

**Programme Learning Outcomes (PLOs):** As per NEP-2020, PLOs include outcomes specific to disciplinary areas of learning associated with the chosen field (s) of learning as well as generic learning outcomes. These also include transferable skills and competencies that post graduates of all programmes of study should acquire and be able to demonstrate for the award of the Degree. The programme learning outcomes would also focus on knowledge and skills that prepare students for further study, employment, research and responsible citizenship.

The PLOs of **M.Sc. Mathematics** programme are stated as per following domains:

PLOs	After the completion of Master degree in Mathematics, a student will be able to:
PLO-1: Knowledge and Understanding	Demonstrate the deep understanding and advanced knowledge in the core areas of Mathematics subject and understanding of recent developments and issues, including concepts, theories, principles, methods and techniques in different areas of pure and applied Mathematics.
PLO-2: General Skills	Acquire the general skills required for performing and accomplishing the tasks as expected to be done by a skilled professional in the fields of Mathematics.
PLO-3: Technical/ Professional Skills	Demonstrate the learning of advanced cognitive computing, programming, formulating models, using mathematical softwares and other teaching and professional skills required for completing the specialized tasks related to the profession and for conducting and analyzing the relevant research tasks in different domains of the Mathematics.
PLO-4: Communication Skills	Effectively communicate the attained skills in different areas of the Mathematics in a precise, well-structured and unambiguous mathematical language through effective oral and/or written expressions to the society at large.
PLO-5: Application of Knowledge and Skills	Apply the acquired knowledge and skills to the problems in the subject area, and to identify and analyze the issues where the attained knowledge and skills can be applied by carrying out research investigations to formulate evidence-based solutions to complex and unpredictable problems associated with the field of Mathematics or otherwise.
PLO-6: Critical thinking and Research Aptitude	Attain the capabilities of critical thinking, logical reasoning, investigating problems, analysis, problem solving, application of mathematical methods/techniques, in intra/inter-disciplinary areas of the <b>Mathematics</b> enabling to develop skills to solve mathematical problems having applications in other disciplines and/or in the real world and to formulate, synthesize, and articulate issues for designing of research proposals, testing hypotheses, and drawing inferences based on the analysis.
PLO-7: Constitutional, Humanistic, Moral	Know constitutional, humanistic, moral and ethical values, and intellectual property rights to become a scholar/professional with

*S*  
✓

*A*  
Deptt. of Mathematics  
K.U. KURUKSHETRA  
35

*Dec*  
Chairman  
Deptt. of Mathematics  
K.U. KURUKSHETRA

Values and Ethics	ingrained values in expanding knowledge for the society, and to avoid unethical practices such as fabrication, falsification or misrepresentation of data or committing plagiarism.
PLO-8: Capabilities/ qualities and mindset	To exercise personal responsibility for the outputs of own work as well as of group/team and for managing complex and challenging work(s) that requires new/strategic approaches.
PLO-9: Employability and job-ready skills	Attain the knowledge and skills required for increasing employment potential, adapting to the future work and responding to the rapidly changing demands of the employers/industry/society with time, and to have strong foundation in basic and applied aspects of Mathematics so as to venture into research in different areas of mathematical sciences, jobs in scientific and various industrial sectors and/or teaching career in Mathematics.

82/4  


---

✓

A-4  
 Deptt. of Mathematics  
 K.U. KURUKSHETRA

Dal

A-4  
 Chairman  
 Deptt. of Mathematics  
 K.U. KURUKSHETRA

### **Programme Outcomes (Pos)**

**The students pursuing the U.G programmes are expected, on completion of the program, to be able to:**

PO1: Think critically

PO2: Communicate effectively

PO3: Become socially more responsible

PO4: Become self-driven for lifelong learning

PO5: Follow basic code of ethics

PO6: Become employable

PO7: Become good human-being and valuable citizen contributing to the development of the nation.

PO8: Learn to work in team

PO9: Promote Research Skills & Competencies

PO10: Develop Documental and Dissemination Ability

### **Programme Specific Outcomes**

**For Commerce students: On completion of programme, student is expected to have**

PSO1: Knowledge of the forms of the organizations and their organizational structures.

PSO2: Role of management in an organization

PSO3: Practical application of management Principles

PSO4: Basic and commercial mathematics

PSO5: Statistical tools used in Business and various types of business research

PSO6: Basic market Research techniques, documentation & dissemination

PSO7: Accounting and its applicability and usefulness for decision making

PSO8: Understand recent market trends and device basic marketing strategies.

**For Science Students: Science students are expected to have**

PSO1: Practical application of Science and technology in day to day life.

PSO2: Identify, formulate, research literature, and analyse complex problems reaching substantiated conclusions using principles of mathematics and natural sciences.

PSO3: Apply ethical principles and commit to professional ethics and responsibilities

PSO4: Try to make innovation models

**For Arts Students: Students are expected to have**

PSO1: Realization of human values and social service.

PSO2: Critical temper and Creative ability.

PSO3: Understanding the interrelation between literature and society.

PSO4: Explaining the nature of language and literature.

PSO5: Obtaining the skills of literary criticism and writing.

PSO6: Illustrating the nature of literary forms like one-act-play, travelogue and short story

**For Home Science Students: Students are expected to have**

PSO1: Understand the basic concepts of Human Physiology, biochemistry and chemistry.

PSO2: Plan and prepare diet for healthy life style using the principles of Food Science and Nutrition.

PSO3: Understand the principles of growth and development from conception to old age and the role of family in development.

PSO4: Acquire scientific skills in the management of resources and develop basic skills for career options in the fields of dietetics, interior designing, textiles and fashion designing and preschool education.

PSO5: Understand and appreciate the role of interdisciplinary sciences in the development and well-being of individuals, families and communities.

PSO6: Understand the sciences and technologies that enhance the quality of life of people.

PSO7: Take science from the laboratory to the people.

**For Computer-Science Students : Students are expected to have:**

PSO1: Awareness about competitive examination like MCA, M.Sc. (IT) and other job opportunities.

PSO2: Appropriate techniques and modern hardware and software tools to engage in life-long learning.

PSO3: Application development approach and to successfully adopt in multi-disciplinary environment.

PSO4: Ability to select modern computing methods to solve different problems.

PSO5: Ability to work in a team to attain a common goal.

PSO6: Knowledge to apply design principles in development of software

PSO7: Ability to use current techniques, skills and tools necessary for computing environment.

## BA PUNJABI ELECTIVE

### Program Specific Outcomes

- ⇒ To develop a bonding with the mother tongue of the students.
- The students know about vocabulary and basic grammar.
- Students know how to study language and literature.
- The students know the difference between prose and poetry as a form of literature.

### Course Outcomes

- By reading modern poetry students are able to understand issues of modernism.
- The students get the literary sense.
- The students know the story as a form of literature.

*SK*  
(SATBIR KAUR)

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

- PSO1** Students will have knowledge and skills and in-depth acquaintance of animal species, their life biology, evolution, interaction with the environment at organismal, cellular and molecular level
- PSO2** Young students will understand the challenges of society and the country that falls into the realms of Zoology, such as Aquaculture, Reproductive health, Animal Behaviour, Cancer Biology, Microbiome and their roles in health and diseases, Bioremediation of pollutants and pesticides, etc.
- PSO3** Youth will be trained to Identify, review, and analyse complex situations of living forms and commitment to professional ethics and responsibilities and norms of the work/research practice
- PSO4** Youth will be capable of using research-based knowledge and research methods with problem solving expertise and robust communication skill with reference to animal life processes
- PSO5** This programme will develop personnel who can function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings with deep understanding of Zoology and management principles
- PSO6** This PG programme will develop youth with excellence in Zoology for career in teaching, research, industry and entrepreneurship in the line of self reliant India.



Tel No: 0172-2583956

Fax No: 0172-2583955

**Government College for Girls,  
Sector-14, Panchkula ( Haryana)**

---

**Course Outcomes (COs),  
Programme Outcomes (POs)  
and Programme Specific  
Outcomes (PSOs) for UG,  
Hons and PG Programmes**



# Programme Outcomes: PSO and Course Outcomes of B.Sc., Home Science

<p><b><u>Programme Specific Outcomes</u></b></p>	<p><b>PSO1: Understand and appreciate of interdisciplinary sciences in the development and well-being of individuals,families and communities.</b></p> <p><b>PSO2:-Take science from the laboratory to the people.</b></p> <p><b>PSO3:- Develop Professional skills in food ,nutrition ,housing ,product making,communication technologies and human development.</b></p> <p><b>PSO4:- Understand the sciences and technologies that enhance the quality of life of people.</b></p>
<p><b><u>Course Outcomes</u></b> <b>(Human development)</b></p>	<ul style="list-style-type: none"> <li>• <b>Demonstrate understanding and knowledge of growth and development.</b></li> <li>• <b>Understand Classical and contemporary theoretical perspectives in Human Development.</b></li> <li>• <b>Apply theoretical understanding of core concepts in Human development in the everyday context.</b></li> <li>• <b>Competent in using methods to study development in Human and explore family and community context.</b></li> <li>• <b>Gain knowledge to locate relvant ex. Of development in the cultural context, focusing on situatedness of human develop in Indian culture.</b></li> <li>•</li> </ul>

<p><b><u>Course outcomes</u></b> <b>(Food Science)</b></p>	<ul style="list-style-type: none"> <li>• <b>Understand the relationship between food,nutrition and health.</b></li> <li>• <b>Understand the function of food.</b></li> <li>• <b>Classify foods into various food groups.</b></li> <li>• <b>List the advantages and disadvantages of various methods of preparing food.</b></li> <li>• <b>Understand the concept of nutrient losses during cooking and enhancement of nutritional quality of foods.</b></li> </ul>
<p><b><u>Course outcomes</u></b> <b>(Introduction to Textiles)</b></p>	<ul style="list-style-type: none"> <li>• <b>Describe Textilefibres in terms of their production and properties.</b></li> <li>• <b>Understand various production techniques and properties of yarns.</b></li> <li>• <b>Identify fabrics and relate it to specific products keeping in mind fabric properties and characterstics.</b></li> <li>• <b>Understand spinning, weaving ,knitting .</b></li> <li>• <b>Understand the journey from fibre to fabric.</b></li> </ul>
<p><b><u>Course outcomes</u></b> <b>(Hygiene and promotive health)</b></p>	<ul style="list-style-type: none"> <li>• <b>Understand the concept of Immunity ,vaccination schedule .</b></li> <li>• <b>Gain knowledge related to national health programmes.</b></li> <li>• <b>Promote Personal hygiene amongst people.</b></li> <li>• <b>Concept of Positive heath.</b></li> <li>• <b>Introduction of Infection disease, symptom ,causes and treatment.</b></li> </ul>

**Programme Outcomes: PSO and**  
**Course Outcomes of M.Sc (Human**  
**Development)**

<b><u>Programme</u></b> <b><u>Specific</u></b> <b><u>Outcomes</u></b>	<p><b>PSO1:- Develop the skills and critical vision which will help them to conduct their own research and will be efficient in applying and interpretation of research methods.</b></p> <p><b>PSO2:- Make them to be able to articulate in-depth analysis of life span developmental areas.</b></p> <p><b>PSO3:- Develop the ability to compare, analyse and contrast various theoretical approaches and assess their validity in the societal context.</b></p> <p><b>PSO4:- Prepare the students for jobs in different government and non-government organizations like UNICEF, NIPCCD, NCERT, CRY, Action Aid, OXFAM, etc.</b></p> <p><b>PSO5:- Encourage them for become a counsellor by adding academic credential in counselling.</b></p> <p><b>PSO6: . Encourage them for make self-reliant by setting up their own Nursery School, Day Care Centre and Crèche.</b></p>
---	--

**Course**  
**Outcomes**

- **Help in achieve knowledge about different theories related to different stages of human development .**
- **Help in developing the skills and techniques to plan and execute activities in ECCE centres of different types such as day care centre, preschool, crèches etc.**
- **Help in understand basic concepts in guidance, counselling and therapy and help students understand the need for guidance and counselling in human development**
- **Sensitise students about socio economic and political factors that determine life experiences in relation to gender.**
- **Aware about the need for proactive approaches and empowerment to attain and maintain equality.**
- **Help the students to understand family as a component of social-cultural milieu and context and familiarize them with developmental perspective in family life cycle.**
- **Guide students to become aware and sensitized to issues related to different vulnerable population such as elderly, person with disabilities, women, children, etc.**
- **Help to understand various concepts related to research like research designs, types of variables, sample and sampling designs, hypothesis and methods of data collection etc. and help in developing scientific competence in writing and abstracting skills**
- **Prepare the students for Internship in various related Institutions and Organizations.**
- **Strengthening the students in preparing a research frame work through research study.**

**Botany Department**

Semester-I	<p><b>Course: Diversity of microbes</b> The course aims at making the students understand the diversity among Algae and Fungi. The course is designed to familiarize the students with structure, nutrition, reproduction and economic importance of Bacteria, Cyanobacteria and Viruses.</p> <p><b>Course: Cell Biology</b> This course help the students to develop a firm foundation in the fundamentals of cell biology and cytogenetic. Students will learn about the cell division (Mitosis and Meiosis)</p>
Semester-II	<p><b>Course: Diversity of Archegoniates</b> This course help the student to understand the diversity among Bryophytes and Pteridophytes. Students will learn about the structure and reproduction in various genera of Bryophyta and Pteridophyta.</p> <p><b>Course: Genetics</b> The objective of this course is to have an insight in to the Study of inheritance of character from one generation to next generation. This course help the students to Know about the Mechanism of gene expression and its regulation in Prokaryotes and Eukaryotes.</p>

Semester-III	<p><b>Course: Biology and Diversity of Seed Plants</b>  This course is helpful to understand the origin and evolution of seed plants. This Course has been designed to know about the external, internal structure and reproduction of some important Gymnosperms.</p> <p><b>Course: Plant Anatomy</b>  The course aims at making the student aware of internal structure of root, stem, leaf of the most evolved group of plants, the Angiosperms. Structural adaptations in plants growing in different environmental conditions are also taught.</p>
Semester-IV	<p><b>Course: Biology and diversity of seed plants</b>  The course is an introduction to methodology and principles of plant systematic and origin of seed plant diversity. The students are made to understand the key methods and principle of biological classification and nomenclature. Lectures and practicals provide Skills to identify and characterize several plant families of Surrounding areas.</p> <p><b>Course: Plant Embryology</b>  This course has been designed to know about the internal structure and reproduction of most evolved group of plants, the Angiosperms.</p>
Semester-V	<p><b>Course: Plant Physiology</b></p>

	<p>This course deals with various physiological processes of plants like Photosynthesis, respiration, mineral nutrition and plant - water relations and transport of organic substances.</p> <p><b>Course: Ecology</b></p> <p>This course has been designed to impart the knowledge about environment (Climatic, Edaphic and topographic factors). The students are made aware about the Ecosystem, community, Biogeochemical cycle and Phyto-geography.</p>
Semester-VI	<p><b>Course: Biochemistry and Plant Biotechnology</b></p> <p>This course helps the students to explore the relationship between plants and new innovative techniques of plant tissue culture, genetic engineering, gene cloning etc. This course has been designed to impart the knowledge of plant growth hormones, lipid metabolism, nitrogen metabolism and enzymology.</p> <p><b>Economic botany:</b> Topics covered under this course include use of plants as food plants, pulses, vegetables, fibers, oils, spices, medicinal plants, beverages, rubber and sugar plants. This Course has been designed to impart the knowledge of timber, energy plantations and bio-fuels.</p>

### Course Outcomes: Department of Chemistry

Chemistry covers a wide range of scientific disciplines concerned with three basic areas (inorganic, organic and physical). The course structure is designed to afford a broad foundation in chemistry that stresses scientific reasoning and analytical problem solving with a molecular perspective. Also they expand the knowledge available opportunities related to chemistry in the government services through public service commission particularly in the field of food safety, health inspector, pharmacist etc. Students get exposures of a breadth of experimental techniques using modern instrumentation. The course aims to understand the concept of chemistry to inter relate and interact to the other subject like mathematics, physics, biological science etc. After completion of degree, students gained the theoretical as well as practical knowledge of handling chemicals.

Semester 1	Inorganic Chemistry	The course aims to give basic understanding of various types bonding involved in compound formation. The detailed knowledge about the Chemical bonds such as Ionic, Covalent, Hydrogen, and Vander Waal forces is provided to students as each bond plays its own important role, and will continue to do so, in the development and maintenance of our world.
	Physical Chemistry	In the course student learns about particle nature of matter, states of matter, their interconversion under different condition of temperature and pressure and Critical phenomenon.
	Organic Chemistry	This course gives knowledge about the hydrocarbons such as alkanes & cycloalkanes. The study of hydrocarbons is particularly important to the fields of medicine and petroleum industries. These hydrocarbons are processed to produce compounds for a number of applications. Students also study the types of bonding in organic compounds, the stereochemistry and the various mechanism of organic reactions.
Semester 2	Inorganic chemistry	In this course students study about characteristic properties of s and p-Block elements and their applications. In this knowledge, introduction, types and application of semiconductors are also provided.
	Physical Chemistry	This course deals with chemical kinetics, various theories of chemical kinetics and introductory part of physical Chemistry. Kinetics provide evidence for the mechanisms of chemical processes. Kinetic study helps to derive a suitable mathematic model that closely describes the rate of reaction and reaction mechanism.
	Organic Chemistry	This course deals with alkenes, arenes, aromaticity, dienes, alkynes, alkyl and aryl halides. In this course student studies some unsaturated hydrocarbons such as alkenes, alkynes and dienes, aromaticity and alkyl and aryl halides. Aromatic compounds plays important role in biochemistry and industry. Knowledge of aromaticity helps to understand the factors responsible for stability of compounds.



Semester 3	Inorganic chemistry	This course helps the students to explore Chemistry of d-Block elements, co-ordination compounds and non-aqueous solvents. Chemistry of d-Block elements helps students to understand the shapes of different orbitals and different principles for filling electrons. Students also studies spectroscopic properties and reaction mechanisms of co-ordination compounds.
	Physical Chemistry	The objective of this course is to have insight into Thermodynamics-I, chemical equilibrium and distribution law. This course covers principles of classical thermodynamics and develops understanding of mass, energy, heat, work, efficiency, ideal and real thermodynamic cycles. Students also studies first and second laws of thermodynamics, perfect gas law, properties of real gases, and the general energy equation for closed and open systems.
	Organic Chemistry	This course is an introduction to alcohols, phenols, epoxides, ultraviolet absorption spectroscopy, carboxylic acids and its derivatives. Students studies to interpret UV-Visible spectroscopy, basic principles, working principle, taking spectra and outline of UV spectroscopy device.
Semester 4	Inorganic chemistry	In this course, Chemistry of f-Block elements, theory of qualitative and Quantitative analysis is studied. This course will provide a synopsis of the chemistry of f elements (lanthanides and actinides) covering structure, bonding, redox and spectroscopic properties and reactivity. The coordination and organometallic chemistry of these ions are also discussed with an overview of their main applications.
	Physical Chemistry	This course deals with introductory part of Thermodynamics-II and electrochemistry. This course covers introduction to electrochemistry, thermodynamics, electrode potentials, galvanic and electrolytic cells, electrode kinetics, dynamic electrochemistry, mass transport by migration, diffusion and convection and diffusion layers.
	Organic chemistry	This course aims at making the students understand Infra-red spectroscopy, amines, diazonium salts, aldehyde and ketones. In this course the general principles of spectroscopy are explained and the student will learn to correlate spectroscopic data with the quantum mechanical description of the matter.
Semester 5	Inorganic chemistry	In this course, students are taught metal-ligand bonding in transition metal complexes, thermodynamics and kinetic aspects of metal complexes, magnetic properties of transition metal complexes and electronic spectra of transition metal complexes. This course helps the student to understand the key features of coordination compounds, including the variety of structures, oxidation numbers and electronic configurations, coordination numbers and ligands.

	Physical Chemistry	In this course, students are taught quantum Chemistry, physical properties and molecular structure and spectroscopy. In quantum chemistry, there is discussion of the phenomenon like black body radiation, Planck's radiation law and photoelectric effect. Spectroscopy-I includes electromagnetic radiation and rotational spectrum. Spectroscopy-II includes vibrational spectrum and Raman spectrum.
	Organic chemistry	The objective of this course is to understand Carbohydrates, Nuclear Magnetic Resonance Spectroscopy, Organometallic Compounds. The objective of the course is to teach the basic aspects of nuclear magnetic resonance (NMR) spectroscopy, which is an important analytical tool in chemical and pharmaceutical industry for structural characterization of molecules. The topics to be covered will include one-dimensional NMR, Chemical shifts, J-coupling, Interpretation of NMR spectrum, and their application/interpretation,
Semester 6	Inorganic Chemisry	The aim of this course is to have an insight about Acids and Bases, organometallic chemistry, Bio-inorganic Chemistry, silicons and phosphazenes. This course provides students with a detailed knowledge of metalloenzymes in metabolism and synthesis, technical applications of hydrogenases or metal containing pharmaceuticals. Students who complete the course are expected to understand the concepts of coordination chemistry in biological environments, and to utilizes this knowledge to analyze the influence of such an environment on the reactivity of a metal centre.
	Physical Chemistry	This course deals with Statistical Mechanics, Photochemistry, solutions and colligative properties and phase equilibrium. The course gives an introduction to statistical mechanics and some important applications. The course discusses how probability theory can be used to derive relations between the microscopic and macroscopic properties of matter.
	Organic Chemistry	This course includes Organic synthesis via enolates, heterocyclic compounds, amino acids, peptides and proteins. The course deals with important heterocyclic systems, such as pyridines, quinolines, isoquinolines, pyrroles, furanes, tiophenes, indoles, pyrimidines, purines, imidazoles, aziridines and oxiranes. For each group, ring synthesis, chemical properties and characteristic reactions is discussed.

# COURSE OUTCOMES

## BSc(N.M) 1<sup>st</sup> year

### PH-101 Classical Mechanics and theory of relativity

Students will be able to articulate and describe:

- Relative motion. Inertial and non-inertial reference frames.
- Parameters defining the motion of mechanical systems
- Study of the interaction of forces between solids in mechanical systems.
- Centre of mass of mechanical systems.
- Laws of motion and conservation principles.

### PH-102 Electricity Magnetism and Electromagnetic Theory

Students will be able to:

- Understand the relationship between electrical charge, electrical field, electrical potential, and magnetism.
- Understanding of ballistic galvanometer
- Define the magnetic field and magnetic flux, solve technical problems.
- Calculate the magnitude and direction of the magnetic field for symmetric current distributions using the Law of Biot-Savart and Ampere's Law

### PH-201 Properties of Matter and Kinetic Theory of Gases

Completion of this course will enable the students to:

- To know about the elasticity and material constant
- Know the basics of thermal physics.
- Make use of different problem-solving techniques in the field.
- Understand the kinetic theory of gases: Maxwell –Boltzmann distribution law, Brownian motion etc.
- Understand the behavior of real gases.

### PH -202 Semiconductor Devices

Completion of this course will enable the students to:

- have a basic knowledge of semiconductor physics
- acquire knowledge about how a semiconductor diode rectifies an input ac signal
- Learn how to construct a transistor amplifier and how its gain varies with frequency

## **BSc(N.M) 2<sup>nd</sup> year**

### PH -301 Computer Programming and Thermodynamics

- Students will have understanding of:
- Basic of Algorithms and flow charts.
- Control statement and scientific word processing.
- Basics of thermodynamics

### PH- 302 Wave and Optics -I

Students will be able to:

- Understand the role of the wave equation and appreciate the universal nature of wave motion.
- Understand superposition of harmonic waves.
- Understand interference and diffraction (Fraunhofer and Fresnel diffraction)
- Understand optical phenomena such as polarization.

### PH - 401 Statistical Physics

Completion of this course will enable the students to:

- Understand how statistics of the microscopic world can be used to explain the thermal features of the macroscopic world.
- Use thermal and statistical principles in a wide range of applications.
- Learn a variety of mathematical techniques.
- Understand Bose-Einstein and Fermi Dirac statistics.
- Establish connection between statistics and thermodynamics.

### PH - 402 Wave and Optics II

Completion of this course will enable the students to:

- Basics of polarized Light. Nicol prism, Quarter wave plate and
- half wave plate, production and detection
- Plane polarized light
- Circularly polarized light
- Elliptically polarized light.
- Mathematical technique Fourier Transform

## **BSc(N.M) 3<sup>rd</sup> year**

### PH - 501 Quantum and Laser Physics

Completion of this course will enable the students to:

- Understanding of: Importance of quantum mechanics compared to classical mechanics at microscopic level.
- Understand various tools to calculate Eigen values and total angular momentum of particles.
- Understand Schrodinger's equation for spherical symmetric potential, complete solution of hydrogen atom.
- Understand and explain the principles and design considerations of various (solid state, gas and semiconductor) lasers, modes of their operation and areas of their application,
- Understand the principles of ultrashort pulse generation and amplification,
- Understand trends of development of modern lasers,
- Gain the basic skills of practical work with lasers.

### PH -502 Nuclear Physics

Upon completion of the course Students will have understanding of:

- Basic properties of nucleus and nuclear models to study the nuclear structure properties.
- Various aspects of nuclear reactions will give idea how nuclear power can be generated.
- Nuclear fission and fusion.
- Basic of elementary particles.

### PH -601 Solid State and Nano Physics

Students will have understanding of:

- Structures in solids and their determination using XRD.
- Behavior of electrons in solids including the concept of energy bands and effect of the same on material properties.
- Magnetic and dielectric properties of solids.
- Practice problem solving by using selected problems in solid state physics.
- Superconductivity basics.
- Understand basic of Nano science and nanotechnology.
- Understand synthesis and characterization of nanostructures materials.
- Understand quantum dots and electron transport

## PH - 602 Atomic and Molecular Spectroscopy

On successful completion of this module, students should be able to:

- Know the vocabulary and concepts of modern physics: basic elementary quantum mechanics, nuclear physics.
- Understand the relationship between observation and theory and their use in building the basic concepts of modern physics.
- Understand the application of modern physics to modern technology
- Become familiar with molecular spectroscopy and have gained basic ideas regarding microwave spectroscopy, infrared spectroscopy and Raman Spectroscopy.

## Program Outcomes: PSO and Course outcome of B.Sc., Zoology

<p><b>Programme Specific Outcomes</b></p>	<p><b>PSO1.</b> Develop insight and improve their analytical communication and professional skills</p> <p><b>PSO2.</b> Understanding the morphology and functional characteristics at cellular and sub-cellular (molecular) level</p> <p><b>PSO3.</b> Enhancing the technical skills for experimental purposes</p> <p><b>PSO4.</b> Explained how organisms function at the level of the gene, genome, cell, tissue, organ and organ-system. Drawing upon this knowledge, they are able to give specific examples of the physiological adaptations, development, reproduction and behavior of different forms of life.</p> <p><b>PSO5.</b> Understood the applied biological sciences such as sericulture, Apiculture, aquaculture, Industrial microbiology, rDNA technology and medicine for their career opportunities.</p>
<p><b>Course Outcomes</b></p> <p>Semester-1</p>	<p><b>Paper Title- Life Diversity from protozoa to Porifera and Cell Biology-I</b></p> <ul style="list-style-type: none"> <li>➤ Came to knowing the basic concept of biosystematics and procedure in taxonomy.</li> <li>➤ Identified the taxonomic status of the entire non-chordates up to Porifera and discuss the evolutionary model of the group.</li> <li>➤ Described the general biology of few selected non-chordates useful to mankind.</li> <li>➤ Know about some of the important and common protozoans, of parasitic nature causing diseases in human beings.</li> <li>➤ Understood the structure of cells and cell organelles in relation to the functional aspects and understanding of the working principles and applications of microscopes</li> </ul>
<p><b>Course Outcomes</b></p> <p>Semester-1</p>	<p><b>Paper Title- Life Diversity from Coelenterate to Helminthes and Cell Biology-II</b></p> <ul style="list-style-type: none"> <li>➤ Understood the diversity and classification and functional aspects of different systems of phylum <b>Coelenterate and Helminthes</b> ,.</li> <li>➤ Describe type study.</li> <li>➤ Know about some of the important and common Helminthes, of parasitic nature causing diseases in human beings.</li> <li>➤ Described the composition of prokaryotic and eukaryotic cells. Structure and function of nucleus understood the structure and functions of chromosome; mitotic and meiotic cell divisions.</li> <li>➤ To understand causes of cancer</li> <li>➤ Know how immunity works.</li> </ul>

<p><b>Course Outcomes</b></p> <p>Semester-2</p>	<p><b>Paper Title- Life Diversity from Annelida to Arthropod and Genetics -1</b></p> <ul style="list-style-type: none"> <li>➤ Understood the diversity and classification and functional aspects of different systems of phylum annelid and Arthropoda,.</li> <li>➤ Described the social life and economic importance of insects..</li> <li>➤ Understood the importance of metamerism in annelids.</li> <li>➤ Describe type study.</li> <li>➤ Understood the theories of classical genetics &amp; blood group inheritance in man</li> <li>➤ Described the genetic variation through linkage and crossing over, chromosomal and aberrations.</li> <li>➤ Understood sex determination and sex linked inheritance.</li> <li>➤ Explain the process of gene expression and applications</li> </ul>
<p><b>Course Outcomes</b></p> <p>Semester-2</p>	<p><b>Paper Title- Life Diversity from Molluska to Hemichordata and Genetics –II</b></p> <ul style="list-style-type: none"> <li>➤ Understood the diversity and classification and functional aspects of different systems of phylum Mollusca Echinodermata and Hemichordates.</li> <li>➤ Described the advanced characteristic features of cephalopod molluscs.</li> <li>➤ Came to know that the resemblance and evolutionary significance of larval forms of echinoderms.</li> <li>➤ To understand link between invertebrate and vertebrates through Hemichordates.</li> <li>➤ Classify and characterize Phylum-mollusca, Echinodermata &amp; Hemichordata.</li> <li>➤ Describe gene action</li> <li>➤ Describe mutation, mutagenesis and repair</li> <li>➤ Acquired knowledge skill development and observation of blood group identification.</li> <li>➤ Understood the genetic defects and inborn errors of metabolism and genetic counseling and role of inbreeding and out breeding, prenatal diagnostics, DNA finger printing</li> <li>➤</li> </ul>
<p><b>Course Outcomes</b></p> <p><b>Lab work</b></p>	<p><b>Paper III practical- LAB- semester 1 and 2</b></p> <ul style="list-style-type: none"> <li>➤ Understood the anatomy and physiology of invertebrate animals dissection [Demonstration through videos only].</li> <li>➤ Described the structural study and mounting of organisms for permanent preparation of slides.</li> <li>➤ Came to knowing the rules of taxonomy and the principle of animal classification.</li> <li>➤ Understood the diversity morphology, biological characters and taxonomical importance some selected museum specimens of different animal groups.</li> </ul>
<p><b>Course Outcomes</b></p> <p>Semester-3</p>	<p><b>Paper Title- Life Diversity of chordates-I</b></p> <ul style="list-style-type: none"> <li>➤ Characteristics and Outline Classification of Protochordata</li> <li>➤ Characteristics and Outline of Classification of Origin of Chordata</li> <li>➤ Type study of some important chordates</li> <li>➤ Make able to discuss some and very important phenomena in Chordates like parental care and migration.</li> </ul>



<p><b>Course Outcomes</b></p> <p>Semester-3</p>	<p><b>Paper Title- and Mammalian physiology-I</b></p> <ul style="list-style-type: none"> <li>➤ To understand the structure of carbohydrates, proteins and fats.</li> <li>➤ To understand the dietary constituents and mechanism of feeding.</li> <li>➤ To know about the mechanism of transport through cell membrane.</li> <li>➤ Understood the knowledge of cholesterol and its biological significance</li> <li>➤ Described the enzymes, mechanism of enzyme action and factors affecting the enzyme activity</li> <li>➤ Understood the types and importance of vitamins</li> <li>➤ Develop understanding for the fundamental concepts of physiology of digestion</li> <li>➤ Familiarize students with structure of muscles and muscle physiology</li> <li>➤ Develop basic understanding structure of bone.</li> </ul>
<p><b>Course Outcomes</b></p> <p>Semester-4</p>	<p><b>Paper Title- Life Diversity of chordates-II</b></p> <ul style="list-style-type: none"> <li>➤ To know about characteristics and Outline Classification of Pisces and Amphibia</li> <li>➤ To understand characteristics and Outline Classification Reptiles and Aves, flight adaptations and migration</li> <li>➤ To know the characteristics and Outline Classification of Mammalia</li> <li>➤ Adaptive radiation and dentition in mammals.</li> </ul>
<p><b>Course Outcomes</b></p> <p>Semester-4</p>	<p><b>Paper Title- Mammalian physiology-II</b></p> <ul style="list-style-type: none"> <li>➤ Develop understanding of blood vascular system</li> <li>➤ Develop the fundamental concepts of physiology of respiration</li> <li>➤ Familiarize students with renal physiology and muscle</li> <li>➤ Develop basic understanding of endocrine system and its interactions with other systems.</li> <li>➤ Develop understanding of Neural integration.</li> <li>➤ Develop understanding of reproduction physiology</li> </ul>
<p><b>Course Outcomes</b></p> <p><b>Lab work</b></p>	<p><b>Paper III practical- LAB- semester 3 and 4</b></p> <ul style="list-style-type: none"> <li>➤ Understood the anatomy and physiology of vertebrate animal dissection [Demonstration through videos only].</li> <li>➤ Came to knowing the rules of taxonomy and the principle of animal classification.</li> <li>➤ Understood the diversity morphology, biological characters and taxonomical importance some selected museum specimens of different animal groups.</li> <li>➤ To detect the abnormal constituents of urine.</li> <li>➤ Understood Estimation of Hemoglobin and RBC and WBC count and DLC.</li> <li>➤ Came to know that internal skeletons and osteology of different bone structures</li> </ul>

<p><b>Course Outcomes</b></p> <p>Semester-5</p>	<p><b>Paper Title- Environmental Biology</b></p> <ul style="list-style-type: none"> <li>➤ Understood and appreciate the environment and ecological services of life on earth. Structure and function of Ecosystem.</li> <li>➤ Understood importance of Biodiversity and conservation</li> <li>➤ Understood the abiotic factors of environment and biogeochemical cycle and</li> <li>➤ Interspecific and intraspecific relationships of animals.</li> <li>➤ Acquired knowledge of ecosystem, food chain, energy flow and productivity and understood pond as a model ecosystem.</li> <li>➤ Understood population growth and regulation.</li> <li>➤ Understood some interesting phenomenon in animals.</li> <li>➤ Imparted knowledge of habitat ecology, pollution and bioremediation of polluted environment.</li> <li>➤ Develop understanding of aquatic ecology</li> </ul>
<p><b>Course Outcomes</b></p> <p>Semester-5</p>	<p><b>Paper Title- Evolution and Developmental Biology</b></p> <ul style="list-style-type: none"> <li>➤ Understood trace the Origin of life</li> <li>➤ To know about established theories of evolution</li> <li>➤ Correlate the theories with the evidences</li> <li>➤ To explain the genetic basis of evolution</li> <li>➤ Understood evolution of man and horse.</li> <li>➤ Understood the process of development of animals.</li> <li>➤ Understood the process of early development of frog and chick.</li> <li>➤ development of extra</li> <li>➤ To understand embryonic membrane &amp; the nature and physiology of placenta.</li> <li>➤ Came to know the inducer and inductor role in embryogenesis and knowledge about</li> <li>➤ Metamorphosis and the process of regeneration.</li> <li>➤ Develop the basic concepts of development</li> <li>➤ Explain the fundamental concept of embryogenesis</li> <li>➤ Explain the fundamental concept of Organogenesis</li> <li>➤ Describe the developmental model systems- invertebrates</li> <li>➤ Describe the developmental model systems- vertebrates</li> </ul>
<p><b>Course Outcomes</b></p> <p>Semester-6</p>	<p><b>Paper Title- Aquaculture and Pest Management-I</b></p> <ul style="list-style-type: none"> <li>➤ Described the fisheries and fishery industries</li> <li>➤ Understood the various types and methods of aquaculture practices.</li> <li>➤ Understood the physiology and reproductive mechanisms of important fishes.</li> <li>➤ Understood the modern techniques and methods of fishery industries.</li> <li>➤ Attained knowledge about important cultivable fin fishes, shell fishes and importance of</li> </ul>
<p><b>Course Outcomes</b></p>	<p><b>Paper Title- Aquaculture and Pest Management-II</b></p>

Semester-6	
------------	--

# वी०ए० कृतीय वर्ष (द्वितीय अर्धवार्षिक)

## पाठ्यक्रम परिणाम (Course Outcomes)

### सेमेस्टर-5.

1. 'समकालीन हिन्दी कविता' पाठ्यपुस्तक में निर्धारित काव्य स्थानकों में अर्थ के आधार पर सामाजिक, भाविक, राजनैतिक परिप्रेक्ष्य में आधुनिक मानव की भाषागत अभिव्यक्ति है जो जीवन संघर्ष के विभिन्न सामाजिक मुद्दों तथा भाषाधिकार के सभ्यतात्मक पक्ष का अन्वेषण करती है। आधुनिक आलोचना, वर्तमान जीवन की विस्मयिकाओं को उलझने, जीवन का अर्थलापन करने विभिन्न पारिवारिक सम्बन्ध, नवजीवन का सौन्दर्य आदि से विद्यार्थियों को अवगत कराता है और जीवन के संघर्षों से जुड़ते हुए जीवन को गहरी निगाहों से देखते हुए अपने लक्ष्य की ओर अग्रसर होता है इस सब का ज्ञान विद्यार्थी इस पाठ्यपुस्तक से अर्जित करते हैं।
2. हिन्दी साहित्य का आधुनिक काल में निर्धारित पाठ्यक्रम के अन्तर्गत युग द्वैत युग, धार्मिक युग, प्रतीकवाद, प्रयोगवाद व गहरी कविता और समकालीन कविता के आधार पर विद्यार्थियों को समकालीन सामाजिक राजनैतिक, सांस्कृतिक, भाविक, भाविक व साहित्यिक संरचना से अवगत कराया जाता है। इसके साथ ही विद्यार्थियों को यह ज्ञान भी प्राप्त होता है कि समकालीन साहित्य वर्तमान संदर्भों में की गिना प्रभावित है।
3. प्रयोगवादी हिन्दी पाठ्यक्रम के अन्तर्गत निर्धारित पाठ्यक्रम में पत्र लेखन, संक्षेपण तथा पत्रलेखन विषयों की जानकारी विद्यार्थियों को दी जाती है। वर्तमान संदर्भों में हिन्दी भाषा का प्रकार, प्रकार व साहित्यिक एवं वाणिज्य के क्षेत्र में प्रयोग विस्तार महत्वपूर्ण है। अतः इस कंप्यूटर युग में हिन्दी का जैसे प्रयोग कर सकते हैं और कार्य जीवन का साधन जैसे बना सकते हैं। साहित्यिक प्रयोग के साथ ही हिन्दी भाषा का पारिवारिक रूप में तथा परिवर्तित भिन्न गणनात्मक नये शब्दों का प्रयोग व अभ्यास से ही हमारे काल में वृद्धि हो

और सृजनशीलता में प्रविष्टि करके और किसी भी विषय पर  
 अपेक्षाकृत करलता से अपने विचार व्यक्त करने की शक्ति  
 की विद्यार्थी एक प्रभावशाली हिन्दी के लेखक के रूप में  
 पाठ्यपुस्तक में उल्लेख करते हैं। इसके निर्दिष्ट औपचारिक  
 पत्र और विभागीय पत्र लेखन में वर्तमान युग में कार्यकर्ता के प्रयोग  
 किए जाने वाले पत्रों के संक्षिप्त रूप परिपत्र, अनुस्मारक  
 प्रेम विवर्धित, प्रतिवेदन (Report) लेखनीय पत्र-वादि के बारे में भी  
 विद्यार्थियों को अवगत कराया जाता है।

संश्लेषण-6

1. पाठ्यपुस्तक में निर्धारित 'नव्यतर गद्य गौरव' पाठ्यपुस्तक में निर्धारित  
 निबन्ध, संस्मरण, यात्रावृत्त, दृश्य चित्र पर आधारित निबन्ध  
 आदि विभिन्न विधाओं का परिचय विद्यार्थियों में प्राप्त किया।  
 गद्य गद्यकारों के जीवन और साहित्यिक परिचय की जानकारी  
 दी गई। आशा का इन्त में देश प्रेम की भावना, उच्चा निबन्ध में  
 आचार्य शुक्ल की ने भाव एवं विचारों को स्वयं विकसित व विवर्धित  
 मानवीय भावों का गम्भीर चित्रण, 'विलम्ब' में गद्यकीर्तिका द्वारा  
 एक विलम्बरी को संवेदनशील एवं उद्बुद्धिमान रूप में चित्रित करना  
 उनके प्रति स्नेह का भाव, 'देवदारन' में भारतीय संस्कृति की शक्ति  
 और 'मेरे राम का छुट्टा भीग रहा है' निबन्ध में नई पीढ़ी और  
 पुरानी पीढ़ी की वैचारिक विषमता, 'सदाचार का नाकीस' निबन्ध  
 में दृश्य चित्र के माध्यम से सामाजिक विकृतियों, रजनीति  
 मध्यचार, गौपण, पारखण्ड, अवसरवादिता, सम्बुद्धिमान का  
 पंर सुधारवादी और 'निबन्ध के पक्ष पर' पर यका वृत्तान्त  
 वर्णन आदि विभिन्न विषयों की जानकारी विद्यार्थियों को प्राप्त  
 होती है।

हरियाणवी लोकशास्त्र के उन्नीस विभिन्न लोक कविताओं में - कविता, मन्त्रा, गान, आभंग आदि के बारे में विचारों को प्रस्तुत कराया जाता है। हरियाणा की विभिन्न क्षेत्रों का विशद परिचय और हरियाणवी संस्कृति और सभ्यता की जानकारी विद्यार्थी प्राप्त करते हैं। इन हरियाणवी लोक कविताओं की विभिन्न विधाओं के माध्यम से हरियाणा की संघ परम्परा, संगीत, जुधावरे, लोकगीतों की जानकारी प्राप्त होती है।

3. प्रगतिशील दिग्दी के उन्नीस विचारित प्रश्नोत्तर में 'पत्रकारिता' विषय पर विशेष जानकारी, पत्रकारिता के विभिन्न रूप व इसकी व्युत्पत्ति के बारे में जानकारी विद्यार्थी प्राप्त करते हैं। पत्रकारिता के विषय पर जानकारी प्राप्त कर विद्यार्थी इसे समाज का माध्यम भी मानते हैं। दिग्दी पत्र व पत्रिका से समाज का मार्ग प्रशस्त करते हैं।

Changshu

# बीबी०एच० प्रथम वर्ष (हिन्दी अनिवार्य)

## पाठ्यक्रम परिणाम (Course outcomes)

### सेमेस्टर - 1 (संचार मैट्रिक्स)

1. बीबी०एच० प्रथम सेमेस्टर के विद्यार्थियों के लिए निर्धारित पाठ्यक्रम का उद्देश्य वाणिज्य एवं पुस्तक से जुड़े विद्यार्थियों को राजभाषा और हिन्दी राष्ट्रभाषा का व्यवहारिक ज्ञान प्रदान करना है ताकि वे अपनी बात उचितमान्य तम उच्च अपनी मातृभाषा हिन्दी में समझा सकें।
2. वाणिज्य एवं पुस्तक से जुड़े विद्यार्थियों को राजभाषा अधिनियम राष्ट्रभाषा अधिनियम तथा केंद्रीय सरकार की हिन्दी योजना का ज्ञान होता है।
3. पत्र-संचार के विविध रूपों छल पत्र, फ़ोन पत्र, पावती, अनुस्मारक, अर्द्ध-सरकारी पत्र, संपत्त, परिपत्र, आदेश, पृष्ठांकन, निविदा सूचना, विज्ञापन जैसे विविध, पत्र गेट, प्रतिवेदन आदि का ज्ञान हासिल होता है। इससे विद्यार्थियों को कविषय में किसी भी तरह से काम करने की कोई कठिनाई नहीं आती है।
4. इसी पाठ्यक्रम में वाणिज्य, बैंकिंग, कम्प्यूटर, अन्तर्राष्ट्रीय व्यापार अन्तर्राष्ट्रीय मुद्रा कोष, भारतीय अर्थव्यवस्था, वैश्वीकरण और भारतीय अर्थव्यवस्था आदि विभिन्न विषयों पर निबन्ध लेखन की प्रथा है जिससे विद्यार्थियों को उपरलिखित सभी विषयों की जानकारी, वर्तमान स्थिति का अनुमान लग जाता है। बीबी०एच० के हिन्दी के पाठ्यक्रम में निर्दिष्ट इन विषयों की जानकारी से विद्यार्थी अधिक से अधिक लाभ उठा सकते हैं साथ में पारिभाषिक शब्दावली का भी ज्ञान हो जाता है।

Champion

वीरस्यो की द्वितीय वर्ष  
सेमेस्टर-3 (दिन्दी अनिवार्य)

1. 'आश्विन जल गरिका' पाठ्यपुस्तक में विद्यारित - भारत की महिला वैद्यनीशरों गुप्त, बधशंकर पुस्तक, शर्मिष्ठा त्रिपाठी निराला, रामेश्वरी सिंघे दिन्कर के जीवन व साहित्य की पूरी जानकारी विद्यार्थी प्राप्त करते हैं।
2. 'निबन्ध लेखन' के अन्तर्गत - भाग्याधिकार, नैतिक शिक्षा, मर्यादापेक्ष, विवाह और नो-दो-गिफ्टिंग, वैज्ञानिक प्रगति के भारत का योगदान, वैश्वीकरण और विश्व अर्थ विभिन्न विषयों की व्यापक जानकारी और निबन्ध कला के बारे में जानकारी मिलती है।
3. करारी और अधि-करारी पर चर्चा और परिपक्व, कौशल-अभिनय, अनुभव-आरम्भ, कृषि विभिन्न रूपों का परिचय प्राप्त होता है।
4. वैज्ञानिक आणविकी में विद्यार्थियों के अपने विज्ञान विषय को सम्बन्धित परिभाषिक आणविकी जिसे वैज्ञानिक आणविकी करते हैं इसका परिचय प्राप्त होता है।

सेमेस्टर-4

1. पाठ्यपुस्तक में विद्यारित पाठ्यपुस्तक में आठ रसमों की - औसत-जल की उचितरी रात, लक्ष्मी का स्वागत, रीढ़ में हड्डी, बसन्त ऋतु का नारिकेल संस्कार और भावना, वफुत-बड़ा स्वागत आदि रसमों की विधि है। इनके आधुनिक युग में सामाजिक विकल्पात्मक, राजकीय समारोहों, सामाजिक स्थितियों, ओषध, समाजीकरण, मूल्यता, मध्यमगीत जीवन का अपार्ष आदि वर्तमान जीवन में काने वाली समस्याओं और संघर्षों से जुड़ता मानव आदि का काने इन रसमों को किया गया है जिसके बारे में विद्यार्थी अवगत होते हैं। और अपने जीवन में काने वाली समस्याओं और संघर्षों से निपटने के लिए हृदय संतुष्ट करते हैं।



2. निम्नलिखित लेखन के उल्लेखित महिलाविचार, गाँधी दर्शन, शिक्षा और राजनीति, विज्ञान और प्रकृति का पुद्गल, 4 म्यूटर तथा इंटरनेट का विभिन्न विषयों की जानकारी विद्यार्थी अर्जित करते हैं।
3. ऊर्ध्वसूचक पत्रलेखन एवं तार लेखन का विषय पर भी विस्तृत ज्ञान विद्यार्थी प्राप्त करते हैं।
4. वैज्ञानिक शब्दावली - विद्यार्थी विज्ञान विषय के सम्बन्धित शब्दों के कारण पारिभाषिक शब्दावली के उल्लेखित विषय के सम्बन्धित शब्दावली का ज्ञान अर्जित करते हैं। इसके विद्यार्थियों को अपने विषय के सम्बन्धित की जानकारी प्राप्त होती है।

Charan Kumar

## **B.A. Political Science**

### **Course Outcome**

#### **Semester 1**

##### **Paper: Indian Constitution**

- To acquaint students about our constitution and democracy of India. Course aims at making students aware about the constituent Assembly, Fundamental Rights and Duties
- To acquire knowledge about Union Executive, State Executive, Union Legislature, State Legislature, Procedure of Constitutional Amendment and Panchayati Raj Institutions
- To understand the third organ of Government i.e. Judiciary for the successful working of Democracy

#### **Semester 2**

##### **Paper: Indian Politics**

- To make students understand Centre-State relations and sharing of powers between Centre and States
- Exercising franchise is necessary for Democracy. Students will be made aware about Election Commission, its powers, Electoral Reforms, Voting Behaviour and Political Parties
- Understanding factionalism in Indian Politics on the basis of caste, religion, region and language and its implications on Democracy

#### **Semester 3**

##### **Paper: Indian Political Thinkers**

- To introduce the students to some of the Indian political thinkers and their ideas, which helped in shaping the society and politics of Modern India
- Discussing the thoughts and contribution of Raja Ram Mohan Roy, Swami Dayanand Saraswati, Swami Vivekanand, Aurobindo Ghosh
- To acquire knowledge about the views and thoughts of Gopal Krishan Gokhale, Dada Bhai Narojee, Bal Gangadhar Tilak and Lala Lajpat Rai

#### **Semester 4**

##### **Paper: Indian Political Thinkers**

- The basic objective of the paper is to help the students to develop a comprehensive understanding of the basics of Indian Political Thought
- Explaining the ideas of J.P. Narayan, Ram Manohar Lohia, M.N. Roy and B.R. Ambedkar

- Elaborating the ideas and sacrifices of Mahatma Gandhi, J.L. Nehru, Subhash Chander Bose and Bhagat Singh

## **Semester 5**

### **Paper: International Relations**

- Introducing Students to the core aspects of International Relations and contemporary issues on the International agenda. Explaining scope and importance of International Relations as an Autonomous Academic Discipline
- Understanding the concepts of National Power, Balance of Power and Collective Security
- Explaining certain basic concepts like Globalisation and Environmentalism in contemporary World Order

## **Semester 6**

### **Paper: International Organisation**

- The objective is to understand the historical development of International Organisations
- To understand the structure and working of League of Nations and United Nations
- To analyse the working of United Nations in Resolving Conflicts, Peaceful Operations, Disarmament and Environment Protection

बी.ए.सी. द्वितीय वर्ष(तृतीय सत्र) CS-03

Course Outcomes:

Paper Name: Compulsory Sanskrit

Paper code: CS-03

CO 1- भारतीय संस्कृति और पुरातन ज्ञान से अवगत कराना ।

CO 2- कहानियों। के माध्यम से विद्यार्थियों को सामाजिक, राजनैतिक और व्यवहारिक ज्ञान प्रदान करना ।

CO 3-शब्द रूप द्वारा बौद्धिक क्षमता को विकसित करना ।

CO 4- संधि के द्वारा वर्णों के मेल का ज्ञान कराना ।

बी.ए.सी. द्वितीय वर्ष(चतुर्थ सत्र) CS 04

Course Outcomes:

Paper Name: Elective Sanskrit

Paper code: CS-04

CO 1- भारतीय संस्कृति और पुरातन ज्ञान से अवगत कराना ।

CO 2- कहानियों। के माध्यम से विद्यार्थियों को सामाजिक, राजनैतिक और व्यवहारिक ज्ञान प्रदान करना ।

CO 3-शब्द रूप द्वारा बौद्धिक क्षमता को विकसित करना ।

CO 4- संधि के द्वारा वर्णों के मेल का ज्ञान कराना ।

बी.ए.तृतीय वर्ष(पञ्चम सत्र) संस्कृत ऐच्छिक ES 05

Course Outcomes:

Paper Name: Elective Sanskrit

Paper code: ES-05

CO 1- संस्कृत नाटक के माध्यम से कवि चातुर्य द्वारा बोधिकता का विकास ।

CO 2-विद्यार्थियों को कालिदास के जीवन, काल, काव्य शैली व नाट्य शैली से परिचित करवा कर कवि कौशल को उजागर करना ।

CO 3- वैदिक साहित्य द्वारा भारतीय संस्कृति और पुरातन ज्ञान से परिचित कराना ।

CO 4- कारक सुत्रों द्वारा वाक्य संरचना एवं अशुद्धि संशोधन से अवगत कराना ।

अंलकारों के ज्ञान द्वारा भाषा के आंलकारिक सौंदर्य का बोध कराना ।

बी.ए. तृतीय वर्ष(षष्ठ सत्र) संस्कृत ऐच्छिक ES 06

Course Outcomes:

Paper Name: Elective Sanskrit

Paper code: ES-06

CO1- संस्कृत नाटक के माध्यम से कवि चातुर्य द्वारा बौद्धिकता का विकास ।

CO 2- विद्यार्थियों को महाकवि कालिदास के वैशिष्ट्य से परिचित कराना ।

CO 3- लौकिक साहित्य द्वारा सामाजिक, राजनैतिक और व्यवहारिक ज्ञान प्रदान कराना ।

CO 4- स्त्री प्रत्यय द्वारा भाषा की शुद्धता का ज्ञान कराना ।

निबन्ध लेखन द्वारा लेखन क्षमता को विकसित करना ।

बी.ए. द्वितीय वर्ष( तृतीय सत्र) संस्कृत ऐच्छिक ES 03

Course Outcomes:

Paper Name: Elective Sanskrit

Paper code: ES-03

CO 1- ' पञ्च रात्रम्' नाटक द्वारा राजनैतिक ज्ञान एवं कौशल से परिचित कराना ।

CO 2- नाटक में प्रयुक्त होने वाले विभिन्न पारिभाषिक शब्दों का ज्ञान कराना ।

गद्यकारों तथा उनकी रचनाओं के वैशिष्ट्य से विद्यार्थियों को अवगत कराना।

CO 3 -समास के द्वारा संक्षेपीकरण का ज्ञान कराना ।

प्रत्ययों के द्वारा भाषा की शुद्धता का ज्ञान कराना।

CO 4 - प्रत्याहार बनाने की विधि से अवगत कराकर सुत्रों द्वारा भाषा की शुद्धता का ज्ञान कराना ।

पत्र लेखन द्वारा विद्यार्थियों की लेखन क्षमता को विकसित करना ।

बी.ए. द्वितीय वर्ष( चतुर्थ सत्र) संस्कृत ऐच्छिक ES -04

Course Outcomes:

Paper Name: Elective Sanskrit

Paper code: ES-04

CO 1- पुरातन साहित्य द्वारा राजा दिलीप के आदर्श, कर्मनिष्ठता और सत्यता से परिचित कराना ।

CO 2-'शिवराज विजय' द्वारा शिवाजी, रघुवीर सिंह, गौर सिंह जैसे वीरों के जीवन से देश भक्ति की भावना विकसित करना।

CO 3- वाच्य द्वारा भाषा की विविधता का ज्ञान कराना

'प्रत्यय' द्वारा भाषा की शुद्धता का ज्ञान कराना ।

CO 4- प्रत्याहार सुत्रों द्वारा भाषा की शुद्धता का ज्ञान कराना ।

अनुवाद द्वारा बौद्धिक क्षमता को बढ़ाना ।

बी. ए. प्रथम वर्ष (प्रथम सत्र) संस्कृत ऐच्छिक ES-01

Course Outcomes:

Paper Name: Elective Sanskrit

Paper code: ES-01

CO 1 - पशु पक्षियों की कहानियां के माध्यम से सामाजिक, राजनैतिक और व्यावहारिक ज्ञान विद्यार्थियों को प्रदान करना।

CO 2 - नीतिशतक द्वारा विद्यार्थियों को सामाजिक व राजनैतिक बुराईयों से अवगत करना। तथा उन्हें सत्पथ पर अग्रसर होने के लिए प्रेरित करना।

CO 3 - शब्द रूप व धातु रूप द्वारा बौद्धिक क्षमता को विकसित करना।

CO 4- संधि के द्वारा वर्णों के मेल का ज्ञान करना।

संस्कृत श्लोको को कंठस्थ करवा कर शुद्ध उच्चारण सिखाना।

बी. ए. प्रथम वर्ष (द्वितीय सत्र) संस्कृत ऐच्छिक ES -02

Course Outcomes:

Paper Name: Elective Sanskrit

Paper code: ES-02

CO 1 -भगवद्गीता जैसे पवित्र ग्रंथ द्वारा कर्म व उन्नति के लिए प्रेरित करना।

CO 2- नीतिशतक द्वारा विद्यार्थियों को सामाजिक व राजनीतिक बुराईयों से अवगत करना तथा उन्हें सत्पथ पर अग्रसर होने के लिए प्रेरित करना।

CO 3- शब्द रूप व धातु रूप द्वारा बौद्धिक क्षमता को विकसित करना।

CO4- छन्दों के ज्ञान द्वारा पद्य के सौंदर्य से अवगत करना।

शुद्ध अनुवाद करने की योग्यता विकसित करना।

## B.A.Psychology

### Course outcomes Semester -I

#### Paper :PY01 Invitation to Psychology

CO1: This specific part of psychology help students in understanding the fundamental causes of behaviour.

CO2: Students learn about the methods of psychology that is experimental ,observation and survey.

CO3: This paper is the laboratory study of sensation, perception emotion ,motivation ,personality and intelligence.

CO4:Knowledge about the importance of psychology in everyday life.

### Semester -II

#### Paper :PY02 Invitation to Psychology

CO1: General Psychology builds a foundation in understanding the basic concepts of learning, attention, memory ,forgetting, thinking and problem solving.

CO2: In statistics part, students will able to find and calculate the Measures of Central Tendencies: Mean ,Median and Mode.

CO4:It performs the experiments on animals rather than on human beings because of ethical reason.

CO4: This paper lay emphasis on the mental processes and behaviour by means of scientific experiments mainly in laboratory or controlled conditions .

### Semester -III



Paper :PY03 Social Psychology and Elementary Statistics

CO1: This branch of psychology is helpful in understanding the important components of a society.

CO2: The paper is concerned with the way in which our thoughts, feelings and behaviour are influenced by other people and by society as a whole.

CO3: It enriches students with the knowledge of topics like prejudice, attitude, attitude change, aggression, social conflicts and behaviour in groups etc.

CO4: It studies the following problems socialization of the child, culture, personality, leadership and group processes, crowd and audience, problems regarding national and international politics.

Semester -IV

Paper :PY04 Developmental Psychology and Elementary Statistics

CO1: Students learn about child development, adolescent psychology, adult psychology and genetic psychology or aging.

CO2: This branch of psychology studies psychological change throughout life. Every psychological concept -learning, memory, motivation, perception, personality and thinking and so on -can be examined in terms of changes over a lifetime.

CO3: Students learn about the measures of variability: Quartile Deviation and Standard Deviation.

CO4: The study includes psychological, behavioral ,social physical ,mental ,emotional, moral and cultural change throughout life from conception to death.

Semester -V

Paper :PY05 Psychopathology

CO1: In this curriculum, students learn about mild, moderate and severe mental and adjustment disorders, diagnose the cause,etiology and analysis of problems and apply therapeutic procedure for the treatment disorders such as alcoholism ,mood disorders, anxiety disorders, schizophrenia etc.

CO2: Students become aware of abnormalities related to emotion, cognition, psychodynamic function and social behaviour like antisocial behaviour.

CO3: Clinical psychology is an objective science in which problems are dealt by using various approaches like psychological, sociological ,experimental and observational approaches.

CO4: Knowledge of classification system of mental disorders: DSM classification system.

Semester -VI

Paper :PY06 Applied Psychology

CO1: This branch of psychology deals with the application of psychology in various fields and day to day life.

CO2: It includes the topics like guidance and counselling, organizational psychology, health psychology, behavioral medicine, forensic psychology and eyewitness memory.

CO3: The students learn about correlation techniques: Rank Difference and Product Moment Method.

CO4: Students become aware of the relevant issues in this area like individuals attitude towards health, role of emotional stress in disease, the design of community education campaigns, the role of social support in treatments and perhaps most important overall, prevention of disease.

*Vibha Madan*

MS. Vibha Madan

Department of Psychology

Principal



Vivo V9

Dual Rear Camera

2020/11/03 10:69

# **COURSE OUTCOMES**

**Name of Programme: B.A.**

## **SEMESTER-I**

### **PAPER:Micro Economics**

**CO1:**Students will understand about the fundamentals of micro economics.

**CO2:** Get an introduction to supply and demand and the basic forces that determine equilibrium in a market economy.

**CO3:**Will be able to solve basic microeconomic problems.

**CO4:** Get introduced to the framework for learning about consumer behaviour and analysing consumer decisions.

# **COURSE OUTCOMES**

**Name of Programme: B.A.(Hons.)**

## **SEMESTER-I**

### **PAPER: Micro Economics I**

**CO1:**Students will understand about significance and scope of micro economics.

**CO2:**Students will be aware about decisions which producers and consumers take for maximising production and satisfaction respectively.

**CO3:**Get an introduction to supply and demand and the basic forces that determine equilibrium in a market economy.

**CO4:**Analyze the performance of firms under different market structures.

# **COURSE OUTCOMES**

**Name of Programme: B.Com (Hons.)**

## **SEMESTER-I**

### **PAPER: Micro Economics**

**CO1:** Students will understand about the fundamentals of micro economics.

**CO2:** Get an introduction to supply and demand and the basic forces that determine equilibrium in a market economy.

**CO3:** Students will be aware about decisions which producers and consumers take for maximising production and satisfaction respectively.

**CO4:** Will be able to solve basic microeconomic problems.

# **COURSE OUTCOMES**

## **Name of Programme: B.A. II (Hons.)**

### **SEMESTER-III**

#### **PAPER: Money and Banking**

**CO1:** Students should garner an understanding of the unique role of banks in the financial system.

**CO2:** The Money and Banking course will help the students to understand key issues in the theory and practice of financial markets, monetary policy and banking and fiscal policy.

**CO3:** Will be able to explain fixed and flexible exchange rate and the effect of changing exchange rates on import and export prices.

**CO4:** Students will know about instruments and significance of capital and money market.

### **COURSE OUTCOME**

**NAME OF PROGRAMME: B.A 2 (HONS)**

**SEMESTER: 3**

**PAPER: DEVELOPMENT ECONOMICS AND PLANNING**

#### **COURSE OUTCOME:**

1. By studying development economics, we will have the opportunity to apply the tools of economic analysis to the problems and challenges facing less-developed countries
2. To begin to understand why some countries have been able to go through a process of economic and human development whilst others have languished.
3. Development economics is fascinating because it shows how economic analysis can help us to understand the big themes of the 21st century –

poverty and inequality, globalisation and trade, and the contrasting experience of success and failure in the economies of different regions of the world

4. It explores the role of decisions by households, firms, and governments, the effects of development aid policies, and the consequences of rising incomes in emerging economies.

#### **COURSE OUTCOME**

**NAME OF PROGRAMME: :B.A. 1(HONS)**

**SEMESTER: 1**

**PAPER: MACRO ECONOMICS**

#### **COURSE OUTCOME:**

1. The study of macroeconomics is very important for evaluating the overall performance of the economy in terms of national income. The national income data helps in anticipating the level of fiscal activity and understanding the distribution of income among different groups of people in the economy.
2. Macroeconomics helps to evaluate the resources and capabilities of an economy, churn out ways to increase the national income, boost productivity, and create job opportunities to upscale an economy in terms of monetary development.
3. Correct economic policies formulated at macro level makes it possible to control business cycles (inflation and deflation) and resultantly, violent booms and depressions rarely occur.
4. Macroeconomics as a discipline includes diverse theories of consumption and saving. It explains the importance of saving in the national economy and its role in the investment.

#### **COURSE OUTCOME**

**NAME OF PROGRAMME: BBA 1**

**SEMESTER: 1**



## **PAPER: MANAGERIAL ECONOMICS**

### **COURSE OUTCOME:**

1. Useful in Business Organization. In any institution or firm. How should any production be done, and for whom should be produced?
2. Managerial economics decides the business is going towards profit or loss. managerial economics decides which way is good for the business. And it is only possible when managerial economics plays a very big and important role in cost control decisions.
3. Managerial economics is useful in coordinating the various activities of a business.
4. Managerial economics provides useful tools for economics managers in demand forecasts and is useful in demanding production planning. The managerial economy deals with future losses easily. So that any business can be protected against future losses.
5. Managerial Economics is synchronized between the planning and control of any institution or firm and hence its importance increases.

## **COURSE OUTCOME**

**NAME OF PROGRAMME: B.COM. 1**

**SEMESTER: 1**

**PAPER: MICRO ECONOMICS**

### **COURSE OUTCOME:**

This approach of economics helps us study and understand the practical working of the economy. The entire economy is complex and complicated for a layman to analyze. However, microeconomics facilitates easy comprehension of the economic system. It provides the required tools that enable the formulation of various economic policies. It also provides techniques that facilitate the easy formulation of economic strategies and economic regulations.

Microeconomics is of great help when it comes to studying the conditions of economic welfare. With the help of this branch of economics, we now understand the standard of living and the condition of welfare of the people. We can not only study their condition of welfare but we can also analyse the factors that determine their welfare as well.

This branch of economics helps us understand the level of satisfaction of the people in the economy.

It also helps economists identify the allocation of resources within the economy.

## COURSE OUTCOMES

Name of Programme: B.A.

English

Semester-I

Paper: EN-01 English

CO 1: The course offered in BA 1 aims to shape the delicate minds of the newcomers towards being sensitive, sensible with critical bent of mind and acquiring the basics of language through the book —English Literature and Language I||.

CO 2: This course provides an opportunity to the students to improve their pronunciation through an elaborated chapter on speech symbols and sounds. They are then reinforced thorough practice words of their phonetic transcription at the end of all the chapters.

CO 3: Empower the students to improve the vocabulary which in turn helps to improve the comprehension of the students.

CO 4: A brief analysis of the essays in the texts would help the students in comprehending the historical, political, religious, intellectual, scientific, emotional and cultural aspects of one's societal life on the whole.

CO 5: The essays included in the texts help to develop the emotional quotient of the students towards plants, animals and fellow human beings.

Semester-II

Paper: EN-02 English

CO 1: Students get a glimpse of famous writers and authors whose brief bionote is provided at the end of the chapter so as to apprise the students of their life achievements, innovations and discoveries of these eminent persons of letters. They act as role models for these students to emulate.

CO 2: The students get a detailed knowledge and practice into formation and structuring of sentences, voices and various facets of grammar.

CO 3: Stories included in the text help to develop the emotional quotient of the students towards animals and fellow human beings.

CO 4: The inclusion of stories and short narratives in this semester aids the students to navigate through the complexities of life as well as enhance their imagination\

CO 5: The conclusion of this semester will help the beneficiaries to develop oratory and writing skills along with good vocabulary understanding.

Semester-III

Paper: EN-03 English

CO 1: The student demonstrates an increase in awareness of word knowledge, vocabulary, sentence formations, grammatical rules.

CO 2: The poetry enhances the students understanding of various elements of poetry such as tone, diction, genre, figures of speech, symbolism and many more.

CO 3: They are able to demonstrate text structuring and organization of the same into paragraphs.

CO 4: The conclusion of the course enables them to enhance their creative skills and writings in a systematic and refined way as they are expected to write paragraphs on specific topics.

CO 5: They are able to identify main ideas in reading and paraphrase the same systematically.

4

Semester-IV

Paper: EN-04 English

CO 1: The end of the course will enable the students to interpret, analyze, discuss several plays & reading material with ease.

CO 2: The conclusion of the course will enable the students to incorporate personal experiences that can be used for creative writings.

CO 3: The course also increases their oral as well as reading fluency.

CO 4: They are able to demonstrate text structuring and organization of the same into paragraphs.

CO 5: The end of the course will enable the students to use the grammatical structures, translations from Hindi to English and English to Hindi accurately and systematically in a proper manner.

Semester-V

Paper: EN-05 English

CO1: Raja Rao's novel Kanthapura will help the students to understand the social, political, cultural, historical aspects of Indian freedom movement in 1930s.

CO2: It will provide better understanding of various age-old social evils that still plague the society and need an urgent redressal.

CO3: Dramatic and vivid description of the events depicting real issues at the heart of freedom movement will provide better understanding and also inculcate patriotic feelings and gratitude for the sacrifice and contribution of common man.

CO4: It will familiarize the students with various literary forms.

CO5: It will help students in their critical thinking process and enhance their reading and writing skills.

Semester-VI

Paper: EN-06 English

CO1: William Shakespeare's *The Merchant of Venice* will familiarize the students with various nuances of plays of Shakespeare.

CO2: It will help them to have better understanding of the text and its themes. It will encourage them to appreciate and understand wider human issues that are still relevant in today's world.

CO3: It will familiarize them with cultural and historical context of the Shakespeare's play.

CO4: It will improve their comprehension and communication skills.

CO5: It will help the students in their critical thinking process and enhance their reading and writing skills.

## Course outcomes, Programme Outcomes/Learning outcome

### Subject: - Geography (2020-21)

Class(Pass course)	Semester	Learning/Course Outcome
B.A I	Geography of India	This specific part of Geography helps students in understanding the physiographic and socio-economic set up of India and help in getting insight of physical and cultural diversity of India.
B.A I	Physical Geography-1 (Geomorphology)	After studying this students will be able to learn about physical geography, its various aspects. Geomorphology builds a foundation in understanding the basic concepts of physical geography and answers the crucial queries related to different types of landforms and their origin.
B.A II	Physical Geography -II	After studying this the students will be learn the important components of atmosphere. It enriches us with the knowledge of basic concepts like insolation, winds, rainfall, climate change, global warming etc.
B.A II	Human Geography	Students will be able learn about distribution of natural and human resources in the world. The areas covered are population distribution, growth, and various types of settlements and importance of sustainable development.
B.A III	Economic Geography	In this curriculum, students learn about various economic activities and their distribution in the world. Likewise, students are given knowledge about different crops, industries and transport in world.
B.A III	Introduction to Remote sensing, GIS and Quantitative Methods	Students will be able to learn about various aspects of remote sensing and geographic information system. Remote Sensing and GIS is very beneficial in acquiring information about the things and objects that are not in our direct contact. GIS helps in storing large data and also helps in retrieving same data at our will.

Dr. Veena Rani(HOD)  
Department of Geography

## DEPARTMENT OF HISTORY

### PROGRAMME SPECIFIC OUTCOME

History is a subject of social science which has its own value in social and human life. It helps the students to develop their ethical and social values. They could know and understand their own culture, heritage and tradition. A student of history has huge futuristic opportunity to choose their career because history is a subject which is studied from primary education level to higher education level. Hence, a student of history can engage himself in teaching profession at primary, secondary and higher education levels. History is an important in competitive exams such as UJSC, SSC and other state level exams. Only a student of history can choose his career as an archaeologist. He or she can get jobs in museums, archives and library or in journalism. Further they can proceed in the field of research in history or archaeology.

### COURSE OUTCOME OF HISTORY

#### **B.A. I - ANCIENT INDIA (From Earliest Times to Gupta Age) Option (i) Semester I**

In this paper a student of history can gain knowledge about the historiography and geographical background as well as sources with approaches to Ancient Indian History. Further they can learn about pre and proto history of our country and about the socio-cultural pattern of India. They read primitive civilization like Harrappa, Vedic and protestant movements like Jainism and Buddhism and the royal history of Mauryan and Guptas.

#### **HISTORY OF INDIA (600-1526 A.D.) Option (i) Semester II**

In this paper students can learn about the post Gupta dynasties and feudalism system in early medieval India, history of sultanate under Das, Khiljis and Tughlaqs, history of peninsular India under Vijaynagar and Bahmani kingdom, Sufism and Bhagti movement. A student can acquire knowledge about the history of Delhi Sultanate and administration, socio-political situation of Delhi under Sultanate and causes of their downfall.

#### **B.A. - II - Political History of India (1526-1857A.D.) Option (i) Semester III**

They can learn about the foundation of Mughal dynasty in India as well as their polity, economy trade, commerce, society, culture etc. and the causes, impacts and results of downfall of Mughal dynasty. The great Mughal emperor Akbar's and Aurangzeb's religious policies are incorporated here. Mughals and their relations with Rajputs, Sikhs, Deccan, Marathas. Mughal administration with emphasize on Mansabdari, Jagirdari, Zamindari system. Students will gather knowledge about expansion and consolidation of British empire, economic changes, land revenue settlements, commercialization of agriculture, de-industrialization, spread of western education, Indian Renaissance, several peasants and tribal movements. Revolt of 1857.

### INDIAN NATIONAL MOVEMENT Option (ii) Semester IV

In this paper students will learn about the origin of the National Consciousness, foundation of Indian National Congress, Ideologies of Moderates, Extremists and Revolutionaries. Role of Mahatma Gandhi in freedom movement, Non-cooperation, Civil Disobedience and Quit India movements. Political reforms of 1909, 1919 and 1935. Bhagat Singh and Subhash Chandra Bose, Partition and independence of India.

### B.A. - III RISE OF MODERN WORLD Option (ii) Semester V

The students will learn about the transition of feudalism to capitalism, Renaissance, Reformation, Scientific revolution, Industrial revolution, Glorious revolution and Agrarian Revolution. Mercantile Revolution, Colonial System.

### MODERN EUROPE (1789-1945) Option (ii) semester VI

In this paper students will learn about the great French revolution of 1789, Napoleon Bonaparte, Vienna Congress, Nationalism in Europe, World War I and Russian Revolution. League of Nations, Rise of Facism and Nazism, World war II all this important issues are incorporated in this papers.

Kapoor  
+ 17/12/2020  
DR KAPOOR SINGH  
ASSI. PROFESSOR (HISTORY)



**Government PG College for Women, Panchkula (Haryana)**  
**Department of Mathematics**  
**B.Sc 1<sup>st</sup> Year (Non-Medical)**

Semester I:

**Subject:** Algebra

**Subject Code:** BM-111

**Upon the completion of Algebra students will be able to:**

- Solve problems related to Matrices and its applications.
- Provide the foundation for high school mathematics, critical thinking and problem solving, helps students transfer their mathematical knowledge to more algebraic generalizations.
- Students will be able to solve problems using equations, graphs and tables to investigate linear relationships. Technology will be used to introduce and expand upon the areas of study listed above.
- Students will learn how to find roots of quadratic, biquadratic and cubic equations

**Subject:** Calculus

**Subject Code:** BM-112

**Upon the completion of Algebra students will be able to:**

- Learn the general concept of function and its applications to real-world situations and work with exponential, logarithmic and trigonometric function and their applications in applied problems.
- Learn the concepts of the derivative and its underlying concepts such as limits and continuity and to calculate derivative for various type of functions using definition and rules.
- Learn the various concept of derivative to completely analyze graph of a function. And learn about various applications of the derivative in applied problems.
- Learn about anti-derivative and the Fundamental Theorem of Calculus and its applications and to use concept of integration to evaluate geometric area and solve other applied problems.

**Subject:** Solid Geometry

**Subject Code:** BM – 113

**Upon the completion of Solid Geometry students will be able to :**

- Find centre and radius of Sphere and circles
- Find family of spheres Passing through a circle , tangent planes and normal lines to a sphere.
- Identify different conicoid and sketch them
- Understand relationship between different coordinate systems and plot the curve in Spherical, cylindrical polar coordinates .
- Understand Jacobian and its importance in Mathematics .
- Obtain equation of Cone, enveloping cone, cylinder, right circular cylinder, enveloping cylinder and prove their results .
- Find equation of tangent plane, reciprocal cone of given cone .

Semester II:

**Subject:** Number Theory And Trigonometry

**Subject Code:** BM – 121

**Upon the completion of Number Theory and Trigonometry students will be able to :**

- Analyse Divisibility, GCD , LCM and Prime numbers and their Properties
- Prove Fundamental theorem of divisibility and Unique factorization theorem .
- Identify Perfect numbers ,Mersenne numbers ,Fermat numbers ,Gauss function, Mobius function, Euler's function and prove their Properties .
- Analyse Congruences, Complete residue system, Reduced residue system and their Properties.
- Solve indeterminate equation, Linear congruence in one unknown and two unknown.
- Understand Chinese theorem and its applications .
- Use mathematical induction and other types of proof writing techniques.
- Evaluate trigonometric and inverse trigonometric functions.
- Solve trigonometric equations and applications.
- Apply and prove trigonometric identities.

**Subject:** Ordinary Differential Equations

**Subject Code:** BM – 122

**Upon the completion of Ordinary Differential Equations students will be able to :**

- Show an awareness of initial and boundary conditions to obtain particular values of constants in the general solution of second-order differential equations.
- Identify a general method for constructing solutions to inhomogeneous linear constant coefficient second-order equations.
- Recognize the proper technique and solve initial value problem for first order equations. Solving of initial value problems for higher order linear homogeneous and non-homogeneous equations

**Subject:** Vector Calculus

**Subject Code:** BM – 123

**Upon the completion of Vector Calculus students will be able to :**

- Describe physical & abstract quantities that have both magnitude & direction, increases knowledge of properties of functions whose domain consists of real no's & range consists of vectors including differential & integration.
- Find length of a vector, the unit vector in direction of a given vector & the cosine of the angle between two vectors in 3-space.
- Calculate scalar product, vector product of two vectors & scalar triple product of three vectors, write vector equation & symmetric equation for a line & vector equation & scalar equation of a plane.

### Semester III:

**Subject:** Advance Calculus

**Subject Code:** BM – 231

**Upon the completion of Advance Calculus students will be able to :**

- The students are expected to learn about the basic principles of multi-variable Calculus with proofs advance calculus. Advance Calculus is a bridge between Calculus and More Advanced Real-Analysis.
- Students will learn completeness axiom, Archimedean property, Triangle inequality, convergence of sequence, sum, product and quotient of convergence sequences.
- Monotonic sequence Bolzano Weierstrass Theorem, Monotonic convergence theorem, Uniform continuity on a closed and bounded interval, Limits of functions, derivative of polynomial, derivative of inverse functions, chain rule, Mean value theorem, Rolle's theorem.

**Subject:** Partial Differential Equations

**Subject Code:** BM – 232

**Upon the completion of Partial Differential Equations students will be able to :**

- PDE describes relations between continuously changing quantities which depends on two or more variables. The main goal of this course is that student should be able to solve Boundary value problem for Laplace equation, Heat equation, wave equation by separation of variables in Cartesian, polar spherical & cylindrical coordinates.
- Students will be able to expand one variable function in series along basis of orthogonal function, for example Fourier series, Bessel's series, Legendre's series.
- They will be able to find weight function, Eigen values and Orthogonal function system (Eigen function for a given Sturm-Liouville problem and used the Fourier and Laplace Transform as part of solving a Boundary Value Problem.

**Subject:** Statics

**Subject Code:** BM – 233

**Upon the completion of Statics students will be able to :**

- Student will be able to demonstrate the application of vectors for the analysis of statics
- Understanding of applications of moments and couples
- Students learn to apply the principles of virtual work

### Semester IV:

**Subject:** Sequences and Series

**Subject Code:** BM – 241

**Upon the completion of Sequences and Series students will be able to :**

- This course involves the study of Real and Complex numbers and their properties, particularly completeness, define and study limits of Sequences, Converges of Series and Power Series.
- Students will have detailed understanding of how Cauchy's criteria for the converges of real and complex sequences follow from completeness axioms of real numbers.
- Students will develop an understanding of how the elementary functions can be defined by Power series with an ability to deduce some of their easier property, knowledge of simple techniques for testing the convergence of sequence and series.

**Subject:** Special Functions and Integral transforms

**Subject Code:** BM – 242

**Upon the completion of Special Functions and Integral transforms students will be able to :**

- To make student understand the basic concepts of complex variables and special functions and to make them able to understand mathematical concepts that provide a foundation for the mathematics.
- Students will be able to demonstrate a sound understanding of elementary functions, analytically Cauchy Riemann equations.
- Students will learn special functions such as Gamma and Beta functions, Bessel's function and Legendre polynomial, Power series solution of ordinary differential equations.
- Understanding D'Alembert's solutions of Wave equation and separation of variables of Heat equation, Laplace equation in different coordinate system.

**Subject:** Programming in C and Numerical Methods

**Subject Code:** BM – 243

**Upon the completion of Programming in C and Numerical Methods students will be able to :**

- To provide suitable and effective methods called Numerical Methods, for obtaining approximate representative numerical results of the problems. To solve problems in the field of Applied Mathematics, Theoretical Physics and Engineering this requires computing of numerical results using certain raw data.
- To solve complex mathematical problems using only simple arithmetic operations. The approach involves formulation of mathematical models of physical situations that can be solved with arithmetic operations.
- To deal with various topics like finding roots of equations, solving systems of linear algebraic equations, interpolation and regression analysis, numerical integration & differentiation, solution of differential equation, boundary value problems, solution of matrix problems.

### Semester V:

**Subject:** Real Analysis

**Subject Code:** BM – 351

**Upon the completion of Real Analysis students will be able to :**

- Student will be able to define and recognize the basic properties of real numbers and improve an outline logical thinking.
- They will be able to define and understand the series of real numbers and their convergence. Students will be able to use the Bolzano Weistrass Theorem.
- Recognition and knowledge of basic topological properties of real numbers. Understanding of real functions and its limits.
- Understanding of continuity of real functions and differentiability of real functions with its related theorems.

**Subject:** Groups and Rings

**Subject Code:** BM – 352

**Upon the completion of Groups and Rings students will be able to :**

- Students will be able to learn the meaning and properties of Groups, Subgroups, Lagrange's theorem, Cauchy's theorem, Cyclic Groups.
- Students will have understanding of Cosets, Quotient groups, Homomorphisms, Isomorphism, Automorphism, inner automorphism of cyclic groups, Cayley's theorem, centre of a group and derived subgroup of a group.
- Recognition of Rings, Sub rings, Integral domain and fields, characteristics of a ring, ring of homomorphism, ideals and quotient rings.
- Understanding Euclidean rings, Polynomial rings, Polynomial over rational field, Eisenstein's criteria.

**Subject:** Numerical Analysis

**Subject Code:** BM – 353

**Upon the completion of Numerical Analysis students will be able to :**

- Find the root of equation using numerical methods i.e. Bisection, False position, Newton-Raphson etc.
- Solve nonlinear equations. Computation of the errors and the rates of convergence.
- Recognize Iterative methods (Jacobi –Gauss Seidel). Analyze the Finite difference, Forward and backward difference table. Construct numerical methods to solve ordinary differential equations
- Apply the Interpolation methods eg. Newton forward and backward difference interpolation etc.
- Apply Lagrange interpolation formula for solving the problems numerically.

Semester VI:

**Subject:** Real and Complex Analysis

**Subject Code:** BM – 361

**Upon the completion of Real and Complex Analysis students will be able to :**

- Develop an in-depth mathematical understanding of the theory of calculus
- Understanding Of Double And Triple Integrals, Fourier 's series
- Perform basic mathematical operations (arithmetic, powers, roots) with complex numbers in Cartesian and polar forms. Determine continuity/differentiability/analyticity of a function and find the derivative of a function. Work with functions (polynomials, reciprocals, exponential, trigonometric, hyperbolic, etc) of single complex variable and describe mappings in the complex plane.

**Subject:** Linear Algebra

**Subject Code:** BM – 362

**Upon the completion of Linear Algebra students will be able to :**

- To understand Model and systematically solve systems of Linear Equations using Matrix notations. Demonstrate factual knowledge of the fundamental concepts of spinning Linear Independence and Linear Transformations.
- Use of Matrix Algebra to analyse and solve equations arising in many applications that require a background in Linear Algebra. Utilise Vector Space terminology and describe how closely other vector spaces resemble  $R_n$ .
- Describe the action of Linear Transformation into elements that are easily visualised using the basic concept of Eigenvectors and Eigenvalues.

**Subject:** Dynamics

**Subject Code:** BM – 363

**Upon the completion of Dynamics students will be able to :**

- Students will be able to draw the free-body diagram for a particle or for a rigid body in plane motion. Students will be able to understand the basic concepts of force, mass and acceleration, of work and energy, and of impulse and momentum.
- Students will be able to apply these three basic methods and to understand their respective advantages. Students will be able to explain the geometry of the motion of particles and plane motion of rigid bodies.
- Students learn to apply the principles of static equilibrium to particles and rigid bodies. Students learn to analyze truss and frame structures. Students apply the principles of equilibrium for analyzing beams. Students analyze problems involving frictional forces. Students learn to draw shear force and bending moment diagram.
- Students analyze planar rigid body kinematics and kinetics. Students learn to write technical laboratory reports. Students apply measurement techniques and formulate experiments based on laboratory handouts.

## COURSE OUTCOME – MUSIC VOCAL

### BA I,II,III

Music is no longer for mere entertainment. Nowadays it is also a subject where a number of serious researches take place. Simultaneously, a number of new professional areas/job prospects have emerged in the field of Music. Music in combination with various subjects enables the students to own different areas other than teaching e.g. Music and Psychology enables the student to be a Music Therapist. Similarly, Music, if studied with Physics leads the student to opt for sound engineering or recording areas. There are various subjects used in Music like Math, Physics etc. in various calculations and tuning of instruments.

By studying the historical details of the Ragas, prescribed in the syllabus, the students gain knowledge about the theoretical part of the Ragas and learning how to write the notation of the same Ragas enables them to preserve the BANDISH of the Raga in practical form as the notation system is the only way of keeping the Bandish secured in the form of the script on paper.

Learning taalās like teen taal, ek taal, jhap taal, sul taal, ada chotaal, dhamar are mandatory for each and every music student as the swaras and taalās are the soul of all forms of music.

Definitions / short forms incorporated in the syllabus like Sangeet (संगीत), Shruti(श्रुति), Swara(स्वर), Saptak(सप्तक), Naad (नाद), Thumri(ठुमरी), Arvibhav(अरिभाव), Tirobhav(त्रोभाव), Raaga(राग), That(ठात), Vadi(वादि), Samvadi(सम-वादी), Alpatav(अल्पतव), Bahutav(बहुतव), Parmel Parvashak (परमेल परवाशक), Dhrupad (ध्रुपद), khayal (खयाल)etc. are essential as they are the basic principals ( मूलभूत शब्दावली / गायनशैली ) of Music, which are a must known to the music students.

By studying the history of Music, the students come to know about their rich cultural heritage and various stages of change and development music has faced throughout the ages.

Similarly, the topics like placement of swaras on shruti by **Bharat , Matang , Lochan,** difference between Desi and Margi Sangeet , original and development of notation system and critical analysis of the time theory of ragas, inculcate knowledge among the students about how the different basic principals of music come into existence and took the present shape and are being used in present Hindustani Classical Music.

By learning about the life sketches and contribution of our legendary Musicians, towards the development of music like Pt. Vishnu Narayan Bhatkhande, Pt. Bhimsen Joshi, Gangu Bai Hangal, Vinayak Rao Patvardhan etc. Students get inspiration and feel encouraged to work hard and develop a sense of proud belongingness to such a great family of Musicians.

There are a number of ragas that are considered to be originated from folk tunes like Raga Miya Ki Todi, Raga Maand. Similarly, there are a number of folk tunes based on different ragas like Punjabi folk Heer is based on Raga Bhairvi. This knowledge is imparted to the students through the study of relationship between folk and classical music. As the music students are required to perform now and then on stages for which they should know the good qualities of a singer, instrumentalist etc. and this purpose is very easily met through studying GAYAKON KE GUN AVEM DOSH.

Music is an important part of human life which moves along with every individual from his/her birth till death. We all are influenced by music in one way or the other. One of the deepest impact of music is creating National Integration so is taught to the students.

Today is the age of Science, no individual can remain untouched by the scientific development in day to day life so is with the Arts and in Arts with the Music. While teaching students about the role of Science in the development of Music, we enrich them with the knowledge of various electrical instruments and other scientific techniques being used in

various professional fields of music e.g. Microphone, Studios etc. Through the teaching of the topic essay on teaching of music through gharana and educational institution the students are

- 3 -

told about the importance of Guru Shishya Parampara since the medieval period, till the present age of Science so that they can prove good and devoted students during higher education.

Hindustani Classical Music and Ragdari Sangeet are synonym to each other. The syllabus of music is totally about Hindustani Classical Music at every stage of education. As a result the students are taught to sing different ragas prescribed in the syllabus and different taalās to make them practically strong.

Dr. Sarika  
Assistant Professor,  
Music Vocal,  
Govt.College for Women,  
Sector 14,Panchkula.

Course outcome

प्रथम सेमस्टर

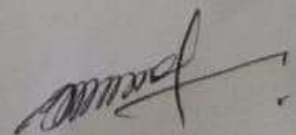
पैपर : भारतीय दर्शन की रूपरेखा

- भारतीय दर्शन जीवन दर्शन है
- यह जीवन की समस्याओं का ज्ञान कराता है
- भोग के द्वारा स्वास्थ्य का ज्ञान करवाना
- समाज में फैले भ्रमों को दूर करके ईश्वर, आत्मा और धर्म का सही ज्ञान कराता है
- मनुष्य के मुक्ति का पथ बताता है

द्वितीय सेमस्टर

पैपर : पश्चात्त्य दर्शन की रूपरेखा

- पश्चात्त्य दर्शन मुख्यतः बुद्धिगदी है
- ज्ञान क्या है उसके साधन क्या है। से परिचित करवाना
- अनुभव क्या है, मनुष्य को उसका ज्ञान देता है।
- ज्ञान जन्मजात नहीं होता, बल्कि बुद्धि और अनुभव से प्राप्त होता है
- ऐसे भ्रमों से अलग करवाना व उनका हल देना है।





## तृतीय संमस्टर

घंषर: तर्कशास्त्र (भारतीय एवं पाश्चात्य)

- तर्कशास्त्र के बिना कोई भी विज्ञान विकसित नहीं हो सकता।
- नियम कैसे बनता है उसका ज्ञान करवाना।
- मनुष्य को तर्क करना सीखता है
- तर्क के द्वारा मनुष्य किसी भी वाद-विवाद में जीत हासिल कर सकता है।
- तर्क के बिना जीवन सम्भव नहीं होता।

## चतुर्थ संमस्टर

घंषर: तर्कशास्त्र (भारतीय एवं पाश्चात्य)

- प्रतिकालक तर्कशास्त्र का ज्ञान मिलता है
- परिकल्पना क्या होती है व परिकल्पना कैसे बनाई जाती है
- परिकल्पना के विज्ञान कोई नहीं नहीं बना सकता
- जैसे आर्चिन का सिद्धान्त परिकल्पना से ही शुरू होकर नियम बना।
- किसी तथ्य की व्याख्या करना बताया जाता है
- व्याख्या के बिना किसी भी तथ्य की अमिच्छित सम्भव नहीं

*Handwritten signature*

### पंचम सेमस्टर

पैपर : शास्त्र नीतिशास्त्र और राजनीति दर्शन

- नीतिशास्त्र के अन्तर्गत नैतिक मूल्यों का ज्ञान करवाना
- मनुष्य पर तीन ऋण (माता-पिता, गुरु, देव) से उद्धार लेने के उपाय बतलाना।
- नैतिक निर्णय लेने के उपाय बतलाना
- पंड और उसके सिद्धान्तों का ज्ञान करवाना
- अधिकार और कर्तव्यों का ज्ञान

### षष्ठ सेमस्टर

पैपर : नीतिशास्त्र और राजनीति दर्शन

- कर्म क्या है ? गीता की मुख्य शिक्षा से अवगत करवाना
- धार्मिक भ्रमों से अवगत करवाकर सही धर्म से परिचित करवाना
- सुख क्या है ? कैसे प्राप्त होता है ? उसके साधनों से अवगत करवाना
- पुजोत्तम क्या है और उसके लाभ व हानि बतलाना
- गांधी के आदर्श व सत्याग्रह से व्यक्ति अपने अधिकारों के लिए कैसे आन्दोलन करके अपने हक प्राप्त कर सकता है
- इसके लिए मार्ग से अवगत करवाना

*[Handwritten signature]*

## Department of Health and Physical Education Session 2020-21

Sub: Detail Course outcomes (Cos), Programme Outcomes (POs) and Programme specific Outcomes (PSOs)

Sr. No.	Programme	Courses include
01	B.A. 1 First Semester	Paper: Health & Physical Education. Course: Taught about Health & Physical Education, Health & Hygiene, Yoga, Human Anatomy & Physiology.
	B.A. 1 Second Semester	Paper: Health & Physical Education. Course: Taught about Health Education, Historical Prospects, Physical Fitness, Human Anatomy & Physiology.
02	B.A. II Third Semester	Paper: Health & Physical Education. Course: Taught about Safety, Sports Injuries, Common Diseases, Balance Diet, Anatomy & Physiology of Body System.
	B.A. II Fourth Semester	Paper: Health & Physical Education. Course: Taught about Warming up and Cooling down, Sports Psychological Aspects, Major Sports Events, Anatomy & Physiology of Body System.
03	B.A. II Fifth Semester	Paper: Health & Physical Education. Course: Taught about Growth & Development, Sports organization and Administration, Concepts of Posture, Anatomy & Physiology
	B.A. II Sixth Semester	Paper: Health & Physical Education. Course: Taught about Motivation and Socialization, Sports Training and Doping, Sports Biochechenics, Anatomy & Physiology

Rano Gill  
Health & Physical Education

## B.A. Public administration.

Course outcome :

Semester - I

Paper : Elements of Public administration .

- ⇒ To acquaint students about the basic elements of Public administration .
- ⇒ To understand the Principles on which our administration actually works .

Semester - II

Paper : Basics of Public administration .

- ⇒ To make students understand the basic theories of Public administration .
- ⇒ To make students understand the budgetary process in India .

Semester - III

Paper : Central administration

- ⇒ To make understand the powers and functions of prime-minister and president of India .
- ⇒ To impart knowledge regarding the working procedure of cabinet secretariat .

Semester - IV

Paper: State and District Administration.

- ⇒ to understand how the state government as well as district administration is run.
- ⇒ to impart knowledge regarding different officers like tehsildar, S.D.M, B.D.P.O.

Semester - II

Paper: Local Govt. and Administration in India.

- ⇒ to make students understand the working of Panchayati Raj bodies in India, like Panchayat.
- ⇒ to make students understand the working of urban local bodies like municipal corporation.

Semester - VI

Paper: Issues in Public Administration.

- ⇒ to make aware the students about the issues like corruption and integrity in Indian administration.
- ⇒ to make students understand the relationship between bureaucrats and politicians.

Atul Kullar  
CATUL KULLAR  
Associate Professor  
Dept. of Public Admin,  
G. C-W, SE-15, PKL

## DEPARTMENT OF HISTORY

### PROGRAMME SPECIFIC OUTCOME

History is a subject of social science which has its own value in social and human life. It helps the students to develop their ethical and social values. They could know and understand their own culture, heritage and tradition. A student of history has huge futuristic opportunity to choose their career because history is a subject which is studied from primary education level to higher education level. Hence, a student of history can engage himself in teaching profession at primary, secondary and higher education levels. History is an important in competitive exams such as UJSC, SSC and other state level exams. Only a student of history can choose his career as an archaeologist. He or she can get jobs in museums, archives and library or in journalism. Further they can proceed in the field of research in history or archaeology.

### COURSE OUTCOME OF HISTORY

#### **B.A. I - ANCIENT INDIA (From Earliest Times to Gupta Age) Option (i) Semester I**

In this paper a student of history can gain knowledge about the historiography and geographical background as well as sources with approaches to Ancient Indian History. Further they can learn about pre and proto history of our country and about the socio-cultural pattern of India. They read primitive civilization like Harrappa, Vedic and protestant movements like Jainism and Buddhism and the royal history of Mauryan and Guptas.

#### **HISTORY OF INDIA (600-1526 A.D.) Option (i) Semester II**

In this paper students can learn about the post Gupta dynasties and feudalism system in early medieval India, history of sultanate under Das, Khiljis and Tughlaqs, history of peninsular India under Vijaynagar and Bahmani kingdom, Sufism and Bhakti movement. A student can acquire knowledge about the history of Delhi Sultanate and administration, socio-political situation of Delhi under Sultanate and causes of their downfall.

#### **B.A. - II - Political History of India (1526-1857A.D.) Option (i) Semester III**

They can learn about the foundation of Mughal dynasty in India as well as their polity, economy trade, commerce, society, culture etc. and the causes, impacts and results of downfall of Mughal dynasty. The great Mughal emperor Akbar's and Aurangzeb's religious policies are incorporated here. Mughals and their relations with Rajputs, Sikhs, Deccan, Marathas. Mughal administration with emphasize on Mansabdari, Jagirdari, Zamindari system. Students will gather knowledge about expansion and consolidation of British empire, economic changes, land revenue settlements, commercialization of agriculture, de-industrialization, spread of western education, Indian Renaissance, several peasants and tribal movements. Revolt of 1857.

### INDIAN NATIONAL MOVEMENT Option (ii) Semester IV

In this paper students will learn about the origin of the National Consciousness, foundation of Indian National Congress, Ideologies of Moderates, Extremists and Revolutionaries. Role of Mahatma Gandhi in freedom movement, Non-cooperation, Civil Disobedience and Quit India movements. Political reforms of 1909, 1919 and 1935. Bhagat Singh and Subhash Chandra Bose, Partition and independence of India.

### B.A. - III RISE OF MODERN WORLD Option (ii) Semester V

The students will learn about the transition of feudalism to capitalism, Renaissance, Reformation, Scientific revolution, Industrial revolution, Glorious revolution and Agrarian Revolution. Mercantile Revolution, Colonial System.

### MODERN EUROPE (1789-1945) Option (ii) semester VI

In this paper students will learn about the great French revolution of 1789, Napoleon Bonaparte, Vienna Congress, Nationalism in Europe, World War I and Russian Revolution. League of Nations, Rise of Facism and Nazism, World war II all this important issues are incorporated in this papers.

Kapoor  
+ 17/12/2020  
DR KAPOOR SINGH  
ASSI. PROFESSOR (HISTORY)

# **Name of Programme: B.COM (Hons.)**

## **SEMESTER-I**

### **PAPER: BC (101) Financial Accounting-I**

**CO1:** This course helps to understand the students the process of book keeping and accounting.

**CO2:** After studying this course, the students learn the practical knowledge of assets liabilities and revenues and expenses.

**CO3:** This course aim to understand the purpose, scope and applicability of accounting

**CO4:** It will clarify the practical aspects of preparation of financial statements.

### **PAPER: BC (102) Micro Economics**

**CO1:** Students will understand about the fundamentals of micro economics.

**CO2:** Get an introduction to supply and demand and the basic forces that determine equilibrium in a market economy.

**CO3:** Students will be aware about decisions which producers and consumers take for maximising production and satisfaction respectively.

**CO4:** Will be able to solve basic microeconomic problems.

### **PAPER: BC (103) Principles of Business Management**

**CO1:** This course would impart the students to understand the importance of business and commerce.

**CO2:** to enhance the further knowledge of students about the implementation management techniques to run the organization effectively by using principles of management.

**CO3:** this course content will cater to the needs of basic requirement like, knowledge of planning, organizing, staffing, directing and controlling.

**CO4:** students will effectively learn the prerequisites of an effective control system and applicability of various controlling techniques.

### **PAPER: BC (105) Business Mathematics-I**

**CO1: Logarithms:** Convert logarithmic equations to exponential equations, convert exponential equations to logarithmic equations, graph logarithmic functions and solve logarithmic equations.

**CO2: Sequence and Series:** understand the idea of differentiation from first principles, differentiate power functions, find stationary points of some functions, determine the nature of



some stationary points using either the first or second derivative tests, understand and work with derivatives as rates of change in mathematical models.

**CO3: Matrices:** Interpret existence and uniqueness of solutions geometrically, understand algebraic and geometric representations of vectors in  $R^n$  and their operations, including addition, scalar multiplication and dot product, Solve systems of linear equations using the inverse of the coefficient matrix when possible Recognize and use equivalent forms to identify matrices and solve linear systems.

**CO4: Determinants:** Provide a definition of the determinant, use determinants and their interpretation as volumes, describe how performing row operations affects the determinant, analyse the determinant of a product algebraically and geometrically, determine the sign of a permutation, compute the determinant of a two-by-two matrix, compute the determinant of a three-by-three matrix, describe properties of the determinant and explain what the determinant measures geometrically.

### **PAPER: BC (106) Business Communication**

**CO1:** to make the students learn the forms of electronic communication; models and its processes.

**CO2:** understanding of Interviewing skills: appearing and conducting; writing resume; Writing business letters and emails

**CO3:** The students will acquire the practices of business communication: group discussion, mock-interview and seminars; report writing etc.

**CO4:** The course content will help the students to further knowledge of formal and informal communication networks in the business organizations.

## **SEMESTER-II**

### **PAPER: BC (201) Financial Accounting-II**

**CO1:** The students will learn practical knowledge about Hire purchase and installment purchase system.

**CO2:** To give practical knowledge about how to maintain Branch Accounts

**CO3:** This course will help the students in gaining knowledge of various concepts of partnership like admission, retirement and death of a partner

**CO4:** This course imparts knowledge of various methods of valuation of goodwill.

### **PAPER: BC (203) Fundamentals of Marketing**

**CO1:** This course helps to understand the meaning and various concepts of marketing

**CO2:** Identifying and discussing the management techniques of planning, organizing, directing, and controlling of marketing functions and activities in response to the business needs of the organization

**CO3:** Develop knowledge among students to formulate a marketing plan that will meet the needs or goals of a business or organization.

**CO4:** learning how to formulate strategies for developing new and/or modified products, concepts that respond to evolving market needs.

### **PAPER: BC (204) E-COMMERCE**

**CO1:** The students will understand the application and uses of Internet, Internet services.

**CO2:** To tell the students about the effects of IT on business.

**CO3:** It helps in understanding the implementation of Electronic Data Interchange and the security issues in e-commerce.

**CO4:** the students will acquire the knowledge, skills values and experience to become lifelong earners.

### **PAPER: BC (205) Business Mathematics-II**

**CO1: Permutation and Combination:** Calculate the number of permutations of  $n$  objects taken  $r$  at a time, use factorial notation to represent the number of permutations of a set of objects, calculate the number of combinations of  $n$  objects taken  $r$  at a time and apply the theory of permutations and combinations to solve counting problems.

**CO2: Binomial Theorem:** Compute factorial values, compute binomial coefficients by formula, expand powers of a binomial by binomial coefficients and approximate numbers using binomial expansions.

**CO3: Linear Programming:** formulate a given simplified description of a suitable real-world problem as a linear programming model in general, standard and canonical forms, classify a two-dimensional linear programming model by the type of its solution, solve a two-dimensional linear programming problem graphically and use the simplex method to solve small linear programming models by hand, given a basic feasible point.

**CO4: Data – Introduction, Classification and Tabulation:** understand types of data and the basis of their classification and use techniques of organizing data in tabular and graphical form in order to enhance data analysis and interpretation.

**CO5: Graphical representation of Data:** Create a frequency table, bar graph, or a pie chart to represent a data set, identify features of ineffective representations of data, create a histogram, pie chart, or frequency polygon that represents numerical data and create a graph that compares two quantities.

## **PAPER: BC (206) Business Environment of Haryana**

**CO1:** Students will be able to understand the concept of economic development and the nature of State of the Haryana economy since its inception:

**CO2:** After studying this course the students will understand the nature, cropping pattern, role of agriculture in Haryana economy, Measures for development in agriculture, crop insurance.

**CO3:** Students will have the knowledge of various types of agriculture finance; credit needs of farmers; and the sources of credit.

**CO4:** The course imparts knowledge of the objectives and policies, sources of revenues and its utilization related to Haryana budget.

## **SEMESTER-III**

### **PAPER: BC (301) Corporate Accounting- I**

**CO1:** It helps the students to understand the accounting treatment of issue of shares and debentures.

**CO2:** clarifies students about preparation, analysis and comparison of final accounts of companies.

**CO3:** Students will get knowledge of Amalgamation of companies: concept and accounting treatment as per accounting standard 14.

**CO4:** The students will come to know the concept and accounting treatment of internal reconstruction.

### **PAPER: BC (302) Business Statistics-I**

**CO1:** This course helps to understand the concept, scope, usefulness & limitations of statistics.

**CO2:** The students will understand the use of data collection and data presentation in an effective manner.

**CO3:** Helps in identifying relationship between various variables and their effect on each other like effect of advertisement on sale etc.

**CO4:** Describes the students how the Statistics can be used for making sales projections, financial analysis of capital expenditure projects, constructing profit projections for a new product etc.

### **PAPER: BC (303) Business Law-I**

**CO1:** Demonstrate recognition of the requirements of the contract agreement

**CO2:** Demonstrate understanding of contract consideration and capacity

**CO3:** Demonstrate recognition of the genuineness of assent in contract formation.

**CO4:** It should introduce students to the study of law and how it governs conduct in business.

### **PAPER: BC (304) Company Law-I**

**CO1:** Gain knowledge on companies and its process of incorporation

**CO2:** Communicate the students to differentiate the meaning regarding members and shareholder of a company and the powers subject to them.

**CO3:** Utilize the legal procedures relating to the formation of a company

**CO4:** Acquire knowledge about Memorandum of Association and Articles of Association of the Company

### **PAPER: BC (305) Indian Financial System**

**CO1:** Introducing the Indian financial system and its regulations

**CO2:** Gaining knowledge on the basics of banking

**CO3:** Describe the trading mechanism in the stock market.

**CO4:** Describe the methods of issuing shares and role of intermediaries in the primary market

### **PAPER: BC (306) (i) Rural Marketing**

**CO1:** To help the students understand and appreciate the differences and similarities between urban and rural Indian markets

**CO2:** To make them understand and develop marketing strategies that are unique to rural India

**CO3:** The objective of this course is to develop understanding of issues in rural markets

**CO4:** To provide an overview of marketing environment, consumer behavior

### **PAPER: BC (306) (ii) Foreign Trade of India**

**CO1:** To understand the Foreign trade of India, trends and balance of payment problems etc.

**CO2:** Analyze the principle of foreign trade policy and strategies adopted by firms to expand globally

**CO3:** Integrate concept in international Financial Institutions.

**CO4:** Explain the concepts in trade documentation in international business with respect to foreign trade

## **SEMESTER IV**

### **PAPER: BC (401) Corporate Accounting-II**

**CO1:** To assess the Valuation of good will and shares

**CO2:** To equip the students with the preparation of financial statements of insurance companies

**CO3:** To make the students understand the accounting for banking companies.

**CO4:** Demonstrate a thorough knowledge about the procedure of preparing liquidator's final statement of accounts at the time of winding up of the companies.

### **PAPER: BC (402) Business Statistics-II**

**CO1:** Discuss the scope of correlation and use of regression analysis to estimate the relationship between two variables and its applications

**CO2:** Measure the usage of Probability distributions

**CO3:** Compare and contrast Probability binomial and Poisson distribution

**CO4:** Construct expertise in statistics methods and applications for statistical analysis.

### **PAPER: BC (403) Business Laws-II**

**CO1:** Demonstrate an understanding of the Indian Partnership Act, 1932: nature of firm, duties and rights of partners.

**CO2:** Demonstrate understanding of Limited Liability Partnership Act, 2008:

**CO3:** Demonstrate a thorough knowledge of RTI Act, 2005: important provisions

**CO4:** Apply basic legal knowledge to business transactions

### **PAPER: BC (404) Company Law-II**

**CO1:** This course helps to understand the Company management and its administration

**CO2:** Demonstrate an understanding of the duties & liabilities of directors.

**CO3:** Gaining knowledge on the concepts of reconstruction and amalgamation

**CO4:** Discuss winding up and procedure and consequences of winding up

### **PAPER: BC (405) Computerized Accounting System**

**CO1:** To give students mastery of Tally, ERP9.

**CO2:** Converting a manual accounting system to a computer based system

**CO3:** Prepare Financial Statements on the completion of the accounting cycle in a timely fashion

**CO4:** Processing a variety of accounting transactions

## **PAPER: BC (406) (i) Advertising**

**CO1:** To provide an overview of the range of tools available for Marketing Communications

**CO2:** To acquaint the students with concepts and techniques in the application for developing and designing an effective advertising and sales promotion program

**CO3:** To sensitize students to the various facets of advertising, public relation and promotion management

**CO4:** To develop a managerial perspective and an informed decision-making ability for effective and efficient tackling of promotional situations

## **PAPER: BC (406) (ii) Entrepreneurship Development**

**CO1:** Student will be able to understand the basic development of entrepreneurship as a profession.

**CO2:** Student will be able to describe examples of entrepreneurial business and actual practice, both successful and unsuccessful, and explain the role and significance of entrepreneurship as a career, in the firm, and in society

**CO3:** Student will be able to identify and implement systems for collecting and analyzing information to monitor the performance of a new firm

**CO4:** Student will evaluate different modes of entering into entrepreneurship

## **SEMESTER V**

### **PAPER: BC (501) Cost Accounting**

**CO 1:** This will help the student to understand cost calculation and how to control the cost during the cost of production.

**CO 2:** Describe the student's process of cost ascertainment of various expenses related to material and labour

**CO 3:** The purpose of this course is to define students that how the budgets and standards are prepared so that actual cost may be compared to find out deviations or variances.

**CO 4:** Develop knowledge among students of the applicability of statistical data on the basis of which future estimates are prepared and quotations are submitted.

### **BC (502) Financial Management**

**CO 1:** Students will be able to understand the concept of optimum utilization of funds. Once the funds are procured, they should be utilized in maximum possible way at least cost.

**CO 2:** It helps in acquiring the knowledge about to plan a sound capital structure-There should be sound and fair composition of capital so that a balance is maintained between debt and equity capital.

**CO 3:** Commerce graduates may be able to understand that how to raise the finance from various resources which will depend upon decisions like type of source, period of financing, cost of financing and the returns etc.

**CO4:** This course will help the students to demonstrate the ability of financial management and forecast.

### **BC (503) Goods and Services Tax**

**CO 1:** This course will help students to know about the concept and applicability of indirect taxes.

**CO 2:** It provides the deep knowledge of GST which helps the students to build their carrier.

**CO 3:** It will help the students to understand the process of returns to be filed under GST, Payment of tax including TDS etc.

**CO 4:** Enable the students to acquire the information about the Input Tax Credit Eligible and Ineligible Input Tax Credit.

### **BC (504) Income Tax I**

**CO 1:** Students will be able to define the procedure of Direct Tax assessment of individuals.

**CO 2:** clarifies the students various terms like total income; tax management, tax evasion, avoidance, and tax planning.

**CO 3:** It gives practical knowledge to the students about how to calculate income from various heads like income from salary, house property; profit and gains from business and profession, capital gains and other sources.

**CO4:** Identifying and discussing the key concepts like Clubbing and aggregation of income, set-off and carry forward of losses etc.

### **BC (505) Auditing**

**CO 1:** Students will understand the concept of Internal Control System, Control Activity and its effectiveness in the business.

**CO 2:** It enables the students to understand the vouching of cash books, purchase book, sale book, bill receivable book, bill payable book, journal proper and debtor creditor ledgers etc.

**CO 3:** After studying this course students will be able to understand why external audits and other types of audits are conducted.

**CO4:** It helps students to conduct careful examination of books of accounts, documents, records and vouchers.

### **BC (506 (i)) Supply Chain Management**

**CO 1:** The purpose of this course is to provide knowledge to the students about the concept, scope and importance; approaches and role of Supply chain management (SCM).

**CO 2:** Identifying and discussing the key concepts of multimodal transportation; warehousing and distribution channel design.

**CO 3:** Students will be able to understand the concept of Information system in SCM.

**CO4:** Supply chain management is a critical factor in the long-term success of a business. Knowledge of the supply chain management can help the students how business value supply chain managers control and decrease supply chain expenditures.

### **BC (506 (iii)) Fundamentals of Stock Market**

**CO 1:** This course helps the students to understand the concept of Stock Market: Primary Market and Secondary Market, and how to apply the principles of investing including the concepts of risk and return.

**CO 2:** To make the students aware of regulations of National Securities Depository Ltd. (NSDL) and SEBI (Securities and Exchange Board of India).

**CO 3:** Students will understand the concept of raising funds from international and domestic market.

**CO4:** The students acquire knowledge in the field of stock market which makes them sensitive and sensible enough to understand the concept of financial institutions.

## **SEMESTER VI**

### **BC (601) MANAGEMENT ACCOUNTING**

**CO 1:** It endeavors the students to know about Management accounting.

**CO 2:** With the help of this course, students will be able to understand the concept of Analysis of financial statements, comparative statements, common size statements, ratio analysis etc.

**CO 3:** It helps in analyzing cost-volume-profit techniques to determine optimal managerial decisions.



**CO4:** It provides the deep knowledge of Budgeting and budgetary control.

## **BC (602) FUNDAMENTALS OF INSURANCE**

**CO 1:** Students will be able to Learn about various terminology used in Insurance.

**CO 2:** Describe the Principles of Insurance and also the difference between Life & Non –Life insurance Products.

**CO 3:** The students get a detailed knowledge of the role of private sectors & regulatory bodies of Insurance sectors.

**CO4:** They would be able to relate to the role of Insurance in economic development of society and social security.

## **BC (603) HUMAN RESOURCE MANAGEMENT**

**CO 1:** Human resource management is mainly known for the responsibility of recruiting employees. By understanding this students will be able to create position announcements which involve identifying job duties and determining the skill level and requirements that are needed for a position.

**CO 2:** This helps the students to evaluate and make changes to an organization's pay structure by researching compensation trends with the aim of providing employees with industry-acceptable pay.

**CO 3:** It helps them to analyse information to obtain the best packages for those benefits which would provide them adequate coverage.

**CO4:** It enables the students to work in conjunction with department managers and to create the entire performance appraisal process effectively.

## **BC (604) INCOME TAX-II**

**CO 1:** It helps the students to define the procedure of Direct Tax Assessment of individual, HUF and Firms.

**CO 2:** It endeavors the students to understand how to file income tax return.

**CO 3:** Students will be aware about income tax authorities and their powers.

**CO4:** The students will get knowledge about penalties, offences and appeal and revision of tax.

## **BC (605) BUSINESS ENVIRONMENT**

**CO 1:** Understand the dynamics of Economic Planning under Capitalist, Socialist and Mixed Economy.

**CO 2:** Students will gain information about globalization of Indian business.

**CO 3:** To make the students familiarize with monetary and fiscal policy of government.

**CO4:** Knowledge of Business Environment will help the students to understand Foreign Exchange Market.

### **BC (606 (i)) RETAIL MANAGEMENT**

**CO1:** This course demonstrates about the concept, theories and strategic planning in retailing.

**CO2:** Learning how to plan, execute and control the procurement and movement of material and resources on some beneficial purpose.

**CO3:** Students will be able to define Organizational structure in retail institutions.

**CO4:** it helps in defining various stages such as planning, researching supplier or service provider, negotiating price, placing order, making payment and availing the product or service.

### **BC (606 (ii)) Corporate Governance**

**CO1:** This course imparts knowledge about corporate governance that includes company's accountability to shareholders and other stakeholders such as employees, suppliers, customers and local community.

**CO2:** It enhances their understanding of Proper compliance with all the applicable legal and regulatory requirements.

**CO3:** It helps in acquiring the knowledge about various corporate governance reforms.

**CO4:** Students will be able to assess the relationship between corporate managers, directors and the providers of equity, people and institutions who save and invest their capital to earn a return.

## **PROGRAM OUTCOMES**

### **Name of Programme: B.Com (Hons.)**

After the completion of three years for Bachelor in Commerce Programme students would gain deep understanding in the fundamentals of Commerce and Finance and the outcomes of this programme will be:-

**PO1:** A B.Com honours degree opens up innumerable career options and opportunities in Banking Sectors, Insurance Companies, Financing Companies, Industries, etc.

**PO2:** After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, over all Administration abilities of the Company.

**PO3:** Capability of the students to make decisions at personal & professional level will increase after completing this course. It enables students to start a business of his/ her own in the capacity of an entrepreneur.

**PO4:** The course offers a number of specializations and practical exposures which would equip the student to face the modern-day challenges in commerce and business.

**PO5:** Students will develop an attitude for working effectively and efficiently in the business environment.

## **PROGRAM SPECIFIC OUTCOMES for B.COM HONS.**

**PSO1:** Students also acquire skills to work as tax consultant, audit assistant and other financial supporting services

**PSO2:** Students are able to play roles of businessmen, entrepreneur, managers, consultant, which will help learners to possess knowledge

**PSO3:** Students have choices to pursue professional courses such as CA, M.COM, MBA, CMA, ICWA, CS, etc

**PSO4:** Students will demonstrate progressive affective domain development of values, the role of accounting in society and business.

**PSO5:** Learners will gain thorough systematic and subject skills within various disciplines of commerce, business, accounting, economics, finance, auditing and marketing etc.

**PSO6:** Understanding legal issues/ laws relati

# **COURSE OUTCOMES**

## **Name of Programme: B.COM (General)**

### **SEMESTER-I**

#### **PAPER: BC (101) Financial Accounting-I**

**CO1:** This course helps to understand the students the process of book keeping and accounting.

**CO2:** After studying this course, the students learn the practical knowledge of assets liabilities and revenues and expenses.

**CO3:** This course aim to understand the purpose, scope and applicability of accounting

**CO4:** It will clarify the practical aspects of preparation of financial statements.

#### **PAPER: BC (102) Micro Economics**

**CO1:** Students will understand about the fundamentals of micro economics.

**CO2:** Get an introduction to supply and demand and the basic forces that determine equilibrium in a market economy.

**CO3:** Students will be aware about decisions which producers and consumers take for maximising production and satisfaction respectively.

**CO4:** Will be able to solve basic microeconomic problems.

#### **PAPER: BC (103) Principles of Business Management**

**CO1:** This course would impart the students to understand the importance of business and commerce.

**CO2:** to enhance the further knowledge of students about the implementation management techniques to run the organization effectively by using principles of management.

**CO3:** this course content will cater to the needs of basic requirement like, knowledge of planning, organizing, staffing, directing and controlling.

**CO4:** students will effectively learn the prerequisites of an effective control system and applicability of various controlling techniques.

#### **PAPER: BC (105) BUSINESS MATHEMATICS-I**

**CO1: Logarithms:** Convert logarithmic equations to exponential equations, convert exponential equations to logarithmic equations, graph logarithmic functions and solve logarithmic equations.

**CO2: Sequence and Series:** understand the idea of differentiation from first principles, differentiate power functions, find stationary points of some functions, determine the nature of some stationary points using either the first or second derivative tests, understand and work with derivatives as rates of change in mathematical models.

**CO3: Matrices:** Interpret existence and uniqueness of solutions geometrically, understand algebraic and geometric representations of vectors in  $R^n$  and their operations, including addition, scalar multiplication and dot product, Solve systems of linear equations using the inverse of the coefficient matrix when possible Recognize and use equivalent forms to identify matrices and solve linear systems.

**CO4: Determinants:** Provide a definition of the determinant, use determinants and their interpretation as volumes, describe how performing row operations affects the determinant, analyse the determinant of a product algebraically and geometrically, determine the sign of a permutation, compute the determinant of a two-by-two matrix, compute the determinant of a three-by-three matrix, describe properties of the determinant and explain what the determinant measures geometrically.

### **PAPER: BC (106) Business Communication**

**CO1:** to make the students learn the forms of electronic communication; models and its processes.

**CO2:** understanding of Interviewing skills: appearing and conducting; writing resume; Writing business letters and emails

**CO3:** The students will acquire the practices of business communication: group discussion, mock-interview and seminars; report writing etc.

**CO4:** The course content will help the students to further knowledge of formal and informal communication networks in the business organizations.

### **SEMESTER-II**

#### **PAPER: BC (201) Financial Accounting-II**

**CO1:** The students will learn practical knowledge about Hire purchase and installment purchase system.

**CO2:** To give practical knowledge about how to maintain Branch Accounts

**CO3:** This course will help the students in gaining knowledge of various concepts of partnership like admission, retirement and death of a partner

**CO4:** This course imparts knowledge of various methods of valuation of goodwill.

#### **PAPER: BC (203) Fundamentals of Marketing**

**CO1:** This course helps to understand the meaning and various concepts of marketing

**CO2:** Identifying and discussing the management techniques of planning, organizing, directing, and controlling of marketing functions and activities in response to the business needs of the organization

**CO3:** Develop knowledge among students to formulate a marketing plan that will meet the needs or goals of a business or organization.

**CO4:** learning how to formulate strategies for developing new and/or modified products, concepts that respond to evolving market needs.

### **PAPER: BC (204) E-COMMERCE**

**CO1:** The students will understand the application and uses of Internet, Internet services.

**CO2:** To tell the students about the effects of IT on business.

**CO3:** It helps in understanding the implementation of Electronic Data Interchange and the security issues in e-commerce.

**CO4:** the students will acquire the knowledge, skills values and experience to become lifelong earners.

### **PAPER: BC (205) Business Mathematics-II**

**CO1: Permutation and Combination:** Calculate the number of permutations of  $n$  objects taken  $r$  at a time, use factorial notation to represent the number of permutations of a set of objects, calculate the number of combinations of  $n$  objects taken  $r$  at a time and apply the theory of permutations and combinations to solve counting problems.

**CO2: Binomial Theorem:** Compute factorial values, compute binomial coefficients by formula, expand powers of a binomial by binomial coefficients and approximate numbers using binomial expansions.

**CO3: Linear Programming:** formulate a given simplified description of a suitable real-world problem as a linear programming model in general, standard and canonical forms, classify a two-dimensional linear programming model by the type of its solution, solve a two-dimensional linear programming problem graphically and use the simplex method to solve small linear programming models by hand, given a basic feasible point.

**CO4: Data – Introduction, Classification and Tabulation:** understand types of data and the basis of their classification and use techniques of organizing data in tabular and graphical form in order to enhance data analysis and interpretation.

**CO5: Graphical representation of Data:** Create a frequency table, bar graph, or a pie chart to represent a data set, identify features of ineffective representations of data, create a histogram, pie chart, or frequency polygon that represents numerical data and create a graph that compares two quantities.

## **PAPER: BC (206) Business Environment of Haryana**

**CO1:** Students will be able to understand the concept of economic development and the nature of State of the Haryana economy since its inception:

**CO2:** After studying this course the students will understand the nature, cropping pattern, role of agriculture in Haryana economy, Measures for development in agriculture, crop insurance.

**CO3:** Students will have the knowledge of various types of agriculture finance; credit needs of farmers; and the sources of credit.

**CO4:** The course imparts knowledge of the objectives and policies, sources of revenues and its utilization related to Haryana budget.

## **SEMESTER-III**

### **PAPER: BC (301) Corporate Accounting- I**

**CO1:** It helps the students to understand the accounting treatment of issue of shares and debentures.

**CO2:** clarifies students about preparation, analysis and comparison of final accounts of companies.

**CO3:** Students will get knowledge of Amalgamation of companies: concept and accounting treatment as per accounting standard 14.

**CO4:** The students will come to know the concept and accounting treatment of internal reconstruction.

### **PAPER: BC (302) Business Statistics-I**

**CO1:** This course helps to understand the concept, scope, usefulness & limitations of statistics.

**CO2:** The students will understand the use of data collection and data presentation in an effective manner.

**CO3:** Helps in identifying relationship between various variables and their effect on each other like effect of advertisement on sale etc.

**CO4:** Describes the students how the Statistics can be used for making sales projections, financial analysis of capital expenditure projects, constructing profit projections for a new product etc.

### **PAPER: BC (303) Business Law-I**

**CO1:** Demonstrate recognition of the requirements of the contract agreement

**CO2:** Demonstrate understanding of contract consideration and capacity

**CO3:** Demonstrate recognition of the genuineness of assent in contract formation.

**CO4:** It should introduce students to the study of law and how it governs conduct in business.

### **PAPER: BC (304) Company Law-I**

**CO1:** Gain knowledge on companies and its process of incorporation

**CO2:** Communicate the students to differentiate the meaning regarding members and shareholder of a company and the powers subject to them.

**CO3:** Utilize the legal procedures relating to the formation of a company

**CO4:** Acquire knowledge about Memorandum of Association and Articles of Association of the Company

### **PAPER: BC (305) Indian Financial System**

**CO1:** Introducing the Indian financial system and its regulations

**CO2:** Gaining knowledge on the basics of banking

**CO3:** Describe the trading mechanism in the stock market.

**CO4:** Describe the methods of issuing shares and role of intermediaries in the primary market

### **PAPER: BC (306) Rural Marketing**

**CO1:** To help the students understand and appreciate the differences and similarities between urban and rural Indian markets

**CO2:** To make them understand and develop marketing strategies that are unique to rural India

**CO3:** The objective of this course is to develop understanding of issues in rural markets

**CO4:** To provide an overview of marketing environment, consumer behavior

## **SEMESTER IV**

### **PAPER: BC (401) Corporate Accounting-II**

**CO1:** To assess the Valuation of good will and shares

**CO2:** To equip the students with the preparation of financial statements of insurance companies

**CO3:** To make the students understand the accounting for banking companies.

**CO4:** Demonstrate a thorough knowledge about the procedure of preparing liquidator's final statement of accounts at the time of winding up of the companies.

### **PAPER: BC (402) Business Statistics-II**

**CO1:** Discuss the scope of correlation and use of regression analysis to estimate the relationship between two variables and its applications



**CO2:** Measure the usage of Probability distributions

**CO3:** Compare and contrast Probability binomial and Poisson distribution

**CO4:** Construct expertise in statistics methods and applications for statistical analysis.

### **PAPER: BC (403) Business Laws-II**

**CO1:** Demonstrate an understanding of the Indian Partnership Act, 1932: nature of firm, duties and rights of partners.

**CO2:** Demonstrate understanding of Limited Liability Partnership Act, 2008:

**CO3:** Demonstrate a thorough knowledge of RTI Act, 2005: important provisions

**CO4:** Apply basic legal knowledge to business transactions

### **PAPER: BC (404) Company Law-II**

**CO1:** This course helps to understand the Company management and its administration

**CO2:** Demonstrate an understanding of the duties & liabilities of directors.

**CO3:** Gaining knowledge on the concepts of reconstruction and amalgamation

**CO4:** Discuss winding up and procedure and consequences of winding up

### **PAPER: BC (405) Computerized Accounting System**

**CO1:** To give students mastery of Tally, ERP9.

**CO2:** Converting a manual accounting system to a computer based system

**CO3:** Prepare Financial Statements on the completion of the accounting cycle in a timely fashion

**CO4:** Processing a variety of accounting transactions

### **PAPER: BC (406) (i) Advertising**

**CO1:** To provide an overview of the range of tools available for Marketing Communications

**CO2:** To acquaint the students with concepts and techniques in the application for developing and designing an effective advertising and sales promotion program

**CO3:** To sensitize students to the various facets of advertising, public relation and promotion management

**CO4:** To develop a managerial perspective and an informed decision-making ability for effective and efficient tackling of promotional situations

## **SEMESTER V**

## **PAPER: BC (501) Cost Accounting**

**CO 1:** This will help the student to understand cost calculation and how to control the cost during the cost of production.

**CO 2:** Describe the students the process of cost ascertainment of various expenses related to material and labour.

**CO 3:** The purpose of this course is to define students that how the budgets and standards are prepared so that actual cost may be compared to find out deviations or variances.

**CO 4:** Develop knowledge among students of the applicability of statistical data on the basis of which future estimates are prepared and quotations are submitted.

## **BC (502) Financial Management**

**CO 1:** Students will be able to understand the concept of optimum utilization of funds. Once the funds are procured, they should be utilized in maximum possible way at least cost.

**CO 2:** It helps in acquiring the knowledge about to plan a sound capital structure-There should be sound and fair composition of capital so that a balance is maintained between debt and equity capital.

**CO 3:** Commerce graduates may be able to understand that how to raise the finance from various resources which will depend upon decisions like type of source, period of financing, cost of financing and the returns etc.

**CO4:** This course will help the students to demonstrate the ability of financial management and forecast.

## **BC (503) Goods and Services Tax**

**CO 1:** This course will help students to know about the concept and applicability of indirect taxes.

**CO 2:** It provides the deep knowledge of GST which helps the students to build their carrier.

**CO 3:** It will help the students to understand the process of returns to be filed under GST, Payment of tax including TDS etc.

**CO 4:** Enable the students to acquire the information about the Input Tax Credit Eligible and Ineligible Input Tax Credit.

## **BC (504) Income Tax I**

**CO 1:** Students will be able to define the procedure of Direct Tax assessment of individuals.

**CO 2:** clarifies the students various terms like total income; tax management, tax evasion, avoidance, and tax planning.

**CO 3:** It gives practical knowledge to the students about how to calculate income from various heads like income from salary, house property; profit and gains from business and profession, capital gains and other sources.

**CO4:** Identifying and discussing the key concepts like Clubbing and aggregation of income, set-off and carry forward of losses etc.

### **BC (505) Auditing**

**CO 1:** Students will understand the concept of Internal Control System, Control Activity and its effectiveness in the business.

**CO 2:** It enables the students to understand the vouching of cash books, purchase book, sale book, bill receivable book, bill payable book, journal proper and debtor creditor ledgers etc.

**CO 3:** After studying this course students will be able to understand why external audits and other types of audits are conducted.

**CO4:** It helps students to conduct careful examination of books of accounts, documents, records and vouchers.

### **BC (506 (i)) Supply Chain Management**

**CO 1:** The purpose of this course is to provide knowledge to the students about the concept, scope and importance; approaches and role of Supply chain management (SCM).

**CO 2:** Identifying and discussing the key concepts of multimodal transportation; warehousing and distribution channel design.

**CO 3:** Students will be able to understand the concept of Information system in SCM.

**CO4:** Supply chain management is a critical factor in the long-term success of a business. Knowledge of the supply chain management can help the students how business value supply chain managers control and decrease supply chain expenditures.

## **SEMESTER VI**

### **BC (601) MANAGEMENT ACCOUNTING**

**CO 1:** It endeavors the students to know about Management accounting.

**CO 2:** With the help of this course, students will be able to understand the concept of Analysis of financial statements, comparative statements, common size statements, ratio analysis etc.

**CO 3:** It helps in analyzing cost-volume-profit techniques to determine optimal managerial decisions.

**CO4:** It provides the deep knowledge of Budgeting and budgetary control.

### **BC (602) FUNDAMENTALS OF INSURANCE**

**CO 1:** Students will be able to Learn about various terminology used in Insurance.

**CO 2:** Describe the Principles of Insurance and also the difference between Life & Non –Life insurance Products.

**CO 3:** The students get a detailed knowledge of the role of private sectors & regulatory bodies of Insurance sectors.

**CO4:** They would be able to relate to the role of Insurance in economic development of society and social security.

### **BC (603) HUMAN RESOURCE MANAGEMENT**

**CO 1:** Human resource management is mainly known for the responsibility of recruiting employees. By understanding this students will be able to create position announcements which involve identifying job duties and determining the skill level and requirements that are needed for a position.

**CO 2:** This helps the students to evaluate and make changes to an organization's pay structure by researching compensation trends with the aim of providing employees with industry-acceptable pay.

**CO 3:** It helps them to analyse information to obtain the best packages for those benefits which would provide them adequate coverage.

**CO4:** It enables the students to work in conjunction with department managers and to create the entire performance appraisal process effectively.

### **BC (604) INCOME TAX-II**

**CO 1:** It helps the students to define the procedure of Direct Tax Assessment of individual, HUF and Firms.

**CO 2:** It endeavors the students to understand how to file income tax return.

**CO 3:** Students will be aware about income tax authorities and their powers.

**CO4:** The students will get knowledge about penalties, offences and appeal and revision of tax.

## **BC (605) BUSINESS ENVIRONMENT**

**CO 1:** Understand the dynamics of Economic Planning under Capitalist, Socialist and Mixed Economy.

**CO 2:** Students will gain information about globalization of Indian business.

**CO 3:** To make the students familiarize with monetary and fiscal policy of government.

**CO4:** Knowledge of Business Environment will help the students to understand Foreign Exchange Market.

## **BC (606) (i) RETAIL MANAGEMENT**

**CO1:** This course demonstrates about the concept, theories and strategic planning in retailing.

**CO2:** Learning how to plan, execute and control the procurement and movement of material and resources on some beneficial purpose.

**CO3:** Students will be able to define Organizational structure in retail institutions.

**CO4:** it helps in defining various stages such as planning, researching supplier or service provider, negotiating price, placing order, making payment and availing the product or service.

# **PROGRAM OUTCOMES**

## **Name of Programme: B.Com (General)**

### **Program Outcomes (POs) for B.Com (General)**

After the completion of three years for Bachelor in Commerce Programme students would gain deep understanding in the fundamentals of Commerce and Finance and the outcomes of this programme will be:-

**PO1:** This program would provide Banking Sectors, Insurance Companies, Financing Companies, Industries, etc., well trained professionals to meet the requirements.

**PO2:** After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, over all Administration abilities of the Company.

**PO3:** Capability of the students to make decisions at personal & professional level will increase after completing this course.

**PO4:** The course offers a number of specializations and practical exposures which would equip the student to face the modern-day challenges in commerce and business.

**PO5:** Students will develop an attitude for working effectively and efficiently in the business environment.

### **Program Specific Outcomes (PSOs) for B.Com (General)**

**PSO1:** The knowledge of different specializations in Accounting, costing, banking and finance with the practical exposure helps the students to get jobs in the corporate sector.

**PSO2:** Students will be able to demonstrate progressive learning of various tax issues and tax forms related to individuals and firms.

**PSO3:** Commerce graduates will be able to pursue their carrier as Manager, Accountant , Management Accountant, Cost Accountant, Bank Manager, Auditor, Company Secretary, Stock Agents, and so on.

**PSO4:** Students will be able to prove themselves in different professional exams like C.A, C.S, C.M.A, M.P.S.C, U.P.S.C etc.

**PSO5:** Will be able to do higher education and advance research in the field of commerce and finance.

**PSO6:** The students will acquire the knowledge, skills in different areas of communication, decision making, innovation and problem solving in day to day business affairs.

# **COURSE OUTCOMES**

## **Name of Programme: M.Com**

### **SEMESTER-I**

#### **PAPER: MC (101) Organizational Behaviour**

**CO1:** Students will learn about the meaning, nature and approaches of Organisational Behaviour.

**CO2:** Will gain the ability to analyse the Personality traits of humans by learning various theories of Personality.

**CO3:** Get to know the concepts of Perception and Learning.

**CO4:** This course will help the students to understand the components of Group Dynamics.

#### **PAPER: MC (102) Business Environment**

**CO1:** Students familiarize themselves with the New Economic Policy of 1991.

**CO2:** This course will help to know about the objectives, strategies and problems of Economic Planning.

**CO3:** Students will gain complete knowledge about the fiscal and monetary policy of India.

**CO4:** Helps in widening the knowledge related to the provisions of Consumer Protection Act, Competition Act, and Foreign Exchange Management Act.

#### **PAPER: MC (104) Company Law**

**CO1:** This course will help to understand the various provisions of Company Law.

**CO2:** Students will gain the complete knowledge of Share capital.

**CO3:** It will help to know about the company administration, various meetings and winding up of the company.

**CO4:** Will clarify the concepts of Reconstruction and Amalgamation.

#### **PAPER: MC (105) Accounting for Managerial Decisions**

**CO1:** To understand students how to apply management accounting and its objectives in managerial decision making.

**CO2:** To have a deep understanding of preparing and demonstrating of a master budget and the relationship between the components.

**CO3:** Students will be able to analyse cost-volume-profit techniques to determine optimal managerial decisions.

**CO4:** Helps to perform cost variance analysis and standard costing analysis in flexible budgeting.

### **PAPER: MC (106) Marketing Management**

**CO1:** This course will help the students to learn about the concept of Marketing Mix product, Price, Promotion, Place and Packaging.

**CO2:** Students will aware of Social, Ethical and Legal aspects of Marketing.

**CO3:** It will be helpful to analyze the procedure for setting up the price of a product.

**CO4:** Helps in determining the various factors which affect the behaviour of the consumer.

## **M.COM**

### **SEMESTER-II**

#### **PAPER: MC (201) Human Resource Management**

**CO1:** To understand the role of HRM in an organization

**CO2:** To learn to gain competitive advantage through people

**CO3:** Capability to understand employee recruitment and selection process.

**CO4:** Understanding of different types of remuneration plans and their significance.

#### **PAPER: MC (202) International Business Environment**

**CO1:** To help students understand the nature scope and structure of International Business

**CO2:** To explore students to various policy perspectives in international regulatory environment.

**CO3:** To enable students to understand the influence of various environmental factors on international business operations..

**CO4:** Skill to manage financial Exchange Rates and Foreign Markets

#### **PAPER: MC (203) Strategic Marketing**

**CO1:** To make the students aware about the current trends in marketing to enable them to take proactive measures while taking marketing decisions

**CO2:** To discuss and make the students understand the nuances and complexities involved in various product and pricing decisions



**CO3:** To develop the skills among students to enable them to design the Promotion-Mix strategies advertising campaigns

**CO4:** To familiarize the students with the fundamentals of marketing to enable them to take better marketing decisions

### **PAPER: MC (204) Financial Management and Policy**

**CO1:** To understand various concepts related to financial management.

**CO2:** To study in detail, various tools and techniques in the area of finance.

**CO3:** To develop the analytical skills this would facilitate the decision making in Business situations.

**CO4:** To understand the concepts of cost of capital

### **PAPER: MC (205) Corporate Accounting**

**CO1:** Have a solid foundation in accounting and reporting requirements

**CO2:** Value goodwill and shares under various methods

**CO3:** Draft Final Accounts for Manufacturing concerns, Banks and Insurance Companies

**CO4:** Account for mergers and amalgamations

### **PAPER: MC (206) Business Statistics**

**CO1:** Calculate correlation and regression analysis. Predict values of strategic variables using regression and correlation analysis.

**CO2:** Understand basic statistical concepts of Probability and probability distributions

**CO3:** Choose a statistical method for solving practical problems

**CO4:** Highlight statistical relationships between variables in data sets

## **M.COM**

### **SEMESTER-III**

#### **PAPER: MC (302) Advanced Financial Management**

**CO 1:** Students will be able to understand the concept of optimum utilization of funds. Once the funds are procured, they should be utilized in maximum possible way at least cost.

**CO 2:** It helps in acquiring the knowledge about to plan a sound capital structure-There should be sound and fair composition of capital so that a balance is maintained between debt and equity capital.

**CO 3:** Students may be able to understand financial restructuring, mergers & takeovers.

**CO4:** This course will help the students to demonstrate the ability of financial management and forecast.

### **PAPER: MC (309) Advertising Management**

**CO1:** To provide an overview of the range of tools available for Advertising

**CO2:** To acquaint the students with concepts and techniques in the application for developing and designing an effective advertising program

**CO3:** To sensitize students to the various facets of advertising, public relation and promotion management

**CO4:** To develop a managerial perspective and an informed decision-making ability for effective and efficient tackling of advertising effectiveness

### **PAPER: MC (310) Applications of Statistical Methods in Business**

**CO1:** This course helps to understand the concept & limitations of probability

**CO2:** The students will understand the use of estimation and hypotesting

**CO3:** Helps in identifying relationship between various variables and their effect on each other like effect of advertisement on sale etc.

**CO4:** Describes the students how the Statistics can be used for making sales projections, financial analysis of capital expenditure projects, constructing profit projections for a new product etc.

### **PAPER: MC (314) Entrepreneurship development**

**CO1:** Student will able to understand the Project repot preparation in organizations

**CO2:** Student will able to describe examples of entrepreneurial business and actual practice, both successful and unsuccessful, and explain the role and significance of entrepreneurship as a career, in the firm, and in society

**CO3:** Student will able to identify and implement systems for collecting and analyzing information to monitor the performance of a new firm

**CO4:** Student will evaluate different modes of perosnl protection equipments for safety at work places.

## **PAPER: MC (316) Human Resource Development**

**CO1:** To understand the role of HRM in an organization

**CO2:** To learn to gain competitive advantage through people

**CO3:** Capability to understand Learning and Role analysis

**CO4:** Understanding of designing training and development programs.

## **M.COM**

### **SEMESTER-IV**

## **PAPER: MC (403) Project Planning and Control**

**CO1:** To provide the students with a holistic, integrative view of Project Management

**CO2:** 2. To highlight the role of projects in modern day business organizations.

**CO3:** To sensitize the students to complexities of project management.

## **PAPER: MC (408) Sales Management**

**CO1:** To introduce various facets of the job of a sales manager

**CO2:** To focus on decision making aspects and implementation of decisions in sales and distribution management.

**CO3:** To provide foundations in components of sales and distribution management

**CO4:** Knowledge of sales management and ability of decision-making and implementation of decision in sales management.

## **PAPER: MC (409) Services Marketing**

**CO1:** To emphasize the significance of services marketing in the global economy.

**CO2:** To make the students understand the deeper aspects of successful services marketing

**CO3:** To provide insights to the challenges and opportunities in services marketing

**CO4:** demonstrate a knowledge of the extended marketing mix for services

## **PAPER: MC (414) Corporate Governance**

**CO1:** provide a range of definitions of corporate governance

**CO2:** identify the other drivers of corporate governance, such as capital markets, shareholders and rating agencies.

**CO3:** to provide tools for analysis of a company's corporate governance system

**CO4:** To acquire the ability to analyze principles of decision-making, to determine the key interests of major stakeholders, to analyze the system of corporate governance.

## **PAPER: MC (415) International Human Resource Management**

**CO1:** Demonstrate an understanding of key terms, theories/concepts and practices within the field of IHRM

**CO2:** Obtain, through elective courses, an in-depth knowledge of specific IHRM-related theories, skills and practices

**CO3:** To learn to study and design HRM system

**CO4:** Identify and appreciate the significance of ethical issues in HR practices and the management of people in the workplace

# **PROGRAM OUTCOMES**

## **Name of Programme: M.COM**

### **Program Outcomes (POs) for M.COM**

**PO1:** To acquaint a student with conventional as well as contemporary areas in the discipline of Commerce.

**PO2:** It serves the needs of academics and prepares students for research and teaching.

**PO3:** M.Com Course attempt to kindle their sense of —responsibility, honesty, conscience, justice — and above all commitment to human values

**PO4:** To enable a student well versed in national as well as international trends.

**PO5:** To enable the students for conducting business, accounting and auditing practices, role of regulatory bodies in corporate and financial sectors nature of various financial instruments.

**PO6:** To provide in-depth understanding of all core areas specifically Advanced Accounting, International Accounting, Management, Security Market Operations and Business Environment, Research Methodology and Tax planning.

### **PROGRAM SPECIFIC OUTCOMES**

**PSO1:** Impart the students with higher level knowledge and understanding of contemporary trends in commerce and business finance

**PSO2:** For pursuing research in their chosen areas.

**PSO3:** For teaching in Schools and Colleges after qualifying requisite tests.

**PSO4:** For working as data analyst.

**PSO5:** To work as investment consultants after a brief internship in suitable organizations absorbed in Banking and Insurance sector as executives.

**PSO6:** Facilitate the students to apply capital budgeting techniques for investment decisions

**PSO7:** Prepare the students to apply Statistical methods and proficient use of tools for modeling and analysis of business data

**PSO8:** Facilitate the students to analyze and frame micro financing schemes for rural banking

**PSO9:** Provide guidance to students to plan and undertake independent research in a chosen discipline

**PSO10:** Train the students on teamwork, lifelong learning and continuous professional development

## **BBA**

### **SEMESTER-I**

#### **PAPER: BBA (101) Business Organization**

**CO1:** To understand the student about the various forms of business organization.

**CO2:** To enlighten with nature and scope of business organization.

**CO3:** To familiarize the students about Joint stock company-Concept characteristics types, formation of company.

**CO4:** To make them understand of the Forms of Business organizations in new millennium.

#### **PAPER: BBA (102) Business Accounting**

**CO1:** Students will be able to acquire conceptual knowledge of basics of accounting

**CO2:** Develop the skill of recording financial transactions and preparation of reports in accordance with GAAP

**CO3:** Describe the role of accounting information and its limitations

**CO4:** Equip with the knowledge of accounting process and preparation of final accounts

#### **PAPER: BBA (103) Managerial Economics-I**

**CO1:** Useful in Business Organization. In any institution or firm. How should any production be done, and for whom should be produced?

**CO2:** Managerial economics decides the business is going towards profit or loss. managerial economics decides which way is good for the business. And it is only possible when managerial economics plays a very big and important role in cost control decisions.

**CO3:** Managerial economics is useful in coordinating the various activities of a business.

**CO4:** Managerial economics provides useful tools for economics managers in demand forecasts and is useful in demanding production planning. The managerial economy deals with future losses easily. So that any business can be protected against future losses.

**CO5:** Managerial Economics is synchronized between the planning and control of any institution or firm and hence its importance increases.

### **SEMESTER-II**

#### **PAPER: BBA (108) Principles of Management**

**CO1:** Understand the importance of Administration & Management.

**CO2:** Understand the details about Planning and MBO

**CO3:** Learn about Principles of Organization & various types of Organizations

**CO4:** Describe Delegation and Decentralization types of delegation

### **PAPER: BBA (109) Analysis of Financial Statements**

**CO1:** understand the Analysis and interpretation of financial statements

**CO2:** to make them understand about of short term liquidity, long term solvency and profitability

**CO3:** learn about Preparation and analyses of cash flow and the funds flow statements

**CO4:** Describe Societal obligations of accounting

### **PAPER: BBA (111) Understanding Social Behavior**

**CO1:** Understand the Methods of Sociology and Concepts of Sociology.

**CO2:** Describe Social Institution and Social Stratification in India

**CO3:** To make then understand the Social Structure and Processes

**CO4:** Demonstrate understanding of Morale Audit, Values and Norms

## **SEMESTER-III**

### **PAPER: BBA (201) Understanding Human Behaviour**

**CO1:** Students will learn about the meaning, nature and approaches of Understanding Human Behaviour.

**CO2:** Will gain the ability to analyse the Personality traits of humans by learning various theories of Personality.

**CO3:** Get to know the laws of Perception and Learning.

**CO4:** This course helps the students to predict, direct, change and control behaviour of individuals or group in the business at work place.

### **PAPER: BBA (202) Micro Business Environment**

**CO1:** Students will gain knowledge about the concepts of Business Environment and its importance in the business.

**CO2:** Students learn about various Economic Systems like Capitalism, Socialism and Mixed Economy.

**CO3:** Understand the major Social Responsibilities of the business.

**CO4:** Covers the MRTP Act and Competition Act.

### **PAPER: BBA (203) Business Statistics-I**

**CO1:** Help to understand basic statistical concepts such as statistical collection, statistical series, tabular and graphical representation of data.

**CO2:** Calculate measures of central tendency, dispersion. Apply knowledge to solve simple tasks using Microsoft Excel.

**CO3:** Students will be independently able to calculate basic statistical parameters like mean, measures of dispersion, indexes. And also be able to interpret the meaning of the calculated statistical indicators.

**CO4:** Choose a statistical method for solving practical problems. Highlight statistical relationships between variables in data sets.

### **PAPER: BBA (204) Management Accounting**

**CO1:** Students will be able to understand the difference between management accounting and financial accounting.

**CO2:** It will provide better understanding of various cost control techniques.

**CO3:** To evaluate the costs and benefits of different conventional and contemporary cost systems.

**CO4:** Help to analyse cost-volume-profit techniques to determine optimal managerial decisions.

### **PAPER: BBA (206) Business Communication II**

**CO1:** Understanding the meaning, nature and importance of business communication.

**CO2:** Knowledge about various approaches of mechanics of writing.

**CO3:** Students will be able to grab highly effective communication skills which will further enhance their level of confidence.

**CO4:** Personality skills of the students will get developed with the help of this course.

## **SEMESTER-IV**

### **PAPER: BBA (208) Human Behaviour at Work**

**CO1:** This course will help the students to know how to behave at work places.



**CO2:** Students will be able to learn how to participate and present themselves in formal group discussions.

**CO3:** Help to understand students a variety of perspectives on how the actions and attitudes of different members at work place, both as a group and as individuals, can influence an organization's productivity and profitability.

**CO4:** Students get introduced to the concept of Team building.

### **PAPER: BBA (209) Macro Business Environment**

**CO1:** Students familiarize themselves with the New Economic Policy of 1991.

**CO2:** This course will help to know nature and operations of multilateral economic Institutions.

**CO3:** Students will gain complete knowledge about the fiscal and monetary policy of India.

**CO4:** Helps in widening the knowledge of students about the Foreign Capital and technology

### **PAPER: BBA (210) Business Statistics-II**

**CO1:** Students will be able to analyze major Time Series patterns such as trends, seasonality, cyclicity and irregularity.

**CO2:** With the help of Hypothesis Testing students will be to interpret and draw conclusions about the population using sample data.

**CO3:** Helps to predict values of strategic variables using regression and correlation analysis.

**CO4:** Will be able to choose a statistical method for solving various practical problems.

### **PAPER: BBA (211) Marketing Management**

**CO1:** This course will help the students to learn about the concept of Marketing Mix product, Price, Promotion, Place and Packaging.

**CO2:** Students will aware of levels and roles of Distribution Channels.

**CO3:** It will be helpful to analyze the procedure for setting up the price of a product.

**CO4:** Helps in determining the various factors which affect the behavior of the consumer.

### **PAPER: BBA (212) Financial Management**

**CO1:** Students will be able to understand the concept of optimum utilization of funds while comparing expected costs and profits.

**CO 2:** It helps in acquiring the knowledge about to plan a sound capital structure. There should be sound and fair composition of capital so that a balance is maintained between debt and equity capital.

**CO 3:** Commerce graduates may be able to understand that how to raise the finance from various resources which will depend upon decisions like type of source, period of financing, cost of financing and the returns etc.

**CO4:** This course will help the students decide how the funds to be allocated into profitable ventures so that there is safety on investment and regular returns will be possible.

### **PAPER: BBA (213) Principles of Material Management**

**CO1:** Will describe meaning, nature, scope and objective of material management.

**CO2:** Students will grab the knowledge of value analysis and value engineering.

**CO3:** Helps to learn about Physical Distribution Logistics.

**CO4:** This course will help the students that how each and every organization should properly purchase, store and use various material techniques to minimize its cost.

## **SEMESTER-V**

### **PAPER: BBA (301) Business Laws-I**

**CO1:** Students will be able to recognize the requirements of the Negotiable Instrument Act, 1981.

**CO2:** Will give the knowledge of contract and its provisions under the Indian Contract Act 1872.

**CO3:** Students will be able to understand the legality and Statute of Frauds in contracts. Identify contract remedies.

**CO4:** Helps to know about the transactions involving the Sales of Goods Act, 1930.

### **PAPER: BBA (302) Principles of Retailing**

**CO1:** This course demonstrates about the meaning, nature and importance of retailing in the Indian economy.

**CO2:** Students will be able to differentiate between organized and un-organized retailing.

**CO3:** It enhances the understanding of store location, store layout and store design etc.

**CO4:** Helps to focus on importance of various technologies used in retailing to increase the returns of the business.

### **PAPER: BBA (303) Principles of Banking**

**CO1:** To analyse the concept, classification, objectives and functions of Banks.

**CO2:** Now days as banking technology is changing, students will get aware about the Computerization and online banking system, security issues etc.

**CO3:** This course will help the students to differentiate between various banking forms.

**CO4:** Students will learn the legal framework of regulations of banks issued by RBI

### **PAPER: BBA (305) Export procedure and documentation**

**CO1:** Will be able to understand the concept of working of export business

**CO2:** Students will be able to explain the various methods of payment in international business

**CO3:** Clarification of Export incentives and schemes in export business.

**CO4:** This course covers the provisions of EXIM policy.

### **PAPER: BBA (306) Principles of Production Management**

**CO1:** Describe the concept of Product and product system

**CO2:** Students will be able to understand production process and methods of production

**CO3:** Clarification of ISO certification and Statistical quality control in Production.

**CO4:** Will be able to differentiate among various inventory management techniques.

## **SEMESTER-VI**

### **PAPER: BBA (308) Entrepreneurship Development**

**CO1:** understand the nature of entrepreneurship

**CO2:** confirm an entrepreneurial business idea

**CO3:** Students acquire necessary knowledge and skills required for organizing and carrying out entrepreneurial activities

**CO4:** Students develop the ability of analyzing various aspects of entrepreneurship – especially of taking over the risk, and the specificities as well as the pattern of entrepreneurship development and, finally, to contribute to their entrepreneurial and managerial potentials

### **PAPER: BBA (309) Business Law-II**

**CO1:** Describe the Indian Companies Act, 2013

**CO2:** Write down the components of MOA and AOA.

**CO3:** Classify the difference between Shares and Debentures

**CO4:** Describe the SEBI Act,1992

### **PAPER: BBA (310) Logistics Management**

**CO1:** Describe the Concept and Importance of Logistics

**CO2:** To understand inventory management and its techniques

**CO3:** Identify the various physical distribution channel of supply chain management

**CO4:** Students will be able to explain role of technology in logistics

### **PAPER: BBA (311) Principles of Insurance**

**CO1:** Will be able to explain the concept and importance of Insurance.

**CO2:** Describe the difference between life insurance and general insurance.

**CO3:** Clarify the provisions of IRDA Act 1999

**CO4:** Students will understand the documentation and claim settlement process of life and general insurance

### **PAPER: BBA (312) Introduction to Financial Services**

**CO1:** Will be able to explain the concept and importance of financial services.

**CO2:** Describe the difference between hire purchase and leasing.

**CO3:** Clarify the concept of mutual funds and its types

**CO4:** Students will understand the merchant banking and its functions

## **PROGRAM OUTCOMES**

### **Name of Programme: B.B.A**

#### **Program Outcomes (POs) for BBA**

BBA programme has been designed to prepare graduates for attaining the following specific outcomes:

**PO1:** Students are competent in the uses of technology in modern organizational operations

**PO2:** Students are able to define, analyze, and devise solutions for structured and unstructured business problems and issues using cohesive and logical reasoning patterns for evaluating information, materials, and data.

**PO3:** Exhibit understanding of broad business concepts and principles.

**PO4:** Students are able to conceptualize a complex issue into a coherent written statement and oral presentation

**PO5:** Students can demonstrate the fundamentals of creating and managing innovation, new business development, and high-growth potential entities.

## **PROGRAM SPECIFIC OUTCOMES (PSO) OF BBA**

**PSO 1:** Understand of the corporate world

**PSO 2:** Analyse the theoretical knowledge with the practical aspects of Organizational setting and techniques or management.

**PSO 3:** Determine conceptual and analytical abilities required for effective decision making.

**PSO 4:** Understand the dynamic and complex working environment of Business.

**PSO 5:** Understand the problems faced by the business sector in the Current scenario.

**PSO 6:** Understand the rapid changes of financial services include banking and insurance sectors.

#### Course Outcomes B.A. and Functional English

1. Functional English : The learning of this subject makes a student more confident in interacting in English as it prepares a student well versed with the language. It improves the communication skills of the students. It also helps in pursuing higher studies in the language.
2. BA English : The students become more confident in using the language in day today life. It improves their knowledge of literature if they want to pursue higher studies. It also helps in getting jobs in any field as without good English one cannot get good job opportunities.

Program Outcomes ; PSO and Course Outcome  
of MA English

Programme Outcome

1. To make students learn the International language (i.e. English) Effectively,
2. To make students learn communication skills so that they can cope up with their professional requirements.
3. To make them understand the society in a better way.
4. To hone the writing skills of students and they learn the conventions of academic writing.
5. To install a critical perspective with which the students approach the disciplines.

Programme Specific Outcome

1. critically interact with works from different contexts: social, political, economic, historical and national as subjects conscious of their own socio-historic specificity and thus their level of critical thinking is enhanced,
2. students become capable of interpreting and exploring relationships from the point of view of different people.
3. inculcate a literary, aesthetic and critical awareness of diverse cultures.

## Core Courses

### Course Name

### Course Outcome

1. Literature in Eng  
(1550-1660)

2. Lit. in Eng  
(1660-1798)

3. Lit in Eng  
(1798-1914)

4. Lit. in Eng  
(Modern)

5. Study of a Genre  
(Fiction)

6. Critical Theory

7. English language

- To make the students aware of those literary periods and the trends of each,

- To introduce them to a bunch of English poetry, drama, prose and fiction

- To make the students capable of analyzing the works of different authors.

- To instill in the students a theory basis.

- To make students analyse and interpret literature based on the text.

- To help the students learn the evolution of language

- To cultivate language skills of students by introducing them to structures of language through a wide variety of literary works.

~~Ashwini~~  
(Ashwini  
Associate Prof.)  
Dept. of Eng.)

For Approval  
Principal



# Program Outcomes: PSO and Course outcome of B.Sc. Genetics

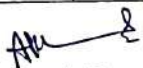
## Program outcomes

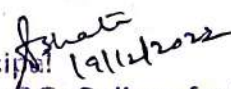
1. To make students learn the deeper aspects of cell structure and function at molecular level.
2. To apprise students about likeness between the physiological processes at the cellular and organismic levels.
3. To develop understanding of organismal, cellular, biochemical and environmental basis of life.
4. To acquaint students with recent knowledge and techniques in basic and applied biological sciences.
5. To provide general overview of different biochemical experimental approaches to understand the structure and functions of cell and its components.

## Course Outcomes:

1. This core course will make students able to understand how the cell functions as a unit of life.
2. Through this course, students will be able to appreciate the importance of various cell function and structures in the evolution of multicellular organisms.
3. The studies will make the students reveal elegance, dynamics and economy in the living cell and a gratifying unity in the principles by which a cell functions.
4. The students will know about the basic cellular and molecular approaches for cancer development and treatment.
5. The students will know how cells work in healthy and diseased states and how cell biologists working in animal, plant and medical science develop new vaccines, more effective medicines, plants with improved qualities and varieties.

<b>Course Outcomes</b>	<b>Paper III practical- LAB- semester 1 and 2</b>
<b>Lab work</b>	<ul style="list-style-type: none"><li>➤ Understood the cell cycle and stages of cell division.</li><li>➤ Described the structural study and mounting of organisms for permanent preparation of slides.</li><li>➤ Came to knowing the rules of taxonomy of chromosomes and preparation of Karyotype.</li><li>➤ Understood the diversity morphology, of giant [lampbrush and polytene] chromosome.</li><li>➤ To learn the technique of preparation of cytological slides [mitoses and meiosis].</li></ul>

  
Dr. Adarsh Deep Kaur  
Associate professor  
Department of Zoology

  
Principal  
Govt. College for Women  
Panchkula  
G.C.W.-14 Panchkula