	Social Psychology	To understand social behaviour in relation to social, cultural and environmental phenomenon.	Students are able to understand the course and congruence of social problem in life scenario. They also prepare themselves to reduce the psycho-social pathology with the help of psychological strategies.
M.A.-I Sem.	G-1080	Biological Foundation of Behaviour	To understand the physiological base of behaviours.	Students learn the mind body relationship particularly neurological basis of psychological behaviour. The role of nervous system in controlling and regularly behaviours.
M.A.-II Sem.	G-2077	Positive Psychology	This course is aimed at presenting the	Student learns the concepts of positive psychology and its

			positive outlook and approaches to behavioural aspects of people, basic concepts and criteria of positive health and happiness and emotional competence in human life.	application in daily life for self-growth and promotion.
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				setting of human behaviour.
M.A.-III Sem.	G-3080	Indian Psychology	To gain familiarity with Indian psychological concept, the core and context of Indian psychology, trends of research and ontological and epistemological premises of Indian psychology.	Students learn in understand basic concept of psychology in term of Indian theoretical perspective. The Learn to develop deep insight into principals of Vedas, pyrana, bhagwatgita and meditation yoga psychology.
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			well as the structure and dynamics of organization and its impact on human behaviour.	explaining dynamics and various facets of work life in organisation.
M.A.-IV Sem.	G-4079	Industrial Psychology	The goal of this course is to create awareness about the nature of fundamental issues related to human behaviour and industrial environment.	Students learn how to develop industrial productivity and worker efficiency. They also learn to make working environment better and solve the problem like industrial, accident, fatigue and minatory.
M.A.-IV Sem.	G-9080	Psychopathology	To get the students acquainted with the nature of psychological disorders, classification of psychological disorder, Indian perspective on sufferings and various psychological approaches to management.	Students learn the concept of psychopathology and how it beings about devotion in behaviour.

B.A I Year

Paper I -Introduction to Sociology, Code- A-132

This introductory paper is intended to acquaint the students with sociology as a social science and the distinctiveness of its approach among the social sciences.

Paper II- Society in India- Structure and change

Code- A- 133

It is presumed that the students have some familiarity with Indian society. The course is aimed at rectifying limitations by presenting a comprehensive integrated and empirically – based profile of Indian society.

B.A II Year

Paper I- Social change and Social control, Code- A -232

It has always been a central concern of sociological study. The course is designed to achieve all aspects of social change as well as of social control.

Paper II- Indian society- Issues and problems

Code- A-233

The outcome of this course is to sensitize the students to the emerging social issues and problems of contemporary Indian society.

B. A III Year

Paper I – Functions of Sociological thought

Code- A-332

Its outcome is to help students gain an understanding of some of the classical contribution in sociology, and their continuing relevance to its contemporary concerns.

Paper II- Social Research Methods, Code A- 333

Its outcome is to provide an understanding of the nature of social phenomenon, the issues involved in social research and the ways and means of understanding and studying social reality.

M.A I Semester

Paper I- Sociological concepts, Code- G-1087

To understand the basic concepts of sociology and familiarize the students to Indian culture and basic institutions.

Paper II- Classical Thinkers, Code- G-1088

The outcome of this course is to introduce the pioneers of sociology and development sociology as a subject.

Paper III- Methodology of social research

Code- G-1089

Its outcome is to provide an understanding of the nature of social phenomenon, the issues involved in social research and the ways and means of understanding and studying social reality.

Paper IV- Rural sociology: concepts, Code- G-1090

To introduce the students to the rural society, economy, polity and rural social structure.

Practical exercises and Viva-Voce, Code- G-787

To enhance the practical knowledge of social research and evaluation of students' knowledge and work.

M.A II Semester

Paper I- Basic statistics and computer application in social research, Code- G-2087

To learn the use of statistics and computer in social research and how to draw the research of social survey in form of mathematical data.

Paper II- Neo- classical theories, Code- G-2088

To study the new theories, to understand the social phenomenon, concepts.

Paper III- Social change: Processes and Theories

Code- G-2089

To understand the changes in social institutions by the social theories and social concepts and means of social change.

Paper IV- Rural development: Concepts and dimensions, Code- G-2090

To understand the rural society and rural development approaches to rural development and development programs.

Practical exercise and Viva- Voce, Code- G-788

To enhance the practical knowledge of social research and evaluation of students' knowledge and work.

M.A III Semester

Paper I- Modern sociological theories, Code- G-3087

To understand the society with the help of modern sociological theories.

Paper II- Explanation in Social Science, Code- G-3088

To learn how to explain scientifically in social sciences such as natural scientists do.

Paper III- Social change in India, Code- G 3089

To understand the processes, approaches, factors, movements of social change.

Paper IV- Works of a Classical/ Contemporary/ Modern Sociologists, Code-G-3090

To understand the works of pioneers/ contemporary and modern sociologists

Practical exercises and Viva-Voce, Code- G-789

To enhance the practical knowledge of social research and evaluation of students' knowledge and work.

M.A IV Semester

Paper I- Sociology in India, Code- G- 4087

To understand the basic institutions, planning and development and emerging concerns in Indian society.

Paper II- Perspectives on Indian Society, Code- G-4088

To learn how to use different perspectives and approaches to understand the Indian society.

Paper III- Classification in Social sciences

Code- G- 4089

To understand how to classify societies in different phases from ancient to modern society.

Paper IV- Political Sociology, Code- G-4090

To understand the approaches and basic concepts of political system of Indian society.

Practical exercises and Viva-Voce, Code- G-790

To enhance the practical knowledge of social research and evaluation of students' knowledge and work.

۲۰۱۸ء سے
B. A. Urdu
بی اے اردو

B.A I
بی اے سال اول

پہلا پرچہ : ناول، افسانہ :- اس پرچے کے مطالعہ سے اردو کی نثری اصناف ناول اور افسانہ کی معلومات فراہم ہوگی نیز مختلف افسانہ اور ناول نگاروں کے بارے میں معلومات میں اضافہ ہوگا۔

دوسرا پرچہ : نظم - اردو نظم کے قدیم وجدید شعرا، ان کی نظم نگاری اور نظم کی مختلف ہیئتوں کے بارے میں مفید معلومات میں اضافہ ہوگا۔

B.A. II
بی اے سال دوم

پہلا پرچہ :- نثر - اردو نثر نگاری میں مضامین اور خطوط کی اہمیت اور مضمون نگاروں کے بارے میں معلومات حاصل ہوگی نیز مرزا غالب اور ان کے انداز خطوط کے متعلق مزید معلومات میں اضافہ ہوگا۔

دوسرا پرچہ :- غزلیات - اس پرچے میں اردو غزل کی ابتدا، قدیم وجدید شعرا اور ان کی غزلیات کے بارے میں معلومات فراہم ہوں گی۔

B.A. III
بی اے سال سوم :-

پہلا پرچہ :- تاریخ ادب اردو اور تنقید - اس پرچے کے مطالعہ سے طلبا اردو زبان کی ابتدائی نشو ونما مختلف اداروں مثلاً فورٹ ولیم کالج، دلی اور لکھنؤ کے دبستانوں کی خصوصیات، سرسید تحریک، ترقی پسند تحریک اور جدیدیت سے روشناس ہوں گے۔

دوسرا پرچہ :- قصیدہ، مثنوی، مرثیہ، رباعی - اس پرچے سے مختلف شعری اصناف کے فن اور شعرا کی خصوصیات سے واقفیت ہوگی۔

M. A. Urdu
ایم اے اردو

Semester - I

۱ - اردو زبان کا آغاز و ارتقا :- اردو زبان کی ابتدائی نشو و نما، زبان کی اہمیت و افادیت، زبان کا خاندانی پس منظر، مختلف نظریات، اردو زبان کی مختلف بولیوں، اردو ہندی کا باہمی رشتہ اور اردو کی موجودہ صورت حال پر معلومات فراہم ہوں گی -

۲- اردو کی ادبی روایت :- دکنی ادب کی روایت، شمالی ہند میں اردو ادب کا ابتدائی دور، اٹھارہویں و انیسویں صدی کا ادب اور ادبی شخصیات کا تعارف، شعری و نثری اصناف نیز ادبی ادارے کے متعلق معلومات فراہم ہوں گی -

۳- تحقیق و تنقید :- اردو میں تحقیق و تنقید کی روایت، اصول و طریقہ کار، باہمی رشتہ، مغربی، مشرقی، کلاسیکی، مارکسی اور جدید تنقید اور ناقدین کے بارے میں جانکاری حاصل ہوگی -

۴- اردو ڈراما :- ڈراما کے آغاز و ارتقا، ڈرامے میں نئے تجربات، ڈرامے کی روایت، مشہور و معروف ڈراما نگاروں کا تعارف اور ان کے طرز تحریر سے طلبا کی معلومات میں اضافہ ہوگا -

Semester II

۱- اردو غزل :- غزل کی تعریف، قدیم و جدید غزل کی روایت، مقبولیت کے اسباب، غزل کے موضوعات و اسالیب، عہد ولی، میر، غالب، اقبال نیز جدید غزل گو شعرا کے کلام اور ان کے حالات سے طلبا متعارف ہوں گے -

۲ - اردو فکشن :- داستان، ناول، افسانہ فن اور روایت، ان کے علاوہ افسانچہ اور قدیم و جدید اردو فکشن نگاروں کی اہم خصوصیات سے روشناس ہوں گے -

۳ - غیر افسانوی نثر :- اردو میں سوانح نگاری، خاکہ نگاری، رپورتاژ، مضمون نگاری سے واقفیت ہوگی اور طنز و مزاح، سفرناموں اور ڈرامے کی روایت کے ساتھ ہی غیر افسانوی نثر نگاروں کے بارے میں معلومات حاصل ہوں گی -

۴- اردو میں عوامی ادب کی روایت :- اردو میں عوامی ادب کی تعریف، اولین نقوش، اس کی اہمیت و افادیت، قصہ گوئی، لوک کہانیاں، ناٹک، گیت، دوہے اور بارہ ماسے کے متعلق طلبا کی معلومات میں اضافہ ہوگا -

Semester III

۱ - اردو نظم :- اس سبق کے مطالعے سے نظم کی روایت، جدید نظم، ترقی پسند نظم، حلقۂ ارباب ذوق، نظم معریٰ، آزاد نظم نیز قدیم و جدید نظمیہ شعرا سے روشناس ہوں گے -

۲- ماس میڈیا :- اس سبق کے مطالعے سے طلبا کو صحافت کی تاریخ و ارتقا کے ساتھ صحافت سے متعلق اس کی خوبیوں کا علم ہوگا جو انھیں روزگار سے جوڑنے میں معاون ہوگا -

۳- خصوصی مطالعۂ نظم (ب: غالب) :- غالب کے شعری و نثری یعنی خطوط کے ذریعے ان کے خیالات کے مدنظر ان کے شعری و ادبی کاوشوں اور خوبیوں کو سمجھنا -

۴- وائی وا :- انداز بیان، لکھنے کا طریقہ اور اظہار خیال کی نشو و نما -

Semester IV

۱ - جدید ادب :- جدید ادب کا تاریخی مطالعہ، ترقی پسند کی فکری اساس، حلقۂ ارباب ذوق، جدیدیت، مابعد جدیدیت، نثر و شعر کی اصناف میں ہیئت کی تبدیلیاں کے مطالعے سے طلبا مستفید ہوں گے -

۲-(ب) مضمون اور ترجمہ نگاری :- مضمون کے فن، اصول و ضوابط، اقسام، ترجمہ نگاری کے فن، اصول، مسائل، میڈیا میں ترجمے کی اہمیت، ترجمہ نگاری کے فروغ میں مختلف اداروں کی خدمات پر اہم معلومات میں اضافہ ہوگا -

۲- کلاسیکی ادب :- کلاسیکی ادب کی اہمیت شعری اصناف قصیدہ، غزل، مثنوی و مرثیہ، کلاسیکی نثر داستان فن اور روایت کے مطالعے سے معلومات میں اضافہ -

Department of Physical Education

Programme Objectives (POs)

1. This would lead the students to understand historical concept of physical education and relationship between Education and Physical Education.
2. To orient students in college with the fundamental skills of selected sports as per their inherited potential.
3. Knowledge about the Anatomy and Exercise Physiology in Physical Education.
4. To understand the concept of Health Education, Psychological foundation of Physical Education, Sports injuries and rehabilitation.
5. Knowledge about the Biomechanics, Statistics, Computer application and Sports Management in Physical Education.

B.A. I

Course Code: 185,186,187, 785

Course Outcomes

- ✓ The pass out would be able to compare the relationship between general education and physical education.
- ✓ He would be able to identify and relate with foundation and history of Physical education.
- ✓ After completion of the course students will have knowledge about structure and function of the body.
- ✓ Students will be able to understand the various types of body systems.
- ✓ The pass out would be oriented with the Track events in Athletics with proficiency and knowledge of rules & regulation.
- ✓ Students will be able to understand about the chosen games with the rules and regulations.

B.A. II

Course Code: 285,286,287, 885

Course Outcomes

- ✓ Students will have understanding about the Health, Nutrition, Drugs, posture, and communicable diseases.
- ✓ Students will be able to understand psychological foundation of Physical Education and Athletic injuries and rehabilitation.
- ✓ After completion of the course students will have knowledge about growth and development, learning, motivation and emotion.
- ✓ Students will have knowledge about the sports injuries, rehabilitation, therapeutic exercises and Sports Massage.
- ✓ The pass out would be oriented with the Field events in Athletics with proficiency and knowledge of rules & regulation.
- ✓ Students will be able to understand about the chosen games with the rules and regulations.

B.A. III

Course Code: 385,386,387, 985

Course Outcomes

- ✓ After completion of the course students will have knowledge about meaning, objectives, principles, definition and importance of
- ✓ Sports Management.
- ✓ Students will have knowledge about leadership, budget, organization and conduct of competition

- ✓ Students will be able to understand about axis, plane, fundamental movements, motion, force and levers.
- ✓ The pass out would be able to understand the Statistics and Computer, application in Physical Education.
- ✓ Students would be oriented with specialisation in concerned Games and Sports.

B.A. Physical Education (Major Subject) 2021-2022

Programme Objectives (POs)

1. Physical Education is a very wide subject in which biological, psychological, physical, health and functional aspects of sports, yoga and body are studied. It is noteworthy that it is such a subject with the help of which human body both internally and externally can be kept healthy.
2. To equip the students with the scientific knowledge of elements of physical Education, Fitness and Yoga.

B.A. I

Course Code: E020101T, E020102P

Course Outcomes

- ✓ Students will get knowledge about ancient wisdom in physical Education, Sports and Yoga.
- ✓ The student will be understand with the basic knowledge of Olympic Games, Asian Games, CWG, History and sociological foundation of Physical Education.
- ✓ Students will aware about Health Education, Wellness, Fitness and body posture.
- ✓ After completion of course students will be able to understand the Yoga, practice of yogic exercises, warm-up, cooling down, training, diet chart and measurement of BMI.
- ✓ Students will have an understanding about the Asanas and Pranayama.

Department of Commerce

B.Com.
Programme Objectives (POs)

1. The course has be designed in such a way so that the students grasp the basic concepts of accounting, taxation and different mercantile laws.
2. It enables the student to be aware the managerial and financial aspects ofbusiness world.
3. To enable the student to become competent to get enployement and generateself-employement opportunities.

B.Com. Ist Year

Business Communication (C-101)

Objective of this course is to develop effective business communication skillsamong the students.

Business Statistics (C-102)
The purpose of this paper is to inculcate analytical ability among the students.

Financial Accounting (C-103)
To impart basic accounting knowledge as applicable to business.

Business Regulatory Framework (C-104)
The objective of this course is to provide a brief idea the framework of Indianbusiness laws.

Business Economic (C-105)
This course in meant to acquaint the student with the principles of businesseconomics as are applicable in business.

Business Environment (C-106)

This course aims acquainting the students with the emerging issues in business atthe national and international level in the light of the policies of liberalization andglobalization.

B.Com. IInd Year

Company Law (C-201)
This course make the students aware of the provision of the Companies Act, 2013and amendments made afterwards.

Cost Accounting (C-202)
This course exposes the students to the basic concepts and the tools used in costaccounting.

Principles of Business Management (C-203)
This course familiarizes the student with the basics of principles of management.

Income Tax (C-204)
It enables the students to know the basics of Income Tax and its implications.

Fundamentals of Entrepreneurship (C-205)
It provides exposure to the students to the entrepreneurial culture and industrial growth so as to preparing them to set up and manage their own small units**.**

Public Finance (C-206)
The objective of this course is to provide basic knowledge about variousintricacies for Public Finance.

B.Com IIIrd Year

Corporate Accounting (C-301)
This paper enable the students to develop awareness about corporate accountingin conformity with the provisions of Companies Act.

Auditing (C-302)
This paper aims at imparting knowledge about the principles and methods of auditing and their applications.
Principles of Marketing (C-303)
The objective of this paper to help students to understand the concepts ofmarketing and its applications.
Economic Laws (C-304)
It will provide a basic knowledge of prevailing economic laws to the students.
E-Commerce (C-305)
To enable the students to become competent to understand the mechanism forexcelling in E-Commerce based employement and self employement opportunities.
Management Accounting (C-306)
It will provide the students the practical knowledge of decision making accountingwhich is useful to the management of business organizations.

M.Com.

Programme Objectives (POs)

- This course is designed to enhance knowledge regarding business and managemet concepts of Trade and Commerce in the changing scenario.

- The student will acquire the advanced knowledge of issues and practices in the fields of Finance, Marketing and Human Resource Management .

- The students will be able to get employment and generate self-employment after the completion of this programme.

Management Concept and Organisation Behaviour (I-1001)

The paper has been designed to help to students to understand the conceptual framework of management and organizational behavior motivational techniques, leadership traits and theory.

Direct Tax – Law and Practices (I-1002)

This paper aims at making students conversent with the concept of corporate tax planning and its implications for corporate management. It also aims at the filing of ITR and taxation of international transactions and non-residents.

Statistical Analysis (I-1003)

To learn the tools of decision making forcasting, planning and teaching the practical use of statistics in research.

Financial Management (I-1004)

To provide expert knowledge and application of financial management in present business environment.

Indirect Taxes – GST and Custom Law (I-2001)

This course is prepared to provide the expert knowledge of GST and custom laws.

Corporate Financial Accounting (I-2002)

This paper enables students to understand advanced accounting issues and practices in corporate world.

Corporate Law and Governance (I-2003)

This paper provides good understanding of recent corporate laws and corporate governance.

Operation Research (I-3001)

The students will know the applicability and use of operation research in diverse field. It will help the students in making effective decisions and to classify the models frequently used in operation research.

Research Methodology (I-3002)

To make the student aware of the methodology of research in the practical aspect.

Stretegic Management (I-3003)

To enhance decision making abilities of students with situation of a dynamic business environment.

Project Based Viva-Voce (I-3004)

This paper will help the student to make a mini research project based on practical business problems.

Managerial Economice (I-4001)

This course develops managerial perspective to economic fundamentals as aid to decision making under given environmental constraints.

Scurity Analysis and Portfolio Management (I-4002)

It provides an expert knowledge of security analysis and portfolio management to the students.

Securities Laws and Capital Markets (I-4003)

To make the learners aware of the prevailing securities laws and have an understanding of Indian capital market.

Marketing Management (I-4004)

The objective of this course is to facilitate the understanding of the conceptual framework of marketing and its application in decision making under various environmental constraints.

International Marketing (I-4005)

The objective of this course is to make the students understand the conceptual framework of international business and familiarize them with trends and developments in the international arena.

Human Resource Management (I-4006)

To provide expert knowledge the principles and practices of human resource management required for management of business organizations.

Industrial Relations and Labour Laws (I-4007)

To provide conceptual framework of industrial relations, to make students aware with the Indian labour legislation and to make students aware with the basic requirement and mandate of labour legislations.

Department of Law

LL.B. 3 Year

Semester I

Paper Code	Title of Paper	Course Outcome
K-1001	Jurisprudence – I (Legal Theory)	This course will enhance the knowledge of different schools of law development and also explain the relationship with other social sciences which provide a broad scope to students in understanding how law develops and is connected with other disciplines.
K-1002	Constitutional Law of India	This course will enhance the concept of 'State' in reference to the fundamental rights and possess the ability to articulate and evaluate how Constitution remains supreme law of the land and interpret its provisions to safeguard the rights of the vulnerable sections of the society. It should be able to possess immense skill sets with the enormous knowledge of Constitutional Law, Fundamental rights and fundamental duties etc. Students should have the ability to interpret the duty of state and inter-relationship between fundamental rights and directive principles.
K-1003	Law of Torts	By this course the principles of Tortuous liability and the defences available in an action for torts will enhance. The students will be able to study and evaluate the specific torts against the individual and property. This course will augment the - analytical view of post graduate law students regarding the general principles that are governing torts.
K-1004	Law of Crimes – I (Indian Penal Code)	The Course analyses the lacunas within the criminal justice system and suggest the amendments have to make to provide the justice according to the changing needs of the society. Students should be able to understand the procedure involved in dispensing the criminal justice system successfully and efficiently. Students will be able to identify and synthesize social theory about crime, justice, and social deviance and explain and address various obstacles and barriers experienced by individuals before, during, and after internment.

K-1005	Contract – I (General Principles of Contract)	This course will identify the relevant legal issues that arises on a given set of facts in the area of contract law. Students will be able to demonstrate a high level of understanding in the matters of contract, commercial agreements and other kinds of agreements and legal instruments. Students will be able to understand as to how contracts and other related agreements are formed and terminated legally. This course will amplify the understanding of law students regarding the general principles of contract, law relating to certain relations resembling those created by contracts and different remedies in the form of compensation.

Semester II

Paper Code	Title of Paper	Course Outcome
K-2001	Jurisprudence – II (Legal Concepts)	The course will enhance the understanding of the various sources of law, custom, precedent, legislation. The students will clarify and engage in identification, articulation and critical evaluation of legal theory and the implications for policy.
K-2002	Constitutional Law of India – II (Structure and Working of the Indian Constitution)	The Course will possess the ability to articulate and evaluate how Constitution remains supreme law of the land and interpret its provisions to safeguard the rights of the vulnerable sections of the society. This course will supplements the law students regarding various principles of constitutional law of India and the analytical view regarding functioning of various constitutional offices in India.
K-2003	Family Law – I (Hindu Law)	This course enhances the knowledge of law students regarding the codified law for Hindus. Students studying Hindu law learn about basic concepts like marriage, divorce, parental custody, domestic abuse and children's rights under Hindu Law. Students studying family law learn about concepts like Succession, Inheritance. Students should possess the ability to articulate and evaluate how Family Law and Justice caters to the various needs of the society

K-2004	Contract – II (Specific Contract and Law of Partnership)	This course will amplify the knowledge of law students regarding the specific contracts and law of Partnership. This course is designed to introduce the students to some of the specific contracts that are pervasive and play a significant role in the day to day commercial transactions besides the law that governs them. Such specific contracts range from contracts of Indemnity and Guarantee to Bailment and Pledge and to Agency. The focus of the course would be to ingrain in the students a critical understanding of the context and importance of such contracts from an economic, social and legal perspective.
K-2005	Indian Legal and Constitutional History (Optional Subject)	This course will analyse general trend of law reformation. Students will be able to understand the Early Charters and the Administration of Justice by the East India Company. The course will develop an understanding of the importance of judicial reform in British India. It will throw light on historical background of High Court, Privy Council, Supreme Court of India, Law Commissions, and Codification. Students will be able to comprehend the Development of Legislative Institutions.

Semester III

Paper Code	Title of Paper	Course Outcome
K-3001	Family Law – II (Muslim Law)	This course will enhance the knowledge of law students regarding laws of Muslims law and the basic concepts like marriage, divorce, parental custody, domestic abuse and children's rights under Muslim Law.
K-3002	Public International Law	This course focuses on the relations between states, international organisations and other legal actors within the public international legal framework. It explores competing notions of sovereignty, and the dilemma of conflict resolution between parties under international law. Students will gain knowledge of the public international legal framework, and be

		exposed to a range of controversial debates which reflect the highly politicised nature of international law.
K-3003	Administrative Law	The key focus of this paper is on comparative study of the administrative law in various legal systems in order to understand governance of the nation and concept of welfare state. The course has been structured in such a manner to understand the rule of administrative law as separation of powers and problems, process and control in delegated legislation. This course will help them analyses the coherence between the constitutional law and administrative law.
K-3004	Law of Property and Easement	This course will enhance the knowledge of law students regarding the legislation that are regulating the various kinds of properties in India. After studying the subject, students shall be able to appreciate that the law requires that immovable property must remain in circulation for the benefit of society. Students will determine and analyse the provisions of Sale of Immovable Property and rights and liabilities of seller and buyer. They would be able to analyze and evaluate the provisions governing Mortgage, Lease, Exchange, Gift and Actionable Claims and also rights and liabilities of transferor and transferee.
K-3005	Professional Ethics, Accountability of Lawyers and Bar and Bench Relations	This course will enable the students to imbibe and internalize the Values and Ethical Behavior in the personal and Professional lives. Students should be able to deal firmly with basic principles of Professional Conduct and ethical issues concerning legal profession. The course will make the students realize the significance of ethics in professional environment. They will understand the relationship between Bar and Bench as well as Contempt of Court.

Semester IV

Paper Code	Title pf Paper	Course Outcome
K-4001	Company Law	The course will help the students to understand the concepts and features of companies, Roles, Duties & Liabilities of Promoters, Classification of Companies, Pre & Post-incorporation stages, Lifting of Corporate Veil, Memorandum of Association & Articles of Association, Common procedure for Incorporation of Company, Prospectus and Private Placement. The course also gives an outlook about the different processes, by a company raise their funds (share capital other borrowing powers etc). It gives an insight about the members, directors working and associated with the company along with their rights and duties. The syllabus will also help the students to know about the two most important tribunal where the corporate matters are dealt in i.e. NCLT & NCLAT. The course will develop understanding about concept and procedures of "winding up" of a company using various statutes comprising of Companies Act.
K-4002	Labour and Industrial Law	The course introduces the Principles of Labour Law and Industrial Law and provides an insight of the Labour laws, labour movements and its enormous significance. Students should able to elaborate the concept of Industrial Relations and illustrate the role of trade union in the industrial setup. They should be able to possess a thorough understanding of the Industrial Disputes Act, Factories Act, Trade Union Act etc. Students should be able to understand the complex structure of the Labour rights protection agencies such as ILO, and other national trade Unions functions and protect the rights of many workers.
K-4003	Environmental Law	The course gives students the opportunity to grapple with contemporary legal debates in environment law. Students will develop

		a thorough understanding of practice and procedure followed by various environmental law enforcing agencies/bodies. This course will amplify the knowledge of law students about the environmental protection and preservation through various legislations in India. Students should be able to foster a high level of understanding in the matters pertaining to Environmental law, common law aspects, constitutional provisions etc.
K-4004	Criminology and Penology (Optional Subject)	The Students will be able to analyse and define the concept of crime and antisocial behaviour in the society and the difference between crime and morality as the concept of crime changes from society to society. They will analyse the various views given by philosophers on criminology and evaluate the reasons behind the crime and significance of Penology in the present society and theories of the punishments and its application in the criminal justice system.
K-4007	Arbitration, Conciliation and Alternate Dispute Resolution	They will understand and appreciate the concept of the two most common forms of ADR- arbitration and conciliation, which is the preeminent mode of dispute resolution and their working mechanism under the Arbitration and Conciliation Act, 1996. The students will understand Arbitration, its nature and scope. They will understand Domestic arbitration, International Commercial Arbitration, Concept of New York Convention and Geneva convention awards. The students will also learn about the dispute resolution through Lok Adalat.

Semester V

Paper Code	Title of Paper	Course Outcome
K-5001	Civil Procedure Code and Limitation Act	The development of trends and transmission of civil law and procedural implications. Students will be able to recognize and address issues that arise in Civil Procedure that implicate relevant ethical, moral, and religious principles. The Code will be covered in particular: Appeals, Review, Revision, Reference and Execution.

K-5002	Law of Crimes – II (Code of Criminal Procedure)	It would further help students to get an insight of the Criminal Procedural Law and its significance in the delivery of Indian Criminal Justice System. The students would learn about the importance of the various kinds of Procedures and the problems to be encountered while following the same Students should be able to draft legal documents required to produce potential procedural practice in criminal matters. Students should be able to demonstrate a high level of understanding in learning the concepts like Charge, Trial, Appeal Review and Revision etc.
K-5003	Law of Evidence	The course content includes the text, legislative history, judicial interpretations, and policy underpinnings of Evidence. The students would get an insight of the Evidence Law and its significance in the delivery of Indian Criminal Justice System The students would learn about the importance of the various kinds of evidence and its applicability. Students should be able to possess a thorough understanding of the Circumstantial evidence, confession law, admission law and the procedure.
K-5004	Land Laws including ceiling and other Local Laws	The Students will be understanding the theoretical basis and the practical application of the Land laws. The course will analyse & integrate functionality of the Land Acquisition Act in India. This course will enhance the knowledge of law students regarding the various legislations governing the Agriculture land use and other kinds of issues relating to Agriculture land.
K-5005	Drafting of Pleading and Conveyancing	This course will help the students to enhance legal drafting skills. It not only focuses on the theory of effective drafting guidelines but also provides relevant formats to assist in understanding practical application of concepts and develop necessary skills for drafting legal documents. The course is intended to improve the ability to draft quality legal documents. Students should be able to draft legal documents such as Sale deed, Mortgage deed, Lease deed, gift deed etc required to produce potential procedural practice in criminal matters.

Semester VI

Paper Code	Title of Paper	Course Outcome
K-6001	Interpretation of statutes	This course of Interpretation of Statutes is designed to understand the true meaning, intent of the maker of the statute. Further to make the student familiar with various rules of interpretation. The course will identify admissible internal and external aids to interpretation. After the course students can apply appropriate rules of interpretation according to the objects and nature of the law and understand doctrines relevant to the interpretation of the Constitution.
K-6002	Legal Language and Legal Writing including proficiency in General English	The study of language in the law programme enables the student to understand the legal terms and the context in which it is used and also develop the communication skills by use of such a terminology. It also enables a student to develop professionalism and court etiquettes. Students should be able to write effective in legal context and knowledge. Students should be able to demonstrate higher level of understanding while using English vocabulary at an advanced stage.
K-6003	Law of Human Rights	The course of Human Rights is designed to prepare for responsible citizenship with awareness of the relationship between Human Rights, democracy and development and to foster respect for international obligations for peace and development; to impart education on national and international regime of Human Rights.
K-6004	Intellectual Property Law (Optional Subject)	The course will distinguish and explain various forms of IPRs. Students will analyse rights and responsibilities of holder of Patent, Copyright, Trademark, Industrial Design etc. The students will apply the Intellectual law principles to real problems and analyse the social impact of Intellectual Property Law and policy. The course also covers the International Institutions, Agreements, Treaties and Convention like WIPO, GATT, TRIPS, etc., students should also be able to understand the international perspective and the arrangement in regard to Intellectual Property rights between different countries.

K-6008	Moot Court, Pre-Trial Preparation in Trial Proceedings	Participation in Moot Court subject will enable students to develop skills in preparing written submissions and in oral advocacy at an advanced level in the various subjects of law and before the different types and levels of courts. Students should be able to exposed to the ground realities of how moot courts help shape the future lawyers by inculcating the art of talking, convincing, negotiation, mediation, arbitration etc. Students should be able to understand the pros and cons of arguments, legal drafting and legal research. Students should be able to foster a high level of understanding in the matters pertaining to Mock Trials, Trial Advocacy, Mooting Debates, etc. This course will give exposure to law students regarding the practices and procedure of court process through the practical training.

LL. M

Course Code	Title	Outcomes of the Course
L-1001 & L-2001	Indian Constitutional Law 1 & 2	• Constitution is the *grund norm* of the country from which the validity of any other act derives. • This course deals with organizations, structure and functioning of ruling institutins/Bodies and their relationship with citizens of the country. • This course comprises fundamental rights of the citizens along with duties of state towards them.
L-1002 & L-2002	Jurisprudence 1 & 2	• The study of Jurisprudence develops the understanding of basic knowledge of law. • It includes various types of schools. • It helps in understanding some uncomplicated concepts of legal world. • It makes them more manageable and rationale and thus easier to understand. • The lawyer and judges can use jurisprudence as a guide to correctly interpret certain laws that require interpretation.
L-1003	Legislative Oughts, Interpretation and Judicial Process	• Legislative Oughts have social impacts pertaining to good principles of legislation. Legislation should have objectives to provide maximum happiness to largest number of people. • Legislative Oughts are useful for legislators, the authorities enjoying power of delegated legislation and other law making agencies. • Interpretation of Statutes is to remove difficulty of practability of declaring law by the courts. The courts are to interpret the law if it seems to ambiguous and unclear and to reach the intention of legislature which reflects the spirit of the people of the nation. • Judicial process is methodology by which justice can be imparted in the most effective manner. There are several theories of judicial process and it consists of every step of justice delivery system from inception to the ends of justice.
L-1004	Legal Education and Research Methodology	Legal Education serves society liberally by imparting general and specific education to law students, making them good law-abiding citizens and thus strengthens the democratic culture in the country. Research Methodology provides knowledge about meaning types, contents, research and steps in legal research. It also provides a detailed plan that helps to keep researchers on track, making the process smooth, effective and manageable. This subject has an immense importance for the people having interest and planning their future in higher education.

L-2003	Law and Social Transformation in India	By virtue of this course work one can see the utility and importance of law as an instrument of social change. To understand social change through law and legal system, it is necessary to understand the working of the legal system in the light of political, social and economic perspective. Law is a mirror to know how people relate to one another, their values, what they consider worth preserving in life and how they define their own security.
L-2004	Human Rights	Protection and enforcement of human rights is the cornerstone of any democratic or civilised society. This subject introduces a comprehensive study of the history, evolution, meaning, nature and dynamic concept of such rights. Apart from that it also makes a study about global and national efforts to safeguard human rights.
L-3001	Constitutionalism and Constitutional Development in India	The Constitution of India is regarded as the grund norm of the country. It basically deals with the ideals, goals, structure, role and power of the authorities falling within the purview of the State and the relationship of citizens with the State. This course work encompasses the study of basic concepts and features enshrined under the Constitution of India under the light of similar provisions of some major countries like the USA, UK and Australia. The basic object behind the inclusion of such a syllabus is to impart the knowledge about nature, aspirations of the makers of the Constitution and fundamental pillars of the law of the land. By virtue of this, students, lawyers, jurists and judges can understand the vision and philosophy of our Constitution on the basis of which our legal system and judicial process works.
L-3002	Comparative and Cooperative Federalism	The Constitution of India is regarded as the grund norm of the country. It basically deals with the ideals, goals, structure, role and power of the authorities falling within the purview of the State and the relationship of citizens with the State. This course work encompasses the study of basic concepts and features enshrined under the Constitution of India under the light of similar provisions of some major countries like the USA, UK and Australia. The basic object behind the inclusion of such a syllabus is to impart the knowledge about nature, aspirations of the makers of the Constitution and fundamental pillars of the law of the land. By virtue of this, students, lawyers, jurists and judges can understand the vision and philosophy of our Constitution on the basis of which our legal system and judicial process works.
L-3003	Civil and Political Rights: Comparative Study of Select Constitutions (India, USA and U.K.)	The Constitution of India is regarded as the grund norm of the country. It basically deals with the ideals, goals, structure, role and power of the authorities falling within the purview of the State and the relationship of citizens with the State. This course work encompasses the study of basic concepts and

		features enshrined under the Constitution of India under the light of similar provisions of some major countries like the USA, UK and Australia. The basic object behind the inclusion of such a syllabus is to impart the knowledge about nature, aspirations of the makers of the Constitution and fundamental pillars of the law of the land. By virtue of this, students, lawyers, jurists and judges can understand the vision and philosophy of our Constitution on the basis of which our legal system and judicial process works.
L-3004	Local Self Government Law	This course work encompasses the study of basic concepts and features enshrined under the Constitution of India under the light of similar provisions of some major countries like the USA, UK and Australia. The basic object behind the inclusion of such a syllabus is to impart the knowledge about nature, aspirations of the makers of the Constitution and fundamental pillars of the law of the land. By virtue of this, students, lawyers, jurists and judges can understand the vision and philosophy of our Constitution on the basis of which our legal system and judicial process works.
L-3005	Contract I(General Principles of Contract)	• The law of contract is set of rules governing the relationship, content and validity of an agreement between two or more persons. • The importance of this course is in the sense that it not only governs what happens when the contract breaks down but it also establishes what the term contract and principles of compensation are in the event of a dispute between the parties in this regard.
L-3006	Contract II (Specific Contract, Sales of Goods and Law of Partnership)	• The law of contract is set of rules governing the relationship, content and validity of an agreement between two or more persons. • The importance of this course is in the sense that it not only governs what happens when the contract breaks down but it also establishes what the term contract and principles of compensation are in the event of a dispute between the parties in this regard.
L-3007	Company Law	• Objectives of the Company Law is to acquire the basic and conceptual knowledge regarding the company like private, public, one man company etc. • A thorough study of various provisions of the Companies Act, 2013 is a sine qua non for becoming a competent and efficient company affairs expert. • This course covers various provisions and case study related to incorporation in a company.
L-3008	Banking Law	• This course mainly contains the Negotiable Instrument Act which provides deeper knowledge of banking documents and their limitations. • The course covers the consequences of bouncing of cheque due to insufficient fund in the account. • Covers how the banks are governed and its regulation.

L-3009	History and Basic Principles of Criminal Law	• This course covers definitions, kinds and punishments of crime. • This course talks about general exceptions in which accused wants from the court. • This course is beneficial for law students, lawyers, judges and laymen.
L-3010	Penology and Treatment of Offenders	• The course covers that how the quantum of penal provisions should be determined to deter the offenders. • Offenders should not only be punished but treated clinically to pave the path back into mainstream. • This course beneficial not only for lawyers, judges but also for public prosecutors as well.
L-3011	Criminology and Privileged Class Deviance	• This course covers various theories of criminology and punishment that help in understanding of criminal justice system. • It also covers privileged class deviance in which white collar crime and certain deviance on the part of people who are privileged socially and economically.
L-3012	General Principles of Tort	• The main purpose of this course is to provide a system that holds people (wrongdoer) accountable for the damages. They cause while infringing the rights of other individuals. • This course covers tortuous liability of private individuals and of State as well.
L-4001	Administrative Law of India- I	Administrative Law carries a great importance to understand the working of administration in the country as per legal and democratic norms fixed by the law of land. Under the purview of this subject, a study is made to understand the nature, scope and basic legal doctrines which have an ultimate importance in the administration of any modern democratic country.It provides a comprehensive study about the organisation, structure and functioning of administrative units along with various control mechanism to have a watch on their actions.
L-4002	Administrative Law of India- II	Administrative Law carries a great importance to understand the working of administration in the country as per legal and democratic norms fixed by the law of land. Under the purview of this subject, a study is made to understand the nature, scope and basic legal doctrines which have an ultimate importance in the administration of any modern democratic country.It provides a comprehensive study about the organisation, structure and functioning of administrative units along with various control mechanism to have a watch on their actions.

L-4007	Dissertation	A dissertation is a comprehensive study on a topic chosen by the student under the guidance of the faculty supervisor. The dissertation allows researchers to specialize in an area that is previously covered in the class, providing the opportunity to delve deeper into an area that interests that student. It is an important method of demonstrating that one can identify a topic concerned to the field, and read, understand and incorporate the relevant literature into a new research question to be investigated.
L-4008	Viva- Voce	Viva-voce is a form of oral assessment that helps students develop better understanding about the subject and valuable communication skills. It provides the examiner flexibility and potential for testing higher skills not checked in written examinations.
L-4003	Insurance Law	• This course covers the principle s of Insurance, Uberrima fides and certain other legal terms. • It defines the concept of risks, identify the way how we should dealt with these risks.
L-4004	Economic Laws	• Laws relating to economics provide international exposure of economic spectrum. • The World Bank, IMF functioning in economic uplifting of developing countries.
L-4005	Specific Principles of Criminal Law	• In this paper general and specific principles of criminal law are taught to the students. Deep analytical knowledge of these principles is a must for LL.M. students for helping them in understanding of criminal justice system.
L-4006	Specific Tort	• New emerging torts in the present decade are taught i.e. cyber tort, domestic violence tort, environmental torts and tort committed by artificial intelligence agencies which is very beneficial for the students of law and the society. It helps the students by enriching them with analytical capacity in order to ensure proper administration of justice.

Department of Education

COURSE OUTCOMES FOR B.ED. (2 – YEARS)

Course Code	Title	Course Outcomes
CC – 1 E – 101	Contemporary India & Education	Understand the development of education is influenced by socio-political forces of the time. Acquire the knowledge of features of education in ancient, medieval and pre-independent period in India with their strengths and weaknesses. Understand the contribution of various Committees and Commissions on education set up from time to time in the economic development of India. Appreciate the developments of Indian Education in the Post Independent Period.
CC – 2 E – 102	Philosophical & Sociological Perspectives of Education	Answer three basic questions-what ? why & How of the Education. Develop an understanding of contribution of Indian & Western philosopher. Build their own view about different Indian Religion and respect them. Describe the role of Education in desirable social change and socio-economic development. Transform one-self and society to empower people to assure responsibilities for creating sustainable future.
CC – 3 E – 103	Growing up as a learner	Acquire the basic principles of psychology of learners. Understands learner characteristics and implications for teaching-learning. Understand learner's mental health problems & choose appropriate strategies to cope with such problems. Apply various psychological principles and approaches to learning. Appreciate the role of psychology in the teaching-learning process.
CC – 4 E – 104	Teacher, Teaching And Technology	Acquire theoretical basis of educational technology and to develop awareness about recent developments in the areas of educational technology. Equip them with various technologies to apply for improving instructional practices. Develop teaching skill required for effective instructional and institutional management. Manage teaching and learning effectively and efficiently. Identify and implement instructional strategies in different situations.
CC – 5 E – 301	Creating An Inclusive School	Understand inclusive education- concept and nature. Understand the global and national commitments towards the education of children with diverse needs.

		Prepare conducive teaching learning environment in inclusive schools. Identify and utilize existing resources for promoting inclusive practice.
CC – 6 E – 302	Gender, School And Society	Sensitize the future teachers towards basic understanding of various key concepts of gender studies. Learn about gender issues in school, curriculum and textual materials across disciplines, pedagogical process and its interaction with class, caste, religion and region. Help them understand the contribution of women in social, economic & political development of the society. Apply the conceptual tools learn regarding gender & sexuality to understand issues related to sexual harassment at the workplace and child sexual abuse.
CC – 7 E – 303	Knowledge, Language & Curriculum	To examine the Epistemological basic of education. To understand the concept and principles of curriculum development. To understand the formulation of new curriculum. To develop the ability to read & comprehend. To develop writing skill.
CC – 8 E – 304	Work Education, Gandhi's Nai Talim And Community Engagement	Appreciate the concept of work and dignity of labor. Sensitize the importance of the Gandhiji ' s ideas on Nai Talim. Compatible with various curriculum frameworks related to Nai Talim. Analyze the school education programmes and policies, which incorporate local community engagement aspects. Reflect the various Nai Talim approaches in every walk of life. Participate efficiently in the local community services. Analyze the school education programmes and policies, which incorporate local community engagement aspects. Reflect the various Nai Talim approaches in every walk of life.
PC – 1 & PC – 2 E – 201 to E – 203	Teaching Of Languages	Understand about the nature and characteristics of a language and mother tongue and the use of language. Practice the required skill and their interlinks for mastering a language. Understand the various approaches for planning for successful language teaching. Understand the Approaches for teaching different aspects of language. Understand the Aids and other similar available material that could be used for teaching language. Practice the technique of obtaining feedback for self-evaluation and evaluation of student's success in learning and using the language.
PC – 1 & PC – 2 E – 204	Pedagogy Of Social Sciences	Understand concept, meaning and scope of social sciences. Get acquainted with appropriate methodology as applicable to social sciences. Prepare unit plan and lesson plan.

		Acquire skill in teaching social sciences. Acquire knowledge of various evaluation procedures and to device effective evaluation tools. Acquire the ability to develop instructional support materials.
PC – 1 & PC – 2 E – 205	Pedagogy Of Mathematics	Understand and appreciate the uses and significance of mathematics in daily life. Learn successfully various approaches of teaching mathematics and to use them judiciously. Know the methods of planning instruction for the classroom. Prepare curricular activities as per the needs. Appreciate and organize activities to develop aesthetics of mathematics. Obtain feedback both about teaching as well as students learning.
PC – 1 & PC – 2 E – 206	Pedagogy Of Physical Science	Develop a broad understanding of the principles and procedures used in modern physical science education. Develop their essential skill for practicing modern physical science education. Develop their skills necessary for preparing international accessories. Prepare acceptance lesson models which lay down this procedure to the acceptance for preparing designs for lesson. Manage introduction activity in such a way that the vast majority of the learners attain most of the objectives.
PC – 1 & PC – 2 E – 207	Pedagogy Of Biological Sciences	Develop broad understanding of principles and knowledge used in biology science. Develop their essential skills for practicing biological science. Know various approaches and methods of teaching life science. Lesson planning of biological science properly. Prepare tools for evaluation in biological sciences.
PC – 1 & PC – 2 E – 208	Pedagogy Of Computer Science	Develop a broad understanding of the principles and procedures used in computer science education. Develop their skills necessary for preparing international accessories. Know the methods of planning instruction for the classroom. Learn successfully various methods of teaching computer science and use them judiciously. Manage introduction activity in such a way that the vast majority of the learner attains most of the objectives.
PC – 1 & PC – 2 E – 209	Pedagogy Of Home Science	Understand the nature and scope of Home Science. Acquaint with the objectives of teaching Home Science in secondary and higher secondary schools. Acquire skills in planning a lesson with reference to methods and instructional materials and processing it effectively. Understand the various methods and techniques that can be employed in the teaching of Home Science. Develop a practical understanding of the technology of teaching Home Science and giving them practice in the use of various aids relating to the technology of teaching.

		Get an insight into the organization of co-curricular activities like Home Science clubs and home science exhibition.
PC – 1 & PC – 2 E – 210	Pedagogy Of Commerce	Acquire knowledge of the terms and concepts used in the pedagogical analysis of Commerce and Accountancy. Understand lesson planning and evaluation aspects in teaching Commerce and Accountancy. Apply the knowledge in analyzing higher secondary Commerce and Accountancy contents in terms of the techniques and aids for the purpose of teaching Commerce and Accountancy. Develop skills in the preparation of lesson plan and construction of evaluation tools using the suitable techniques. Develop interests in learning recent developments in Commerce and Accountancy. Develop a desirable positive attitude towards the teaching of Commerce and Accountancy.
PC – 3 E – 401	Assessment For learning	Become cognizant of key concepts such as measurement & evaluation assessment, test examination, formative & summative evaluation etc. Be exposed to different kinds of assessment that aid student learning. Have an idea of new trends in evaluation. Learn the different characteristics of standardize test-Reliability, validity, norms, etc. Relate & use statistics in educational setting.
PC – 4 E – 501	Educational Administration And Management	Acquaint the student teaches with the concept and concerns of educational administration. Develop an understanding of the role of the headmaster and the teacher in school management. Enable the students to understand to concept at importance of communication and tis possible barriers in educational administration. Enable the student teacher to critically analyses the administrative scenario in relation to the functioning of the other secondary schools of the area. Acquaint the student teacher with the scientific practices of educational management and keep him to apply it in work situation.
PC – 4 E – 502	Guidance And Counseling	Develop an understanding of the need and importance of career information for the pupils. Identify their role and function in locating, collecting, evaluating and disseminating career information for the use of pupils. Develop an understanding of how one's ability, interests and aptitudes are related to world of work. Know about the importance of developing the right attitude and values at every stage if education.
PC – 4 E – 503	Environment Education	Enable the student teacher understand about the concept of environmental education.

		Develop in the student teacher a sense of awareness about the environmental pollution, and possible hazards and its causes and remedies. Develop a sense of responsibility towards conservation of environment, bio-diversity and sustainable development. Develop reasonable understanding about the role of school and education in fostering the idea and learning to live in harmony with nature. Enable the students to understand about the various measures available to conserve the environment for sustaining the development.
PC – 4 E – 504	Computer Education	Acquire knowledge of computers, its accessories and software. Acquire the skills of operating a computer in multifarious activities pertaining to teaching. Understand features of MS Office and their operations. Develop skill in using MS – Word, Power Points and Spread Sheets. Apply the knowledge gained in respect of to process various data of students as well as simple library financial transaction of the school. Appreciate the value of CAI/CML packages on optional subjects and use them in class room instruction. Acquire skill in accessing World Wide Web and Internet and global accessing of information integrate technology in to classroom teaching learning strategies. Develop a broad understanding of the principles and procedures used in computer education.
PC – 4 E – 505	Health, Physical Education & Yoga	Understand the concept of holistic health and its various dimension and determinants of health. Acquaint them to school health program & its importance. Sensitize the student teacher towards physical fitness & its importance. Acquire the skills for assessment of physical fitness. Introduce them to the philosophical bases of Yoga. Understand the process of stress management through Yoga education. Acquire the knowledge of techniques of performing yoga sana and develop the skill for the same.
PC – 4 E – 506	Life Style Management	Identify their life styles. Manage the challenges of day to day life. Developing a successful personality.
PC – 5 E – 701	Preparation To Function as a Teacher (Teaching Skills)	This is visualialised as a shorter duration initial experience (5 weeks) of student-teachers to train in lesson-planning based on constructivist approach. Micro-teaching skills and playing the role of teacher in simulated condition as well as in real classroom situation. It will help him/her to prepare himself/herself as a teacher possessing teaching skills.

PC – 6 E – 703	School Internship (Teaching Competence)	This is visualized as a longer-duration field experience (16 weeks) of student-teachers supported by relevant interactive exposures within the school. During this period he/she will observe school functioning and prepare journal containing day-to-day report about all activities including evaluation tools and also perform an Action Research project based on any school problem. It will help him/her to become a professional teacher, processing teaching-competence.
EPC – 1 E – 702	Strengthening language Proficiency	Strengthen the ability to read correctly. Strengthen the ability to pronunciate. Strengthen the ability to write correctly. Strengthen the ability to communicate correctly.
EPC – 2 E – 702	Art And Aesthetic	Gain direct experiences. Develop motor skill. Make students believe in the dignity of labor. To nurture children's creativity and aesthetic sensibilities.
EPC – 3 E – 702	Reading and Reflecting On Texts	Develop study – habits. Develop skill of reading & writing. Develop skill of summarization. Develop skill of note-taking.
EPC – 4 E – 704	Understanding Of ICT	Have a basic familiarity with computers. Understand & appreciate ICT as an effective learning tool for learners. Understand ICT as an enormous functional support to teachers.
EPC – 5 E – 704	Scouting And Guiding	Develop the characteristics of good citizenship. Develop world peace. Develop two feeling of dignity of labor. Make students self-reliant. Develop the physical, mental & spiritual powers.
EPC – 6 E – 704	Working With Community	Develop social-sensitivity among student-teachers. Develop sympathy with the poor and the people below-poverty-line. Develop awareness about the environment. To have the positive attitude toward the neglected class.

COURSE OUTCOMES FOR M.ED.

Course Code	Title	Course Outcomes
CC – 1	Philosophical Foundations Of Education	To understand the nature of education as a discipline. To examine the philosophical origin of educational theory and practice. To understand the nature and functions of philosophical approach of education. To interpret and synthesis of various concepts, philosophical assumptions and issues about educational phenomenon.

		To know about various Indian schools of philosophy and their educational implications. To appraise the contributions made for education by prominent Indian and western educational thinkers. To enable the student to develop a philosophical point of view towards educational problems.
CC – 2	Psychology Of Learning And Development	To understand psychology of development. To develop understanding about school of psychology. To develop understanding about theories of learning and its educational implications. To understand individual difference and pupils' readiness towards learning.
CC – 3	Sociological Foundations Of Education	To develop adequate familiarity with social structure, class, caste and culture. To help students to make a critical analysis of the social structure. To enable them to realize the sale of education as an instrument of social, political, economic and technological change.
CC – 4	History Of Indian Education And Economic Issues	To develop understanding about Indian Education system in social, historical and political economy context. To critically analyze the policies and commissions and its implication on the educational system. To develop understanding of the implications of various contribution through education for an equitable society. To develop understanding of the economic issues in education. To develop understanding of the perspectives on political economy of education.
CC – 5	Educational Studies And System	To understand the nature of education as a discipline and area of study. To examine issues related to education as interdisciplinary knowledge. To examine the theories and basic concepts of education drawn from different disciplines. To examine the concerns of eminent educators regarding vision of school education. To reflect on the multiple contexts in which the schools are working. To discuss the emerging trends of school education.
CC – 6	Fundamental Of Research Methodology	To describe the nature, purpose, scope, areas, and types of research in education. To explain the characteristics of quantitative, qualitative and mixed research. To select and explain the method appropriate for a research study. To conduct a literature search and develop a research proposal. To explain a sampling design appropriate for a research study. To explain tool, design and procedure for collection of data.

		To explain the importance of documentation and dissemination of researches in education.
CC – 7	Perspective, Research And Issues in Teacher Education	To understand the concept of teacher education. To acquaint with competencies essential for the teaching profession. To acquaint with sense of accountability for the teaching profession. To acquaint with the recent trends in teacher education. To understand the new trends and techniques in teacher education.
CC – 8	Educational Technology and ICT	To develop an understanding of the nature and scope of educational technology. To develop an awareness about the recent innovations and future perspectives of education technology. To acquaint with the challenges and opportunities emerging in integrating new technology in educational processes. To select, use and produce instructional material and media effectively. To develop the ability for critical appraisal of the audio-visual media. To become good practitioner of educational technology.
CC – 9	Research Designs, Statistics and Report Writing	To understand the tabular, graphical representation of data, measure of central and variability, measure of relationship and normal distribution. To understand measures of association, its assumption and uses, regression and prediction. To know the concept of population, sample and sampling technique, degree of freedom, standard error, confidence, confidence intervals, null hypothesis and parametric test. To understand of non-parametric tests and computer programmes like SPSS.
SC 11 A	Issues and Concerns in Elementary Education	To acquaint with perspectives of elementary education. To develop understanding about the role of UEE. To understand the curriculum and evaluation process of elementary education. To understand the role of various commissions, policies and strategies of elementary education.
CC – 10	Testing, Measurement and Evaluation in Education	To understand the meaning of testing, measurement and evaluation. To understand the general principles of test constructions. To understand the interpretation of test scores. To plan, prepare, to administer and execute the teacher made test. To understand the concept of grading system.
SC 11 B	System and Structure of Elementary Education	To understand the different perspectives and context of elementary education. To understand the different policies and programmes of elementary education.

		To understand Universal Elementary Education (UEE) its objective and challenges. To understand the system and structure of elementary school education in India. To develop the skills and knowledge require for resource management in schools at elementary level.
OC 12 A	Issues and Concerns in Secondary and Higher Secondary Education	To acquaint the student with perspectives of secondary and higher secondary education. To understand problems and challenges of secondary and higher secondary education in India. To develop the skills and knowledge require for resource management in schools at secondary and higher secondary level.
OC 12 B	System and Structure of Secondary and Higher Secondary Education	To understand the different perspectives and context of secondary and higher secondary education. To understand the different policies and programmes of secondary and higher secondary education. To understand the curriculum across different types of school in India.
CC – 13	Curriculum Development	To enable students to understand the theoretical perspectives of curriculum. To develop students analytical ability to assess the relevance of curriculum practice in the context of learner's development in socio cultural context and advancement of knowledge system. To develop skills of learners to design curriculum outline for a school program.
CC – 14	Educational Management, Administration and Leadership	To become effective manager/administrators of education. To become agents of change in various aspects of education i.e. classroom management, curriculum construction, examination systems, educational policies, etc. To acquaint with the challenges and opportunities emerging in the management and administration in education. To acquaint with the Central and State mechanisms of educational administration and management. To acquaint with the various leadership theories and leadership styles. To be familiar with the new trends of education.
OC 15 A	Pre-Service and In-Service Teacher Education	To understand the concept of pre- and in- service teacher education. To understand the teacher education curriculum. To get acquainted with knowledge base, reflective teaching and models of teacher. To understand managing practicum in teacher education.
OC 17	Guidance and Counseling	To develop understanding of bases meaning, need and types of guidance. To get acquainted with the tools and techniques of appraisal of an individual. To get acquainted with the need and various ways of collection and dissemination of occupational information.

		To develop understanding of meaning characteristics and types of counseling. To get acquainted with process and techniques of Counselling. To get acquainted with the importance of placement and follow up services. To get acquainted with meaning, purposes and out-line of job-study. To develop understanding about counselling- research, issues and trends.

Department of Biotechnology
(Under Self Finance Scheme)

Course outcome of B. Sc. Biotechnology Programme

The course outcome ensures student's ability for effective communication within different field of biology focusing on their use on human, plants, social welfare as well as for sustainable development. Their outcome can be inoculated when they interact with interdisciplinary professionals and empower them with the ability to think and solve problems in the field of biotechnology by converting theoretical knowledge into practical. They would be able to acknowledges health, safety and environment (HSE) issues in handling chemicals and biological materials and understands the environmental impacts associated with the activity

S. No.	Name of Course	Outcome
First Year		
1.	Biochemistry	All downstream events and interactive pathways of catabolism and anabolism and structures of different molecules I studied in this course. Completing this course student is able to appreciate the web of pathways that are involved in overall metabolism.
2.	Biophysics	Biophysics is that branch of knowledge that applies the principles of physics and chemist and the methods of mathematical analysis with the ultimate goal of understanding at a fundamental level of the structure, dynamics, interactions and ultimately the function of biological system.
3.	Cell Biology	To help them to understand the structures and purposes of basic components of prokaryotic and eukaryotic cells, especially macromolecules, membranes, and will understand how these cellular components are used to generate and utilize energy in cells. The objective of this course is to demonstrate significant cell biological principles, quantitative and analytical approaches that enable the students to translate the theoretical foundation.
4.	Microbiology	To understand the basic concepts and usefulness of microbial world.
5.	Genetics	To help them learn the basic concepts of heredity in the organisms and their flow by one generation to the next
6.	Instrumentation and Bio-analytical Techniques	To help them to learn the basic principles, functions and applications of equipments used in biotechnology.
7.	Biomathematics & Biostatistics	To help them to learn the significance and application of mathematics and statistics in biotechnology research
8.	Biodiversity	To be acquainted with the knowledge of ecosystem and its structure, natural resources and their growing needs. It also helps in developing knowledge of biodiversity conservation.
9.	Chemistry	To help them to learn the stereochemistry and bonding in main group compounds and reaction mechanism of transition metal complexes. Also helps in development of skills in the identification of nature of bonding in organic molecules, stereochemistry, and reaction mechanism.
Second Year		

1	Fundamentals of computers & Bioinformatics	To help them learn the importance of basic knowledge computers and understanding of NCBI data and also learning of probes and their use for NCBI database.
2.	Bioenergetics & Bio-membranes	The goal of course is to describe how living organisms acquire and transform energy in order to perform biological work. The study of metabolic pathways is thus essential to bioenergetics.
3.	Molecular Biology	This course imparts students the ability understand the central dogma of biology and predict outcomes when the process malfunctions and gain skills required to do effective scientific research.
4.	Molecular Genetics & Cytogenetics	To make them understand the concept of molecular and genetics mechanism and their application in life.
5.	Immunology & Immuno-technology	Conceptualized the protective role of the immune system of the host and developed an understanding of the basic components as well as the mechanisms underlying the immune system and its response to pathogenic microorganisms.
6.	Recombinant DNA Technology	To help them to learn the basic techniques of RDT and understand their applications in life science.
7.	Animal Physiology	To help to study mammalian, principally human, systems physiology, on knowledge of basic physiological principles established.
8.	Plant Physiology	To help them to understand plant metabolism, nitrogen fixation, their growth by absorbing minerals from the soil and by interplay of various phytohormones to maintain a balance with their surroundings.
9.	Enzymes and Enzymes Technology	This involves the understanding of procedures involved in purification of enzymes, enzyme assays and quantitative evaluation of the influencing parameters such as concentrations of substrate/enzyme, pH, temperature and effect of inhibitors on enzyme activity.
Third Year		
1.	Plant Biotechnology	To learn the basic concepts and techniques of tissue culture and genetic manipulations for crop improvement.
2.	Animal Biotechnology	To learn the immunetechniques and animal tissue culture
3.	Molecular Virology	Viruses cause various diseases which are of medical importance in relation to disease and their control.
4.	Nano-biotechnology	To make them understand about synthesis, characterization nano-particles and their various applications in plant science.
5.	Environmental Biotechnology	To learn the biotechnological principles and techniques for the remediation of pollutant from environment.
6.	Industrial Biotechnology	To help them understand and practice various biotech techniques used in industries for commercial productions.
7.	Genomics & Proteomics	To help them acquainted with the basic concepts of genome and proteome and techniques for study as well as applications.
8.	Biosafety, Intellectual Property Rights & Entrepreneurship Development	To make them understand the importance of IPR, Bio-ethics and Bio-safety issues in biotechnology.

9.	Recent Trends in Biotechnology	To make the understanding the emergence of advanced technology in brings about various products synthesized by microbes, plants for the welfare of human beings.

Department of Home Science
(Under Self Finance Scheme)

B. Sc. Home Science (Clinical Nutrition & Dietetics)

I Semester

(1) English Language & Communication Skills
Paper code (T-101)
COURSE OUTCOME: This course improves the English language, grammar and communication skills of students, students will deploy ideas from works of criticism and theory in their own reading and writing.

(2) Communication & Instructional Technology
Paper code (T- 102)
COURSE OUTCOME: In this course improves in education, engagement and knowledge retention. Also this subject helps in the extension of knowledge from college premises to rural area.

(3) Introduction to Human Development
Paper code (T-103)
COURSE OUTCOME: This course Demonstrate an understanding of the biological, psychological, social and cultural influences of lifespan human development.

(4) Food Science
Paper code (T-104)
COURSE OUTCOME: This course provides strong knowledge of Food & Nutrition regarding basics of nutrition, therapeutic nutrition, meal management, food preservation, nutrition assessment etc to become a successful dietitian.

(5) Human Physiology
Paper code (T-105)
COURSE OUTCOME: This subject provides concepts and knowledge of human Anatomy and physiology of several organs & systems.

(6) Computer Basic
Paper code (T-106)
COURSE OUTCOME: This subject provide knowledge to operate computer software and hardware along with different features like MS words, excel and different computer languages like C+, C++, JAVA etc.

(7) Environmental Science- Qualifying Paper
Paper code (T-107)
COURSE OUTCOME: This course prepares students for understand and addressing complex of environmental issues especially pollution related issues and their reduction.

II Semester

(1) Introduction to Textiles
Paper code (T-201)
COURSE OUTCOME: This subject provides basic knowledge about the basic concepts about fiber, yarn, fabrics, textile manufacturing.

(2) Introduction to Resource Management
Paper code (T-202)
COURSE OUTCOME: This subject provides knowledge about techniques of management like planning, controlling, and evaluation different human and non human resources like time, energy, money, knowledge, skills etc.

(3) Applied Physics
Paper code (T-203)
COURSE OUTCOME: This course provides fundamental truth & basic concepts of the physical science.

(4) Applied Chemistry
Paper code (T-204)
COURSE OUTCOME: This course gives the knowledge about basics of chemistry like compound, acids, alkali, pH, and dyeing agents etc.

(5) Sanitation & Hygiene
Paper code (T-205)
COURSE OUTCOME: This course helps the students to know the importance of sanitation and hygiene and the problems faced in the form of different diseases due to absence of sanitation & hygiene and importance of vaccination to build immunity in society.

(6) Meal Management
Paper code (T-206)
COURSE OUTCOME: This course deals with the basics of meal management like principles of meal planning according to age group which help students to perform their job as a dietitian.

III Semester

(1) Food Commodities
Paper code (T-301)
COURSE OUTCOME: This course includes knowledge about the structure, composition about cereals, pulses, milk &milk products, vegetables and fruits, eggs, fats &oil. It's also provides knowledge about preservatives, colours emulsifiers etc.

(2) Maternal & Child nutrition
Paper code (T-302)
COURSE OUTCOME: This course provides the knowledge regarding nutrient rich maternal diet during pregnancy and management of children diet during disease like, fever, diarrohea. It's also providing the knowledge regarding nutrition of lactating mother.

(3) Consumer Economics
Paper code (T-303)
COURSE OUTCOME: Consumer Economics deals with the question of how the consumer allocates his resources over variety of different commodities and services. It includes knowledge regarding budget, saving, family income, consumer buying problems etc.

(4) Nutritional Bio-chemistry
Paper code (T-304)

COURSE OUTCOME: This course establishes the basic principles of metabolism and its regulation. It examines how metabolism is responsive to and explores the biochemical, physiological and clinical impact of specified nutrients.

(5) Food Product Development &Sensory Analysis
Paper code (T-305)
COURSE OUTCOME: This course provides knowledge about sensory evaluation of a product including both the analytical sensory evaluation carried out by panel experts and the effective test carried out and consumers obtain more information about the product, its quality and to verify factors.

(6) Applied Life Science I
Paper code (T-306)
COURSE OUTCOME: This course provides general information about manures and fertilizers, herbal plants, medicine plants and it are also provides the knowledge of kitchen gardening.

IV Semester

(1) Basic Dietetics
Paper code (T-401)
COURSE OUTCOME: This course deals with the study of diets more commonly used in various conditions, health maintenance & disease prevention.

(2) Food Behavior
Paper code (T-402)
COURSE OUTCOME: This course provides the knowledge regarding food choice, feeding practices, eating related behavior in different states of India. It's also includes role of media changing food behavior.

(3) Food Microbiology
Paper code (T-403)
COURSE OUTCOME: This course provides the role of micro organism in food safety. Its compare various methods used in control of micro organism and also explain factors that affect micro organism growth in food.

(4) Applied Life Science II
Paper code (T-404)
COURSE OUTCOME: It provides affective knowledge about Poultry, Apiculture, Sericulture, Insect Pest, Pisciculture to the students.

(5) Elements of Fashion &Traditional Textiles
Paper code (T-405)
COURSE OUTCOME: This course provides detailed knowledge about traditional textiles like Patola, Tie & Die, Pochampally, Brocades, Kalamkari and traditional embroideries of India.

(6) Community Nutrition
Paper code (T-406)
COURSE OUTCOME: This course provides knowledge regarding nutrition of community and also provides knowledge about common nutritional problems in India, food adulteration, nutrition education, nutrition programmes etc.

V Semester

(1) Food Service Equipment Layout
Paper code (T-501)
COURSE OUTCOME: This course provides the knowledge of equipment used in different catering organization like hotels, restaurant, dhabas etc.This also develop professional skills to run their own catering organization in future successfully.

(2) Advanced Dietetics
Paper code (T-502)
COURSE OUTCOME: This course gives knowledge to plan diets of different disease like diabetes, hypertension, hepatitis, atherosclerosis etc. So the students can become successful dietitian.

(3) Quantity food Production & Services
Paper code (T-503)
COURSE OUTCOME: In this course students are given practical experience of catering organization as well as knowledge required to run. It's also important to understand the principles of food safety, preservation, packaging, legal aspects that will keep customers safe.

(4) Food Toxicology and Food Adulteration
Paper code (T-504)
COURSE OUTCOME: This subject provides knowledge about spoilage of food cause by harmful microorganisms, toxins & diseases caused by micro organism. It also teaches students about Food adulteration which decrease food quality.

(5) Personnel Management
Paper code (T-505)
COURSE OUTCOME: This course focuses on personnel administration, employee welfare and labour relation. Personnel management assumes people as input for achieving the desired output.

(6) Food Material Management & Cost Accountancy
Paper code (T-506)
COURSE OUTCOME: This course improves the ability of students regarding budget plan and costing, keeping accounts and records.

VI Semester

(1) Clinical Nutrition
Paper code (T-601)
COURSE OUTCOME: This course gives knowledge about metabolism of different nutrients like lipid, CHO, protein etc. this also teaches about nutrient and drug interactions.

(2) Nutritional Assessment
Paper code (T-602)
COURSE OUTCOME: This course gives knowledge about assessment of nutritional status according to anthropometrics, biochemical tests, clinical observation and diet survey.

(3) Food Preservation and Protection
Paper code (T-603)
COURSE OUTCOME: This course gives knowledge of food preservation and production in the form Jam, Jelly, Marmalades, Pickles etc. to prevent the food from spoilage until it can be consumed.

(4) Entrepreneurship & Motivation
Paper code (T-604)
COURSE OUTCOME: This course helps the student to develop their skills & ideas as entrepreneur with the ability to run their own enterprise. It also provides knowledge regarding different entrepreneurship programmes of govt.

(5) Project Cum Internship(Project Report + Viva)
Paper code (T-605)
COURSE OUTCOME: In this subject student go to different hospitals for 45 days to work practically in hospital environment in dietetics department.

M.Sc. Home Science (Food & Nutrition)

I Semester

(1) Applied Physiology
Paper Code (V-1118)
COURSE OUTCOME: Apply to clinical scenarios, the concepts and knowledge of the general terminology, cell structure and function, biology, gross anatomy, physiology of several organ system (integumentary, skeletal, muscular, and nervous)

(2) Geriatric Nutrition and assessment of Nutritional status
Paper Code (V-1119)
COURSE OUTCOME: Geriatric Nutrition applies nutrition principles to delay effects of aging and disease, to aid in the management of physical, psychological, and phyco-social changes commonly associated with growing old.

(3) Food Science
Paper Code (V-1120)
COURSE OUTCOME: Food Science is the study of the physical, biological and chemical make up of food: and the concepts underlying food processing. Food Technology is the application of Food Science to the selection, processing, packaging, distribution and use of safe food.

(4) Advances in Food Microbiology
Paper Code (V-1121)
COURSE OUTCOME: Apply the knowledge to understand the microbial physiology and to identify the micro-organisms. Understand the regulation of biochemical pathway and possible process modifications for improved control over micro organism for microbial product synthesis.

II Semester

(1) Advanced Nutrition
Paper Code (V-2118)
COURSE OUTCOME: The course provides a detailed insight into understanding

the composition. molecular interaction and biomechanics of the food metabolites. The course has a multidisciplinary emphasis providing a broad base of knowledge and understanding of the wide role of nutrition in sustaining health and preventing diseases.

(2) Research Methods and Statistics
Paper Code (V-2119)
COURSE OUTCOME: Students will be able to understand basic theoretical and applied principles of statistics needed to enter the job force. Students will be able to communicate key statistical concepts to non-statisticians. Students will gain proficiency in using statistical software for data analysis.

(3) Nutritional Biochemistry
Paper Code (V-2120)
COURSE OUTCOME: Capable of describing biochemical pathways relevant in nutrient metabolism. Capable of describing biochemical techniques that are relevant for the investigation of the nutrient metabolism.

(4) Community Nutrition and Nutritional deficiency
Paper Code (V-2121)
COURSE OUTCOME: Understand about Clinical Nutrition & Nutrition Education, Be aware of National Nutrition Programmes. Be aware of objectives and functions of National and Internal Agencies working in the field of nutrition. Understand the concept of health & primary health care.

III Semester

(1) Clinical & Therapeutic Nutrition
Paper Code (V-3118)
COURSE OUTCOME: Understand nutrients, their functions & metabolism and diet therapeutic modification of normal diet, understand principles of dietic management in different disease conditions.

(2) Institutional Food Administration
Paper Code (V-3119)
COURSE OUTCOME: Understand concepts and functions of catering management, know the importance and guidelines and menu planning. Aware of functions and types of menus followed and catering institute. Understand the importance of Food selection, purchase and storage of food.

(3) Food Processing and Technology
Paper Code (V-3120)
COURSE OUTCOME: This course has an advanced food processing components and overview conventional and emerging novel for food processing method

available to maximize the nutritional levels in the making of foods that are safe, high quality with maximum shelf life and convenience.

(4) Nutrition for Health & Fitness
Paper Code (V-3121)
COURSE OUTCOME: A plan to review and facilitate a deeper understanding of nutrition. How Past experiences, advertising, history, family and personal preference influence the decisions we make with respect to health and wellness.

IV Semester

(1) Dissertation and seminar/Industry training (Internship) and project report
Paper Code (V-4118/4119)
COURSE OUTCOME: To develop practitioner skills for entry- level dietitians who are able to assume leadership roles to improve and maintain the nutritional care of diverse individuals, families and communities within national and global populations. The programme will prepare graduates to be competent entry- level dietitians.

Department of Computer Science
(Under Self Finance Scheme)

B. Sc. Computer Science

I Semester

BCS101: Involves study of technical communication.

BCS1O2: Provides knowledge about Matrices and calculus.

BCS1O3: Provides essential knowledge about optics and measuring instruments.

BCS1O4: Provides knowledge about Computer Fundamentals.

II Semester

BCS201: To inculcate knowledge of Business letters.

BCS2O2: Provides knowledge about differential equations .

BCS203: Provides knowledge about electronic appliances .

BCS204: To inculcate knowledge about introduction to C.

III Semester

BCS301: To teach about Discrete structure .

BCS302: To teach about Switching circuit and logic circuit.

BCS303: To teach about Data Structure using C .

IV Semester

BCS401: Provide comprehensive knowledge of numerical techniques .

BCS402: To teach about computer organization .

BCS403: To teach principals and methods of object oriented programming .

V Semester

BCS501: To teach about Database Management System .

BCS502: To teach about Introduction of System Software .

BCS503: To teach about Review of the Java Language.

VI Semester

BCS601: Provide comprehensive knowledge of System Analysis and design .

BCS602: To teach about computer Networks .

M. Sc. Computer Science

I Semester

MCO1: Involves study of computer basics.

MCO2: Provides knowledge about fundamental of Programming in C and Data Structure.

MCO3: Provides essential knowledge about Discrete Maths.

MCO4: Provides knowledge about various statistical methods used in Computer orientation.

II Semester

MCO6: To inculcate knowledge of Fundamentals of operating systems .

MCO7: Provides knowledge about Algorithmic complexity .

MCO8: Provides knowledge about file organization.

MCO9: To inculcate knowledge about various Numerical stability and instability.

III Semester

MC11: To teach about Picture transformation and image transformation.

MC12: To teach about Switching circuit and virtual circuit.

MC13: To teach about linear and integer programming .

MC14: To teach about the introduction to object oriented programming

IV Semester

MC16: Provide comprehensive knowledge Fuzzy sets and application.

MC17: To teach about cryptology and secure systems.

MC18: To teach principals and methods of Artificial Intelligence.

MC19: To provide foundational knowledge of Java programming.

Master of Journalism & Mass Communication-MJMC
(Under Self Finance Scheme)

Course outcome of MJMC

This is the study of communicating the information to a mass through the various means like electronic media and print media and others. Journalism encompasses the activity of writing, editing, and photography about the recent developments for newspapers, magazines and TV etc.

S. No.	Name of Course	Outcome
First Semester		
1.	Communication Concept and Process	This deals to introduce the fundamentals of communication and mass communication.
2.	Fundamental of Computers	This aims to provide the basic knowledge, fundamentals and components of computer as well as internet and services of internet.
3.	History of Press, Media Laws and Ethics	This is designed with an aim to provide the knowledge of History of Press, Media Laws and Ethics.
4.	Social and Political System of India	Media informs society and its different aspects, to familiarize to understand the relationship of groups and their attitudes, basic features of Indian political system and economy also.
Second Semester		
1	Development and International Communication	Importance of role of Communication in development and international organizations, information flow and imbalance etc, is learnt.
2.	Print Journalism-I (Reporting)	This course aims to acquaint and provide knowledge of Reporting in Print Journalism. To introduce about news, qualities of reporter and various kinds of reporting.
3.	Electronic Media-I (Radio)	To help them to understand the History and Development of Radio. This helps to understand the nature and types of radio programs.
4.	IT and Computer Application in Mass Media	Introduction to IT and computer and their application in Mass Media is imperative. It also imparts the knowledge of Computer Networks and Social Networking sites.
Third Semester		
1.	Print Journalism- II (Editing and Layout)	This course aims to provide knowledge of Editing and Layout of Print Journalism. It also introduces Newspaper organization, Copy Editing, Photo Journalism, Page layout and design etc which are essential components of print journalism.
2.	Electronic Media- II (Television)	To help to understand the introduce, the History and Development of Television. They will also understand the nature and types of television program, TV News, Qualities of news anchor and presenter, technologies of Television Program Production, etc.

3.	Advertising and Public Relation	In the era of Information revolution, Public Relations and Advertising is playing a vital role in the field of Government, Private and Corporate Sector.
4.	Special Paper (Any one of the following) Online Journalism Environment Communication	**Online Journalism** To help them to understand the fundamentals of online journalism. This course will equip them to understand the communication technology, internet, e-journalism, cyber media and cyber deviation (crime). **Environmental Communication** To familiarize and provide knowledge of Environment and its different aspects. Role and importance of national and International organizations in environmental protection and environmental laws and also specific features of this course.
Fourth Semester		
1.	Communication Research	This helps them to understand the fundamentals, nature, scope and areas of communication research. It aims to well equip the students to understand the process of communication research, methods of data collections, data analysis and report writing as well.
2.	Print Media Practical	This course aims to acquaint and provide practical knowledge of Reporting in Print Journalism.
3.	Electronic Media (Radio and TV) Practical	Through this students acquainted the practical knowledge about History and Development of Radio.
4.	Internship with and Agency for 60 days (Diary and work record based viva)	Students are sent to various Media Houses and Organizations to learn the process of Print Media and Electronic Media.
5.	Dissertation	The completion of course with a dissertation ensures students know the basis of academic writing on original research.

चौधरी चरण सिंह विश्वविद्यालय, मेरठ

सम्बद्ध महाविद्यालयों के सस्थागत छात्रों हेतु शैक्षणिक सत्र 2019-2020 से प्रभावी

एम.ए. संस्कृत का पाठ्यक्रम

एम.ए. संस्कृत के अधिगम प्रतिफल

1. किसी भी विश्वविद्यालय से पीएच.डी कर सकते हैं।
2. विद्यालय, महाविद्यालय एवं विश्वविद्यालय में अध्यापन हेतु जा सकते हैं।
3. संस्कृत समाचार वाचक (दूरदर्शन एवं रेडियो, आकाशवाणी बन सकते हैं, साथ ही संस्कृत पत्रकारिता हेतु भी जा सकते हैं।
4. भाषाविज्ञान के क्षेत्र में भारतसहित विदेशों में कार्य कर सकते हैं।
5. आई.ए.एस., पी.सी.एस. जैसी परीक्षाओं को बड़ी सफलतापूर्वक उत्तीर्ण कर सकते हैं।
6. भारतीय सांस्कृतिक विभाग के अन्तर्गत तीन वर्ष हेतु किसी विदेशी दूतावास से सम्बद्ध हो सकते हैं।
7. अन्य विषयों में निर्धारित अभिज्ञानशाकुन्तलम्कौटिल्य अर्थशास्त्र, प्राच्य भारतीयइतिहास, काव्यशास्त्र जैसे विषयों को हृदयंगम करने के लिए संस्कृतभाषा का ज्ञान अनिवार्य है।
8. संस्कृत भाषा के सम्यक अध्ययन के पश्चात् किसी भी अन्य भाषा का ज्ञान कम प्रयास से हो सकता है, इससे छात्रों के लिए आजीविका के अनेक मार्ग प्रशस्त होते हैं।
9. छात्रों के लिये योग, ज्योतिष, आयुर्वेद एवं वास्तु का भी अध्ययन कर आजीविका के नए अवसर सृजित हो सकते हैं।
10. संस्कृतभाषा केवल भाषा नहीं है अपितु सम्पूर्ण जीवन दर्शन है। भारत की शरीर, मन, आत्मा है संस्कृत। पतञ्जलि के अनुसार बिना किसी आर्थिक लाभ के भी वेद और वेदाङ्गों का अध्ययन करना चाहिए।

I-Semester

Paper I **G-1082 वेद, उपनिषद्, शिक्षा एवं वैदिक साहित्य का इतिहास**
(Ved, Upnishad, Shiksha & History of Vedic Literature)

अधिगम प्रतिफल

1. भारत की आत्मा के रूप में जाने वेद और उपनिषद् का अध्ययन आध्यात्मिक व्यक्ति के लिए ही नहीं अपितु प्रत्येक व्यक्ति की जीवन दृष्टि से अपरिहार्य है।
2. शिक्षा-पाणिनीय-शिक्षा के वर्णोच्चारण की वैज्ञानिक विधि से छात्र अवगत होते हैं। वर्णोच्चारण की उचित विधि से अपरिचित विद्यार्थी का उच्चारण व लेखन दोनों शुद्ध होते हैं।
3. वैदिक साहित्य का इतिहास विविध-परीक्षाओं की दुविर से जितना उपयोगी है, उतना ही भारतीय अस्तित्व की दृष्टि से भी महत्त्वपूर्ण है।
4. उपनिषद् केवल अलौकिक ज्ञान ही नहीं प्रदान करती अपितु व्यक्ति के सुखी जीवन का मार्ग भी प्रशस्त करती है।

Paper II **G-1083** **भारतीय दर्शन** (न्याय-वैशेषिक, सांख्य एवं इतिहास)
Indian Philosophy *(Nyay-Vaisheshik, Sankhy & History)*

अधिगम प्रतिफल

1. छात्रों की विश्लेषण समता का विकास होता है इसलिए कुछ समय पूर्व तक न्यायाधीशों, वकीलों के पाठ्यक्रम में न्यायदर्शन का कुछ भाग निर्धारितहोता था।
2. जालसाज़ी (Fraud) के समय में इसकी उपयोगिता और बढ़ जाती है।
3. परमाणु-अणु-त्रसरेणु इस ब्रह्माण्ड का मूल है, यह विज्ञान भी सहमत है।
4. सांख्य का प्रकृति-पुरुष सिद्धान्त विद्यार्थी की समस्त मिथ्या धारणाओं की निवृत्ति कर निर्वाण का सरल सा राजमार्ग बतलाता है।
5. दर्शन ग्रन्थों के इस आधार ज्ञान से विद्यार्थी भविष्य में ज्ञान के उच्च सोपान पर उत्तिष्ठित हो सकता है।

Paper III **G-1084** **नाटिका एवं नाट्य शास्त्र**
(Natika & Dramaturgy)

अधिगम प्रतिफल

1. नाटिकाओं के अध्ययन से छात्र भाषा का ज्ञान सरसता तथा सुगमता से प्राप्त करता है।
2. इस काल के सामाजिक, राजनैतिक, आर्थिक परम्पराओं एवं अवस्थाओं को सहज रूप से समझ सकते हैं।
3. भारतीय नाट्यविद्या का आधार ग्रन्थ यदि कोई है तो वह है भरतमुनि का नाट्यशास्त्र। जो बताता है कि भारत में मनोरञ्जन की कितने स्वरूप तथा समृद्ध परम्परा रही है।
4. मानवीय संवेदनाओं के सम्यक् प्रकरीकरण से पाठक अनेक मानसिक व्याधियों से बच सकता है।
5. विद्यार्थी को बोध होता है कि जीवन उदासी नहीं उत्सव है।
6. उस काल के नाट्यमण्डपों की संरचना इतनी भव्य है कि पाठक स्वाभिमान जाग उठता है।

Paper IV **G-1085** **गीतिकाव्य एवं गद्यकाव्य**
(Geetikavy & Gadyakavy)

अधिगम प्रतिफल

1. गीतिरूप में पठित सुदीर्घ काल तक विस्तृत नहीं होता।
2. महाकवि कालिदास ने यक्ष और मेघ के माध्यम से संवेदनाओं को अद्भुत ढंग से प्रस्तुत किया है। पाठक भी इसके अछूता नहीं रह सकता।
3. प्रकृति रक्षण आवश्यक विषय को विद्यार्थी स्वाभाविक रूप से समझ सकेंगे।
4. भाषा को लिखने, पढने, जानने, समझने के लिए गद्य से उत्तमविधा नहीं हो सकती।
5. गद्यसम्राट, बाणभट्ट एक संज्ञा के अनेक पर्यायवाची देते हैं, उनके वर्णन छात्र के संस्कृतलेखन कौशल को समृद्ध करने में सर्वथा सहायक है।

II-Semester

Paper I **G-2082 संस्कृत महाकाव्य**
(Sanskrit Epic)

अधिगम प्रतिफल

1. किरातार्जुनीयम् - छात्रों को राजनीति की अनेक विधाओं, समस्याओं से परिचित कराता हुआ, उनके उचित समाधानों निर्णयों से अवगत कराता है।
2. राजा के कर्त्तव्यों तथा प्रज्ञा के अधिकारों और उत्तरदायित्वों का बोध प्रदान करता है।
3. विद्यार्थी एक ही महाकाव्य 'शिशुपालवध' के द्वारा उपमा के प्रयोगों, अर्थ के गौरव, पदों की सरसता से अवगत होता है।
4. छात्र को बोध होता है कि दुराचरण और अन्याय की परिणति दुखद होती है।
5. भारतराष्ट्र की समृद्धि से छात्र अवगत होते हैं।

Paper II **G-2083 संस्कृत काव्यशास्त्र**
(Sanskrit Poetics)

अधिगम प्रतिफल

1. काव्यलेखन के सिद्धान्तों और नियमों से छात्र परिचित होते हैं।
2. अभिधा, लक्षणा, व्यञ्जना के ज्ञान से साहित्य के रसास्वादन में पाठक समर्थ होते हैं।
3. किसी भी भाषा के सम्यक् बोधार्थ काव्यशास्त्र का अध्ययन आवश्यक है ।
4. छन्दों, अलंकारों का ज्ञान विद्यार्थी की साहित्यिक रुचि को बढ़ाता है।
5. अलंकार, छन्द सम्बन्धित उदाहरण छात्र विविध ग्रन्थों से परिचित कराते हैं।

Paper III **G-2084 संस्कृत व्याकरण निबन्धानुबादश्च**
(Sanskrit Grammer, Essay & Anuwaad)

अधिगम प्रतिफल

1. संस्कृतव्याकरणाध्ययनेन छात्रस्य संस्कृतसहितं विश्वस्य अन्यासु भाषास्वपि गतिर्भवति।
2. कारकाणां समासानां ज्ञानं सर्वासां परीक्षाणां कृते अनिवार्यम्।
3. पठन-पाठने व्याकरणस्य प्रभावः प्रत्यक्षतया अनुभूयते अतः व्याकरणज्ञानं छात्रे आत्मविश्वासं वर्धयति।
4. निबन्धानामध्ययनं विशिष्टविषयस्य सम्यक् बोधः कारयति।
5. विद्यार्थिनां भाषा परिमार्जिना भवति।

अनुवादमाध्यमेन छात्राः भाषायाः साहित्यिकं रूपं व्यावहारिकं प्रयोगञ्च सम्यगवगमने समर्थाः जायन्ते।

Paper IV **G-2085 रूपकं चम्पूकाव्यञ्च**
(Roopak & Champu-Kavy)

अधिगम प्रतिफल

1. विद्यार्थिनः मृच्छकटिकद्वारा तदानीन्तनस्य समाजस्य उदात्तरूपेण अनुदात्तरूपेण परिचिताः भवन्ति।
2. राजव्यवस्थायाः दोषगुणान् सुकरतया अवबोधयन्ति।
3. राज्ञः रामस्य चरित्रे के दोषाः गुणाश्च इति विवेचनेनछात्राणां मतिः तर्कपूर्णा भवति।
4. रामस्य पतिस्वरूपमवलोक्य छात्राणां संवेदनाः परिष्कृताःउदात्ताश्च जायन्ते।
5. सामाजिकानां स्वान्तेषु करुणरसप्रवाहे भवभूते, नैपुण्येन छात्राः अवगता भवन्ति।

आश्रमव्यवस्थया बालाः अपि शास्त्राणि सारल्येन अवगन्तुं पारयन्ति इत्यपि जानन्ति छात्राः।

III-Semester

Paper I **G-3082 संहिता निरुक्तञ्च**
(Sanhita, Nirukt)

अधिगम प्रतिफल

1. सृष्टिक्रमस्य दार्शनिकं पक्षंज्ञास्यन्ति छात्राः। जीवन कथं विकसति, सृष्ट्यादौ कीदृशं वातावरणमासीत्।
2. वैदिकसूक्तानामध्ययनं पाठकान् बोधयति यत् प्रेम्णा, पवित्रतया व्यवह्रियते चेत् तदा कठिना अपि समस्याः साध्याः भवन्ति।
3. सर्वदा संचरणशीलं मनः ज्योतिषामपि ज्योतिर्विद्यते, संकल्पबलेन तच्चेतः असाध्यानि साधयितुं समर्थम्।
4. राष्ट्राभिवर्धनम्, सूक्तमाध्यमेन छात्राः जानन्ति यत्इयं समग्रापि भूमिः अस्माकं राष्ट्रम्। 'वसुधैवकुटुम्बकम्' इति भावना सुदृढा भवति।
5. निरूक्ताध्ययनं वैदिकवाङ्मयस्य सुविस्तृतं भाण्डारागारं सूचयति। कियती उत्तमा ज्ञानपरम्परा अस्माकं पूर्वजानामासीत् इति विज्ञायगौरवमनुभवन्ति छात्राः। स्वाभिमानमुन्नतं भवति विद्यार्थिनाम्।

Paper II **G-3083 ध्वनिस्थापनं व्यञ्जनास्थापनं तथा काव्यशास्त्रीयं षट्प्रस्थानानि**
(Dhwani, Vyanjana Sthapan & Kavyashastriy Shat Prasthan)

अधिगम प्रतिफल

1. ध्वनिविषयकैः विविधसिद्धान्तैः छात्राः परिचिताः भवन्ति।
2. विद्यार्थी व्यञ्जनाज्ञानेन,ध्वनिरवगमनेन च साहित्यविधां जानन्ति, तासां प्रयोगे च कुशलाः भवन्ति।
3. छात्राः निजभावाभिव्यञ्जने नैपुण्यमवाप्नुवन्ति।
4. ध्वनिज्ञानेन, ध्वनिसिद्धान्ताध्यनेन सहृदयः पाठकः साहित्यस्यहृदयपक्षेणापि संयुक्ताः जायन्ते।
5. अलङ्कार-रीति-औचित्य-वक्रोक्तिप्रस्थानैः, ध्वनिप्रस्थानं कथं विशिष्टमिति विवेचयति विद्यार्थी।

Paper III **G-3084** **भाषाविज्ञान संस्कृतव्याकरणञ्च**
(Linguistics & Sanskrit Grammer)

अधिगम प्रतिफल

1. सर्वेषां मानवानां सहजेयं जिज्ञासा यत् आदिमा भाषा का? कुतः समायाता? कथं समायाता? आदौ के वर्णाः आसन्? स्वराः व्यञ्जनानि कीदृशानि तदा?
2. देश-काल-स्थानकारणेन तत्रकीदृशानि परिवर्त्तनानि जातानि।
3. छात्राः वर्णानां विकासः सक्रमेण परिचिता जायन्ते।
4. तत् तद्देशीयभाषाणां पदानि विज्ञाय तेषां तुलनात्मकाध्ययने छात्राणां रुचिः जायते।
5. धातूनां रूपनिर्माणविधिं विज्ञाय विद्यार्थी विविधधातूनां साहित्यिकप्रयोगे व्यावहारिकप्रयोगे च कुशलाः भवन्ति।

Paper IV **G-782** **प्रायोगिकी एवं मौखिकी**
(Practical and Viva-Voce)

अधिगम प्रतिफल

1. अधीतं स्मृतं विषयं कथं प्रस्तोतव्यमिति अवगन्तुंपारयति छात्रः।
2. विषयविशेषज्ञं प्रतिप्रस्तुतिकरणेन भविष्यकालिकस्य साक्षात्कारस्य अभ्यासो भवति।
3. पृथक् पृथक् पुस्तकैः पृथक् पृथक् छन्दसांसंकलनं छात्रस्य साहित्यसम्बन्धिनं ज्ञानं वर्धयति।
4. छन्दसामलंकाराणां लक्षणानि प्रतियोगितापरीक्षास्वपिसहाय्यं ददति।
5. अस्मिन् काले निर्मिता पुस्तकसूची शोधसमये सहायिका भवति। अनेकैः पुस्तकैः, सुधीभिः लेखकैः च छात्रस्य परिचयः तस्य कल्याणाय कल्पते।

IV Semester

Paper I **G-4082** **भारतीयं दर्शनम्** (वेदान्त-योग-मीमांसादर्शनम्)
(Indian Philosophy) *(Vedant, Yog & Mimansa Darshan)*

अधिगम प्रतिफल

1. 'तत्त्वमसि'अस्य बहुश्रुतस्य वाक्यस्य अधिगमप्रक्रियां विदन्ति विद्यार्थिनः।
2. विशालस्यास्य ब्रह्माण्डस्य संरचनायां मूलभूततत्त्वाःके अस्य परिज्ञानं भवति।
3. साम्प्रतिके जनसमाजे खुप्रथितं दर्शनं योगदर्शनम्। योगदर्शनं दैनन्दिनजीवनस्य अङ्गम्। अस्याध्ययनं आजीवनं सुखदं विद्यार्थिने।
4. ज्ञानेन सह स्वास्थ्यं संरक्षति पाठकः।

Paper II **G-4083 धर्मशास्त्रम् अर्थशास्त्रञ्च**

(Dharm Shastr & Arth Shastr)

अधिगम प्रतिफल

1. प्रशासकस्य करणीयकार्यैरकरणीयकृत्यैः परिचिताः छात्राः जीवने तस्य प्रयोगेच जागरुकाः जायन्ते।
2. पुरातने दुर्गनिर्माणं कथं क्रियते स्म इति विज्ञाय पुरातनीं रक्षाविधिमवबोधयन्ति छात्राः।
3. मन्त्रिणः, सचिवाः, नीतिज्ञाः, देशभक्ताः, विधिज्ञाः, शास्त्रज्ञाः, नीतिज्ञः, कूटनीतिज्ञाः स्युरिति स्पष्टं ज्ञानं भवति। एतेषांगुणानामभावे देशे उपद्रवाः आक्रमणानि च भवितुम्मर्हन्ति।
4. 'कौटिल्यमर्थशास्त्रम्' साम्प्रतमपि समसामयिकं विद्यते। शास्त्रस्यास्याध्ययनं देशरक्षायां तत्पराणां मानवानां हितावहं खलु।
5. याज्ञवल्क्यकालिनी समाजव्यवस्था कीदृशी आसीत्? तत्र किं हेयमुपादेयञ्चास्ति, इति विवेको जायते छात्रम्।

Paper III **G-4084 ब्राह्मणं प्रातिशास्यं निरूक्तञ्च**

(Brahman Pratishakhy & Nirukt)

अधिगम प्रतिफल

1. निषिद्धानि कृत्यानि क्रियते चेत् महती हानिर्भवति, मानवस्य, समाजस्य चेति चेतना आयाति छात्रेषु।
2. ऋग्वेदप्रातिशास्यं पुरातनं खलु। तदा स्वराणां व्यवस्था का आसीत्, व्यञ्जनानि कीदृक्षाणि, कियन्ति चजिज्ञासा जागर्ति पठकेषु। कदाचित् तेषामध्ययने ते प्रवृत्ता अपि भवन्ति।
3. वृद्धिप्रक्रिया, गुणप्रक्रिया कथं भिन्ना, पाणिनि व्याकरणेन इत्यवबोधो छात्राणां लाभायकल्पते।
4. शेमुषिजुषा यास्कमुनिना यत् आदिनं भाषाविज्ञानं प्रस्तुतम् तद्द्वितीयम्।
5. यादृशी ऊहा निरुक्ते दरीदृश्यते, तेनापि छात्राः विषयाणां विवेचने समर्थां भवन्ति।

एम0 ए0 संस्कृत (M.A. SANSKRIT)
प्रथम सत्र (I Semester)
G-1082

Paper I: **वेद, उपनिषद्, शिक्षा एवं वैदिक साहित्य का इतिहास** *पूर्णाङ्क -100*
(Ved, Upnishad, Shiksha & History of Vedic Literature)

Unit I	**ऋग्वेद सूक्त** -	30
	1. ज्ञान (10/71) 2. उषस् (3/61) 3. पुरुष (10/90)	
	4. हिरण्यगर्भ (10/121) 5. वाक् (10/125)	
Unit II	**ईशावास्योपनिषद्** एवं **तैत्तिरीयोपनिषद् (शिक्षावल्ली)**	20
Unit III	**पाणिनीय शिक्षा** (1-40)	30
Unit IV	**वैदिक साहित्य का इतिहास** (चारों वेदों का सामान्य परिचय)	20

***नोट** - वेद मन्त्रों से व्याख्या, स्वराङ्कन सहित पद पाठ, सारांश तथा देवता की विशेषताओं से सम्बन्धित प्रश्न पूछे जायेंगे तथा यूनिट II तथा III से व्याख्या पूछी जायेगी।*

Books Recommended

1. **ऋग्वेद संहिता** - सम्पा. रामगोविन्द त्रिवेदी चौखम्बा विद्याभवन वाराणसी
2. **ऋक्सूक्त संग्रह** - हरिदत्त शास्त्री, साहित्य भण्डार, मेरठ
3. **ऋक्सूक्त सौरभ** - डा0 आर0 के0 लौ, ज्ञान प्रकाशन, मेरठ
4. **ईशावास्योपनिषद्** - ईशादि नौ उपनिषद्, गीताप्रेस गोरखपुर
5. **ईशावास्योपनिषद्** - Ed. Swami Chinmayanand, The Chinmay Publication Trust, Madras
6. **तैत्तिरीयोपनिषद्** - गीताप्रेस गोरखपुर
7. **पाणिनीय शिक्षा** - सम्पा0 विद्यासागर डा0 दामोदर महतो, मोतीलाल बनारसीदास, दिल्ली
8. **वैदिक साहित्य और संस्कृति**- आचार्य बलदेव उपाध्याय, वाराणसी,
9. **The New Vedie Selection-** Telang and Chaubey, Bharti Vidhya Prakashan, Varanashi

एम0 ए0 संस्कृत (M.A. SANSKRIT)
प्रथम सत्र (I Semester)
G-1083

Paper II: **भारतीय दर्शन** (न्याय–वैशेषिक, सांख्य एवं इतिहास) *पूर्णाङ्क - 100*

Indian Philosophy (Nyay-Vaisheshik, Sankhy and History)

Unit I	**तर्कभाषा** (अर्थापत्ति प्रमाणपर्यन्त)	30
Unit II	**सांख्यकारिका** - ईश्वरकृष्ण (कारिका 1 से 30 तक)	25
Unit III	**सांख्यकारिका** - ईश्वरकृष्ण (कारिका 31 से अन्त तक)	25
Unit IV	**भारतीय दर्शन का इतिहास**	20

नोट *- Unit I, II, & III से व्याख्या और सामान्य प्रश्न पूछे जायेंगे।*

Books Recommended

1. **तर्कभाषा** - आचार्य विश्वेश्वर, ज्ञानमण्डल प्रकाशन, वाराणसी
2. **तर्कभाषा** - आचार्य श्रीनिवास शास्त्री, साहित्य भण्डार, मेरठ
3. **तर्कभाषा** - डा0 राकेश शास्त्री
4. **सांख्यकारिका** - डा0 आद्या प्रसाद मिश्र, इलाहाबाद
5. **सांख्यकारिका** - डा0 हरिदत्त शास्त्री, साहित्य भण्डार, मेरठ
6. **सांख्यकारिका** - ज्ञान प्रकाशन, मेरठ
7. **सांख्यकारिका** - डा0 राकेश शास्त्री
8. **भारतीय दर्शन** - बलदेव उपाध्याय - वाराणसी
9. **भारतीय दर्शन** - उमेश मिश्र, हिन्दी संस्थान, लखनऊ
10. **भारतीय दर्शन** - डा0 श्रीकान्त पाण्डेय, साहित्य भण्डार, मेरठ
11. **सांख्य एवं जैन दर्शन की तत्त्वमीमांसा** - डा0 रामकिशोर शर्मा, ज्ञान प्रकाशन, मेरठ
12. **सांख्य दर्शन का इतिहास** - उदयवीर शास्त्री, विरजानन्द वैदिक संस्थान, ज्वालापुर

एम0 ए0 संस्कृत (M.A. SANSKRIT)
प्रथम सत्र (I Semester)
G-1084

Paper III: **नाटिका एवं नाट्यशास्त्र** *पूर्णाङ्क - 100*
(Natika & Dramaturgy)

Unit I	**रत्नावली नाटिका** (अङ्क 1 व 2)	20
Unit II	**भरतमुनि का नाट्यशास्त्र** (द्वितीय)	20
Unit III	**दशरूपक** - धनञ्जय (प्रथम प्रकाश)	20
Unit IV	**दशरूपक** - धनञ्जय (तृतीय प्रकाश)	20
Unit V	**नाट्यशास्त्र का इतिहास**	20

नोट - *यूनिट 1, 2, 3 तथा 4 से व्याख्या तथा तत्सम्बन्धी सामान्य प्रश्न पूछे जायेंगे।*

Books Recommended

1. **रत्नावली नाटिका** - डा0 शिवराज शास्त्री सम्पादित, साहित्य भण्डार, मेरठ
2. **नाट्यशास्त्र** - बाबू लाल शुक्ल, चौखम्बा सुरभारती, वाराणसी
3. **नाट्यशास्त्र** - साहित्य भण्डार, मेरठ
4. **दशरूपक** - (नन्दी टीका सहित), रामजी उपाध्याय, वाराणसी
5. **दशरूपक** - डा0 भोलाशंकर व्यास
6. **दशरूपक** - डा0 श्रीनिवास शास्त्री, साहित्य भण्डार, मेरठ
7. **संस्कृत नाट्य साहित्य** - डा0 जयकिशन प्रसाद खण्डेलवाल
8. **Aspects of Poetic Language -** By K. Krishnamoorthy, Pune, 1986

एम0 ए0 संस्कृत (M.A. SANSKRIT)
प्रथम सत्र (I Semester)
G-1085

Paper IV: **गीतिकाव्य एवं गद्यकाव्य** *पूर्णाङ्क - 100*

(Geetikavy and Gadyakavy)

Unit I	**मेघदूत** (पूर्वमेघ)	20
Unit II	**मेघदूत** (उत्तरमेघ)	20
Unit III	**कादम्बरीकथामुखम्** - बाणभट्ट (मंगलाचरण से चाण्डाल कन्या वर्णन तक, विन्ध्याटवी वर्णन, अगस्त्याश्रम वर्णन, पम्पासरोवर वर्णन, प्रभात वर्णन, जाबालि वर्णन, संध्या वर्णन एवं रात्रिवर्णन)	40
Unit IV	**गीति काव्य तथा गद्य काव्य का इतिहास**	20

नोट - *यूनिट I, II, III से व्याख्या, सूक्ति तथा सामान्य प्रश्न पूछे जायेंगे।*

Books Recommended

1. **मेघदूतम्** - ज्ञान प्रकाशन, मेरठ
2. **मेघदूतम्** - अमरनाथ शुक्ल, साहित्य भण्डार, सुभाष बाजार, मेरठ
3. **कादम्बरीकथामुखम्** - तारणीश झा, रामनारायण लाल बेनीमाधव, कटरा, इलाहाबाद
4. **संस्कृत साहित्य का इतिहास** - बलदेव उपाध्याय, शारदा मन्दिर, वाराणसी
5. **कादम्बरी एक सांस्कृतिक अध्ययन**- वासुदेव शरण अग्रवाल,
6. **संस्कृत साहित्य का इतिहास** - वाचस्पति गैरोला, चौखम्बा विद्याभवन, वाराणसी

एम0 ए0 संस्कृत (M.A. SANSKRIT)
द्वितीय सत्र (II Semester)
G-2082

Paper I: **संस्कृत महाकाव्य** *पूर्णाङ्क - 100*
(Sanskrit Epic)

Unit I	**भारवि - किरातार्जुनीयम्** (प्रथमसर्ग)	25
Unit II	**माघ - शिशुपालवधम्** (प्रथमसर्ग)	25
Unit III	**श्री हर्ष - नैषधीयचरितम्** (प्रथमसर्ग 1 से 100 श्लोक)	25
Unit IV	**संस्कृत महाकाव्य का इतिहास**	25

***नोट** - सम्बद्ध ग्रन्थों से व्याख्या, सूक्ति एवं सामान्य प्रश्न पूछे जायेंगे।*

Books Recommended

1. **किरातार्जुनीयम्** (प्रथमसर्ग) - डा0 राजेन्द्र मिश्र, अक्षयवट प्रकाशन, इलाहाबाद
2. **किरातार्जुनीयम्** (प्रथमसर्ग) - डा0 जनार्दन शास्त्री, मोतीलाल बनारसीदास, दिल्ली
3. **किरातार्जुनीयम् महाकाव्य** - अनु. श्री रामप्रताप त्रिपाठी, लोकभारती प्रकाशन, इलाहाबाद
4. **शिशुपालवधम्** - अनु. श्री रामप्रताप त्रिपाठी, शास्त्री हिन्दी साहित्य सम्मेलन, प्रयाग
5. **नैषधीयचरितम्** - साहित्य भण्डार, सुभाष बाजार, मेरठ
6. **नैषधीयचरितम्** - नारायणी टीका, राष्ट्रिय संस्कृत संस्थान, दिल्ली
7. **नैषधीयचरितम्** - श्रीहर्ष, व्या. हरगोविन्द शास्त्री, चौखम्बा संस्कृत सीरीज, वाराणसी
8. **संस्कृत साहित्य की रूपरेखा** - श्री चन्द्रशेखर पाण्डेय, साहित्य भण्डार, मेरठ
9. **Sanskrit Sahitya ka Vishad Itihas –** Gupta Pushpa, Estern Book linkers' Delhi
10. **History of classical Sanskrit Literature -** Krishnamacariar, Motilal BD, Delhi

एम0 ए0 संस्कृत (M.A. SANSKRIT)
द्वितीय सत्र (II Semester)
G-2083

Paper II: **संस्कृत काव्यशास्त्र** *पूर्णाङ्क - 100*
(Sanskrit Poetics)

Unit I	**मम्मट - काव्य प्रकाश** (प्रथम उल्लास)	20
Unit II	**मम्मट - काव्य प्रकाश** (द्वितीय एवं तृतीय उल्लास)	30
Unit III	**मम्मट - काव्य प्रकाश** (चतुर्थ उल्लास) अभिनवगुप्त की रस सूत्र-व्याख्या पर्यन्त	10
Unit IV	**मम्मट - काव्य प्रकाश** (सप्तम उल्लास से रस दोष)	20
Unit V	**मम्मट - काव्य प्रकाश** (नवम एवं दशम उल्लास से अधोलिखित अलंकारों के लक्षण एवं उदाहरण तथा दो अलंकारों में परस्पर अन्तर- अनुप्रास, यमक, श्लेष, दीपक, तुल्ययोगिता, उपमा, उत्प्रेक्षा, रूपक, अर्थान्तरन्यास, दृष्टान्त, विभावना, विशेषोक्ति, समासोक्ति, सन्देह एवं भ्रान्तिमान)	20

Books Recommended

1. **काव्यप्रकाश** - वामन झलकीकर टीका, भंडारकर, प्राच्यविद्या संस्थान, पुणे 1965
2. **काव्यप्रकाश** - आचार्य विश्वेश्वर, ज्ञान मण्डल वाराणसी 1960
3. **काव्यप्रकाश** - श्री निवास शास्त्री, साहित्य भण्डार, मेरठ
4. **काव्यप्रकाश** - पारसनाथ द्विवेदी, वाराणसी
5. **काव्यप्रकाश** - डा0 सत्यव्रत सिंह, चौखम्बा विद्याभवन, वाराणसी 1955
6. **काव्यशास्त्र का इतिहास** - डा0 सत्य देव चौधरी, दिल्ली
7. **काव्यशास्त्र का इतिहास** - एस. के. डे.
8. **The Kavyaprakash of Mammata** ***(Part I)*** - Ed. G.N Jha, Varanasi, 1967.

एम0 ए0 संस्कृत (M.A. SANSKRIT)
द्वितीय सत्र (II Semester)
G-2084

Paper III: संस्कृत व्याकरण, निबन्ध एवं अनुवाद
(Sanskrit Grammar, Essay & Anuvad)

पूर्णाङ्क - 100

Unit I	**कारक प्रकरण** (सिद्धान्त कौमुदी)	20
Unit II	**स्त्री प्रत्यय** (सिद्धान्त कौमुदी)	20
Unit III	**तद्धित प्रकरण** (लघुसिद्धान्त कौमुदी) अण्, इञ्, त्व, तल्, मतुप् ढक्, तरप्, तमप्, इनि, ईयसुन् प्रत्यय	20
Unit IV	**निबन्ध**	20
Unit V	अनुवाद (क) हिन्दी से संस्कृत में अनुवाद	10
	(ख) संस्कृत (अपठित) से हिन्दी में अनुवाद	10

नोट *- यूनिट I, II, एवं III से सूत्र व्याख्या तथा सामान्य प्रश्न पूछे जायेंगे।*

Books Recommended

1. **सिद्धान्तकौमुदी** - चौखम्बा सुरभारती प्रकाशन
2. **लघु सिद्धान्त कौमुदी** - सम्पा. श्री धरानन्द शास्त्री, मोतीलाल बनारसीदास, दिल्ली, 1969
3. **संस्कृत व्याकरण** - श्री निवास शास्त्री सम्पा., साहित्य भण्डार, मेरठ
4. **संस्कृत व्याकरण** - डा0 मधु सक्सेना, मानसी प्रकाशन, मेरठ
5. **प्रौढ़ रचनानुवाद कौमुदी** - डा0 कपिलदेव द्विवेदी, विश्वविद्यालय प्रकाशन, वाराणसी, दिल्ली 1969
6. **संस्कृत रचनानुवाद प्रभा** - श्री निवास शास्त्री, साहित्य भण्डार, मेरठ
7. **निबन्धशतकम्** - डा0 कपिलदेव द्विवेदी
8. **संस्कृत निबन्ध पारिजातम्** - डा0 गणेशदत्त शर्मा, साहित्य भण्डार, मेरठ
9. **संस्कृत निबन्ध रत्नाकर** - डा0 शिव प्रसाद भारद्वाज, अशोक प्रकाशन, दिल्ली 6
10. **बृहद् संस्कृत निबन्ध कलिका** - आचार्य शिवदत्त द्विवेदी, भारतीय विद्या प्रकाशन, वाराणसी
11. **संस्कृत निबन्धावलिः** - डा0 रामजी उपाध्याय, लोक भारती प्रकाशन, इलाहाबाद

एम0 ए0 संस्कृत (M.A. SANSKRIT)
द्वितीय सत्र (II Semester)
G-2085

Paper IV **रूपक और चम्पू काव्य** *पूर्णाङ्क -100*

(Roopak and Champu-kavy)

Unit I	**शूद्रक-मृच्छकटिकम्** (अङ्क 1 से 3)	25
Unit II	**भवभूति-उत्तररामचरितम्** (अङ्क 1 से 3)	25
Unit III	**नलचम्पू**-प्रथम उच्छ्वास (आर्यावर्त वर्णन तक)	25
Unit IV	रूपक तथा चम्पू काव्य का उद्भव और विकास	25

नोट - *सम्बद्ध ग्रन्थों से व्याख्या, सूक्ति तथा सामान्य प्रश्न पूछे जायेगें।*

Books Recommended

1. **उत्तररामचरितम्** - आचार्य प्रभुदत्त स्वामी, ज्ञान प्रकाशन, मेरठ
2. **Uttararamacharitam-** Ed. GK Bhat, Popular Publishing House, Surat 1965
3. **Uttararamacharitam-** with the comm. Ghanshyama with notes by PV kane, tr. by C.N. Joshi, Ed. 4 Mothilal Banarsi dass, Delhi, 1962
4. **Uttararamacharitam-** Com. Eng Tr. by. Saradaranjan Ray. By, Kumudranjan Ray 1966
5. **भवभूति उत्तररामचरितम्** - महालक्ष्मी प्रकाशन, शहीद भगतसिंह मार्ग, आगरा
6. **भवभूति और उनका उत्तररामचरितम्**- परिमल पब्लिकेशन, दिल्ली, 1927
7. **Bhavbhuti** – VV Mirashi, Motilal Banarsi dass, 1974
8. **Bhavbhuti** – RD Karmarkar, Karnatak University, Dharwar 1971
9. **मृच्छकटिकम्** - एम. आर. काले, मोतीलाल बनारसी दास, दिल्ली
10. **मृच्छकटिकम्** - श्रीनिवास शास्त्री, भण्डार, सुभाष बाजार, मेरठ
11. **Mudraraksasa of Visakhdatta-** By M.R. kale, Delhi
12. **Mudraraksasa of Visakhdatta-** Saradaranjan Ray, Calcutta
13. **नल चम्पू** - साहित्य भण्डार, मेरठ
14. **History of Classical Sanakrit Literature -** By S.K Dey & S.N. Das Gupta, Calcutta

एम0 ए0 संस्कृत (M.A. SANSKRIT)
तृतीय सत्र (III Semester)
G-3082

Paper I: **संहिता एवं निरुक्त** *पूर्णाङ्क - 100*

(Sanhita and Nirukt)

Unit I	**ऋग्वेद** - 1. नासदीय सूक्त (10/129), 2. सरमा-पणि (10/108), 3. विश्वामित्र-नदी (3/33)	20
Unit II	**शुक्ल यजुर्वेद** - 1. शिव संकल्प, अध्याय 34, (1-6) 2. प्रजापति अध्याय 23 (1-5)	25
Unit III	**अथर्ववेद**- 1. राष्ट्राभिवर्धनम् (1/29), 2. काल (10.53) 3. पृथिवी सूक्त (12/1 से 1-15 मन्त्र)	25
Unit IV	**निरुक्त** - यास्क (प्रथम अध्याय)	30

नोट - *सभी यूनिट से व्याख्या एवं तत्सम्बन्धी सामान्य प्रश्न पूछे जायेंगें।*

Books Recommended

1. **अथर्ववेद भाषा भाष्य** - दयानन्द संस्थान, दिल्ली
2. **अथर्ववेद भाषा भाष्य** - स्वामी जगदीश्वरानन्द दिल्ली
3. **अथर्ववेद भाष्य** - क्षेमकरणदास त्रिवेदी, दिल्ली
4. **अथर्ववेद संहिता** - सायण भाष्य, पं. रामस्वरूप गौड़, चौखम्बा विद्याभवन, वाराणसी
5. **शिव संकल्प सूक्त** - सुषमा पाण्डेय
6. **Sayana's Introduction to Rigveda** (P. Peterson.) कचौड़ी वाली गली, वाराणसी
7. **निरुक्तम्** - छज्जूराम शास्त्री
8. **निरुक्तम्** - डा0 श्रीकान्तपाण्डेय, साहित्य भण्डार, मेरठ
9. **निरुक्तम्** - डा0 उमाशंकर ऋषि
10. **यजुर्वेद भाष्य** - क्षेमकरणदास त्रिवेदी, दिल्ली

एम0 ए0 संस्कृत (M.A. SANSKRIT)
तृतीय सत्र (III Semester)
G-3083

Paper II: **ध्वनि तथा व्यञ्जना स्थापन एवं काव्यशास्त्रीय षट्प्रस्थान।** *पूर्णाङ्क - 100*
(Dhwani, Vyanjana Sthapan & Kavyashastriy Shat Prasthan)

Unit I	**प्रमुख ग्रन्थ, प्रमुख चिन्तक, प्रमुख सिद्धान्त**	25
Unit II	**ध्वन्यालोक** - आनन्दवर्धन (प्रथम उद्योत)	30
Unit III	**काव्यप्रकाश** - पञ्चम उल्लास (व्यञ्जना स्थापन)	25
Unit IV	**काव्यप्रकाश** - अष्टम उल्लास	20

Books Recommended

1. **संस्कृत काव्य शास्त्र का इतिहास** - डा0 नगेन्द्र
2. **काव्यालङ्कारसूत्रवृत्ति** - गंगानाथ, नई दिल्ली
3. **काव्यादर्श** - डा0 श्रीकान्त पाण्डेय, साहित्य भण्डार, मेरठ
4. **काव्यादर्श** - डा0 योगश्वरदत्त शर्मा, नाग प्रकाशन, दिल्ली
5. **ध्वन्यालोक** - डा0 कृष्ण कुमार, साहित्य भण्डार, मेरठ
6. **ध्वन्यालोक** - सम्पा. डा0 चण्डिका प्रसाद शुक्ल, इलाहाबाद
7. **ध्वन्यालोक** - सम्पा. के कृष्णमूर्ति, दिल्ली 1982
8. **आचार्य दण्डी की साहित्य साधना** - डा0 काशीनाथ तिवारी, नाग प्रकाशन दिल्ली

एम0 ए0 संस्कृत (M.A. SANSKRIT)
तृतीय सत्र (III Semester)
G-3084

Paper III: भाषा विज्ञान एवं संस्कृत व्याकरण

पूर्णाङ्क - 100

(Linguistics & Sanskrit Grammer)

Unit I	भाषा का उद्भव एवं विकास, भाषा परिवर्तन की दिशाऐं एवं कारण	10
Unit II	वाक्य विज्ञान एवं अर्थ विज्ञान की दिशाऐं एवं कारण	10
Unit III	ध्वनि परिवर्तन की दिशाऐं, ध्वनि नियम (ग्रिम, ग्रासमान)	15
Unit IV	भाषाओं का वर्गीकरण -	15
	(क) आकृतिमूलक - अयोगात्मक भाषा, योगात्मक भाषा, श्लिष्ट, अश्लिष्ट एवं प्रश्लिष्ट	
	(ख) पारिवारिक - स्वरूप एवं आधार	
Unit V	भारोपीय परिवार का महत्त्व एवं विशेषताऐं	10
	भारोपीय परिवार की शाखाऐं - केन्तुम् और शतम् वर्ग	
	आर्य ईरानी शाखा - आर्य परिवार, वैदिक, संस्कृत एवं अवेस्ता	
	प्राचीन भारतीय आर्य भाषाऐं - वैदिक एवं लौकिक संस्कृत की तुलना	
Unit VI	समास प्रकरण (लघुसिद्धान्त कौमुदी)	20
Unit VII	भू, एध् धातु के लट्, लोट्, लृट्, लङ्, विधिलिङ् लकारों की रूप सिद्धि (सिद्धान्त कौमुदी)	20

Books Recommended

1. **भाषा विज्ञान** - डा0 कर्ण सिंह, साहित्य भण्डार, मेरठ
2. **भाषा विज्ञान एवं भाषा शास्त्र** - डा0 कपिलदेव द्विवेदी, विश्वविद्यालय प्रकाशन वाराणसी
3. **संस्कृत सिंटैक्स** - तारापोरवाला, दिल्ली
4. **अर्थ विज्ञान और व्याकरण दर्शन** - डा0 कपिलदेव द्विवेदी, इलाहाबाद वि.वि. प्रकाशन, वाराणसी
5. **अर्थ विज्ञान : व्याकरण एवं काव्याशास्त्र का योगदान** - कमल कान्त मिश्र, नाग प्रकाशन, दिल्ली
6. **भाषाशास्त्र की भूमिका** - आचार्य नरेन्द्रदेव शर्मा, राधाकृष्ण प्रकाशन, दरियागंज, दिल्ली
7. **अर्थतत्त्व की भूमिका** - शिवनाथ, काशी
8. **सिद्धान्तकौमुदी** - चौखम्बा सुरभारती प्रकाशन
9. **लघु सिद्धान्त कौमुदी** - सम्पा. श्री धरानन्द शास्त्री, मोतीलाल बनारसीदास, दिल्ली, 1969
10. **An introduction to the Science of Meaning –** Oxford Blackwell, Semantics 1962.
11. **The Principles of Semantics –** Blackwell, Ullmann, Stephen, 1957

एम0 ए0 संस्कृत (M.A. SANSKRIT)
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G-782

Paper IV: प्रायोगिकी एवं मौखिकी
(Practical and Viva-Voce)

पूर्णाङ्क - 50+50

निम्न विषयों में से किसी एक से सम्बद्ध प्रायोगिकी कराई जायेगी तथा उसके संदर्भ में लिखित कार्य भी संकलित किये जायेगें-

1. **वर्णोच्चारण विधान** - कण्ठयौ अहौ, इचुयशाः तालव्या, औष्ठजौ उपू, ऋटुरषाः मूर्धन्या, लृतुलसाः दन्त्याः, जिह्वामूले तु कु, वः दन्त्योष्ठ्यम्, ए ऐ कण्ठतालव्यौ, ओ औ कण्ठौष्ठजौ।

2. **साहित्य से छन्दों का संकलन** - (किसी एक छन्द का संकलन, न्यूनतम 20 तथा एक से अधिक रचनाओं से) लक्षण एवं उदाहरण सहित- अनुष्टुप्, मालिनी, वंशस्थ, इन्द्रवज्रा, शिखरिणी, वसन्ततिलका, त्रोटक, वियोगिनी, मन्दाक्रान्ता, शार्दूलविक्रीडित, स्रग्धरा, आर्या, उपजाति, द्रुतविलम्बित।

3. **बिब्ल्योग्राफी** - वेद, दर्शन, पुराण, कवि (किसी एक विषय से सम्बद्ध न्यूनतम 25 पुस्तकों की सूची एवं विषय-वस्तु)

4. **योगासन एवं प्राणायाम**

5. **14 माहेश्वर सूत्र तथा उनसे प्रत्याहार रचना**

6. **निबन्धलेखन**

एम0 ए0 संस्कृत (M.A. SANSKRIT)
चतुर्थ सत्र (IV Semester)
G-4082

Paper I: **भारतीय दर्शन** (वेदान्त, योग तथा मीमांसा दर्शन) *पूर्णाङ्क - 100*

(Indian Philosophy) *(Vedant, Yog & Mimansa Darshan)*

Unit I - II	**वेदान्तसार** (सम्पूर्ण)	50
Unit III	**पातञ्जलयोग सूत्र** (समाधिपाद)	25
Unit IV	**अर्थसंग्रह** - व्याख्या हेतु निर्धारित अंश- आदितः आर्थीभावना पर्यन्तम्।	
	निम्नलिखित पर संक्षिप्त टिप्पणी अपेक्षित हैं- धर्मलक्षण, शाब्दीभावना, आर्थीभावना, वेदस्वरूप, विधिस्वरूप, उत्पत्तिविधि, विनियोगविधि, प्रयोगविधि, अधिकारविधि, मन्त्र, नामधेय, अर्थवाद एवं निषेध।	25

नोट *- सम्बद्ध ग्रन्थों से व्याख्या एवं प्रश्न पूछे जायेंगे।*

Books Recommended

1. **पातञ्जलयोग दर्शनम्** - आचार्य उदयवीर शास्त्री, दिल्ली
2. **पातञ्जलयोग दर्शनम्** - व्यास भाष्य, हिन्दी व्याख्या सहित, डा0 सुरेश चन्द्र श्रीवास्तव, चौखम्बा सुरभारती
3. **सर्वदर्शनसंग्रह** - उमाशङ्कर शर्मा, चौखम्बा विद्याभवन, वाराणसी
4. **SarvadarshanSangraha of Madhav-** Eng. Tr. by E.B. Cowell & A.E Gough, Delhi
5. **SarvadarshanSangraha of Madhav-** Ed. By U.S. Sharma, Varanasi
6. **A History of Indian Philosophy** – By J.N. Sinha, Calcutta,
7. **अर्थसंग्रह** - डा0 राकेश शास्त्री, चौखम्बा ओरियंटालिया
8. **The Philosophical Traditions of India-** Pt. Raju, Delhi
9. **भारतीय दर्शन का इतिहास** - आचार्य उमश मिश्र हिन्दी संस्थान, लखनऊ
10. **भारतीय दर्शन का इतिहास** - डा0 श्रीकान्त पाण्डेय, साहित्य बाजार, मेरठ
11. **वेदान्तसार** - डा0 अवनीन्द्र कुमार, परिमल पब्लिकेशन्स, दिल्ली
12. **वेदान्तसार** - डा0 सन्तनारायण श्रीवास्तव, इलाहाबाद
13. **वेदान्तसार** - डा0 राममूर्तिशर्मा, दिल्ली
14. **वेदान्तसार** - साहित्य भण्डार, मेरठ

एम0 ए0 संस्कृत (M.A. SANSKRIT)
चतुर्थ सत्र (IV Semester)
G-4083

Paper II: **धर्मशास्त्र एवं अर्थशास्त्र** *पूर्णाङ्क - 100*
(Dharm Shastr & Arth Shastr)

Unit I	**मनुस्मृति** (सप्तम अध्याय)	25
Unit II	**याज्ञवल्क्य स्मृति** (व्यवहाराध्याय से दायभाग प्रकरण)	25
Unit III	**कौटिल्य अर्थशास्त्र** (प्रथम विनयाधिकारिक)	25
Unit IV	**धर्मशास्त्र का इतिहास**	25

Books Recommended

1. **मनुस्मृति** - सम्पादक जे. के जैन, साहित्य भण्डार मेरठ
2. **मनुस्मृति** - सम्पादक प्रवीणप्रलयंकर, न्यू भारतीय बुक कॉर्पोरेशन, दिल्ली
3. **मनुस्मृति** - मोतीलाल बनारसीदास, दिल्ली
4. **मनुस्मृति** ***(कुल्लूक टीका)*** - गोविन्द शास्त्री, चौ. सं. सं, वाराणसी
5. **याज्ञवल्क्य स्मृति** ***(मिताक्षरा टीका)*** - सम्पा. उमेश चन्द्र पाण्डेय, चौखम्बा संस्कृत सीरीज, वाराणसी
6. **कौटिलीय अर्थशास्त्र** - उदयवीर शास्त्री, मेहरचन्द्रलक्ष्मण दास, दरियागंज दिल्ली
7. **कौटिलीय अर्थशास्त्र** - वाचस्पति गैरोला, वाराणसी
8. **The Kautiliya Arthasastra** – R.P. Kangle, Motilal Banarsidass, Delhi
9. **धर्मशास्त्र का इतिहास** - पी. वी. काणे, उत्तर प्रदेश हिन्दी संस्थान, लखनऊ 1963
10. **धर्मद्रुम** - आचार्य राजेन्द्र प्रसाद पाण्डेय, किशोर विद्या निकेतन, वाराणसी
11. **हिन्दू संस्कृति** - राधाकुमुद मुखर्जी
12. **Hindu Polity** – K.P. Jayaswal

एम0 ए0 संस्कृत (M.A. SANSKRIT)
चतुर्थ सत्र (IV Semester)
G-4084

Paper III: **ब्राह्मण, प्रातिशाख्य एवं निरुक्त** *पूर्णाङ्क - 100*
(Brahman Pratishakhy & Nirukt)

Unit I	**ऐतरेय ब्राह्मण** (अध्याय 33) हरिश्चन्द्रोपाख्यान (शुन:शेपाख्यान)	30
Unit II	**ऋग्वेद प्रातिशाख्य** प्रथम पटल (1-25 सूत्र)	30
Unit III	**निरुक्त** - द्वितीय अध्याय, प्रथम तथा द्वितीय पाद	20
Unit IV	**निरुक्त** - सप्तम अध्याय,	20

नोट- *यूनिट I, II तथा III से व्याख्या एवं प्रश्न पूछे जायेंगें।*

Books Recommended

1. **ऐतरेय ब्राह्मण** - सम्पा. डा. काशीनाथ शास्त्री, आनन्दाश्रम ग्रन्थावलि: ग्रन्थांक 32
2. **ऐतरेय ब्राह्मण** - सुधाकर मालवीय, चौखम्बा प्रकाशन
3. **ऐतरेय ब्राह्मण** - नाग प्रकाशन, जवाहर नगर दिल्ली
4. **ऋग्वेद प्रातिशाख्य *(उव्वट भाष्य)***- सिद्धेश्वर भट्टाचार्य, काशी हिन्दू विश्वविद्यालय, वाराणसी
5. **निरुक्तम्** - छज्जूराम शास्त्री
6. **निरुक्तम्** - श्रीकान्त पाण्डेय, साहित्य भण्डार, मेरठ
7. **निरुक्तम्** - डा0 उमाशंकर ऋषि
8. **निरुक्तम्** - श्री सीताराम शास्त्री, परिमल पब्लिकेशन, दिल्ली, तृ0 सं0 2002