

Table: Course outcomes for Chemistry

1. First Year Students

Sr. No.	Course Code	Course Name	Expected outcome
	CHEM 101 (TH)	ATOMIC STRUCTURE, BONDING, GENERAL ORGANIC CHEMISTRY & ALIPHATIC HYDROCARBONS	<p>Predict atomic structure, chemical bonding and molecular geometry based on accepted models</p> <p>To study the subject initially by understanding the basic things for chemical reactions i.e. Substrate and Reagents Types of reagents Electrophilic and Nucleophilic Homolytic and heterolytic fission, Electron mobility Inductive effect etc</p> <p>Predict the major and minor products of a variety of organic reactions with appropriate stereochemistry and regiochemistry.</p> <p>Understand and reproduce accepted mechanisms of organic reactions including all intermediates, arrows, charges, and resonance structures.</p>
	CHEM 101 (PR)	ATOMIC STRUCTURE, BONDING, GENERAL ORGANIC CHEMISTRY & ALIPHATIC HYDROCARBONS	<p>Define chemistry as the study of the composition, structure, properties, and reactions of matter.</p> <p>Purification of organic compounds by crystallization and distillation.</p>
	CHEM 102 (TH)	STATES OF MATTER, CHEMICAL KINETICS & FUNCTIONAL ORGANIC CHEMISTRY	<p>Apply quantitative reasoning skills to determine quantities of matter and energy involved in physical and chemical changes.</p> <p>Manipulate the gas laws to describe real and ideal gas behavior.</p> <p>Identify the physical and chemical properties of common organic functional groups.</p>

	CHEM 102 (PR)	STATES OF MATTER, CHEMICAL KINETICS & FUNCTIONAL ORGANIC CHEMISTRY	Describe method to determine the surface tension, viscosity of organic liquids and study the kinetics of chemical reaction. Systematic analysis of organic compound.
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Comment [D1]:

2. Third semester students

Sr. No.	Course Code	Course Name	Expected outcome
	CHEM CC 303	SOLUTIONS, PHASE EQUILIBRIA, CONDUCTANCE, ELECTROCHEMISTRY & ORGANIC CHEMISTRY	<p>Explain the origin of K_{eq} and its relation to fugacity and activity and apply these concepts to ideal and real solutions of electrolytes and non-electrolytes and to colligative properties.</p> <p>Apply the principles of electrochemistry to conductance, voltaic, and electrolytic systems.</p> <p>Study of preparation and mechanism of carboxylic acid and their derivatives.</p> <p>Recognize the structure and function of carbohydrates, amino acids, proteins and nucleic acids.</p>
	CHEM CC 303 P	SOLUTIONS, PHASE EQUILIBRIA, CONDUCTANCE, ELECTROCHEMISTRY & ORGANIC CHEMISTRY LAB	<p>Describe the method for the determination of conductance, degree of dissociation in case of strong acid vs strong base and weak acid vs strong base.</p> <p>Systematic analysis of organic compound</p>
	CHEM SEC 301	BASIC ANALYTICAL CHEMISTRY	<p>To understand the various methods for soil, water, food product and cosmetic analysis</p> <p>Analysis by various Chromatographic techniques</p>

3. Fourth semester students

Sr. No.	Course Code	Course Name	Expected outcome
	CHEM CC 404	COORDINATION CHEMISTRY, STATES OF MATTER & CHEMICAL KINETICS	<p>Recognize the role played by transition metal complexes in Inorganic Chemistry.</p> <p>Describe the structure and bonding theories in coordination compound electronic and magnetic properties of the transition metal complexes.</p> <p>Explain the theories of bonding in coordination compounds and their experimental behaviour.</p> <p>Manipulate the gas laws to describe real and ideal gas behaviour.</p> <p>Study of kinetics of chemical reactions and defects in solids</p>
	CHEM CC 404 P	COORDINATION CHEMISTRY, STATES OF MATTER & CHEMICAL KINETICS LAB	<p>Describe method to determine the surface tension, viscosity of liquids and study the kinetics of chemical reaction</p> <p>Systematic analysis of inorganic mixture</p>
	CHEM SEC 402	FUEL CHEMISTRY & CHEMISTRY OF COSMETICS AND PERFUMES	<p>To study energy sources, fuels, lubricants, essential oils and cosmetics.</p>

Table :Course Outcome of Botany

1. First Year Students

Sr. No.	Course Code	Course Name	Expected Outcome
	BOTA 101(TH)	Biodiversity (Microbes, Algae, Fungi & Archegoniates)	<ul style="list-style-type: none"> -To make students aware about microbial diversity. - To understand the structure, general characteristics, ecology, distribution , reproduction & life cycles of the Algae, Fungi, Bryophytes Pteridophytes & Gymnosperms with various genera. - To understand the stellar evolution & seed formation habitat in Pteridophytes. - To explore economic importance of Algae, Fungi, Bryophytes, Pteridophytes & Gymnosperms.
	BOTA 101(PR)	Biodiversity (Microbes, Algae, Fungi & Archegoniates)	<ul style="list-style-type: none"> To identify the specimen \structure of Algae, Fungi, Bryophytes, Pteridophytes & Gymnosperms. -To understand the morphology, thallus structure and reproduction among them.
	BOTA 102-(TH)	Plant Ecology and Taxonomy	<ul style="list-style-type: none"> -To understand ecological relationships between organisms and their environment. -To identify diversity of life forms in an ecosystem. -To understand the role that biodiversity plays in conservation Science. - To recognize the major groups of vascular plants and their phylogenetic relationships. -To gain the knowledge of Herbarium, Botanical gardens, ICBN (Principles & rules).
	BOTA 102-(PR)	Plant Ecology and Taxonomy	<ul style="list-style-type: none"> -Study of instruments used to measure microclimatic variables. Soil thermometer, anemometer, rain gauge & lux meter. -Study of morphological adaptations of Hydrophytes & Xerophytes. - Study of vegetative & floral characters of flowers-Field visit. -Mounting of a properly dried & pressed specimen of any wild angiosperm with herbarium label.
	BOTA-401(TH)	Plant Physiology	-To understand plant physiological

		and Metabolism	<p>processes and metabolism.</p> <p>-To explain the role of micronutrients in plant growth and development.</p> <p>-To understand the importance of plant growth regulators.</p>
	BOTA-401(PR)	Plant Physiology and Metabolism	<p>-To gain practical knowledge of Osmosis by potato osmoscope experiment.</p> <p>-Structure of stomata.</p> <p>-Demonstration of transpiration by Ganong's photometer.</p> <p>-Demonstration of ascent of sap\Transpiration pull.</p> <p>-Study of mineral deficiency symptoms using plant photographs\material.</p> <p>-Separation of chloroplast pigments using paper chromatography technique.</p>
	BOTA-402	Floriculture	<p>To gain the knowledge of factors affecting growth & flower production of ornamentals.</p> <p>-To understand the cultivation of important flower crops (Carnation, Chrysanthemum, Gladiolus, Marigold, Rose, Lilium)</p>
			To gain the knowledge of packaging , storage and transport of flower crops.
			To gain the Post-harvest handling of important flower crops, flower arrangements and other floral crafts.

Table: Course outcomes for History

1. First Year Students

Sr. No.	Course Code	Course Name	Expected outcome
1.	HIST101	History of India from the Earliest Times up to 300 CE	<ul style="list-style-type: none">• Students learned about importance of Indian culture and its rich diversity.• Students learned about main physical features of India and sources of Indian History.
2.	HIST102	History of India from c. 300 to 1206	<ul style="list-style-type: none">• Students learned about Gupta Administration, Golden Age of Indian History and rich literary development.

2. Third semester students

Sr. No.	Course Code	Course Name	Expected outcome
3.	HIST103	History of India from c. 1206-1707	<ul style="list-style-type: none">• Students learned about Muslim dynasty and role of muslim rulers in India.• Students learned about architecture development
4.	HIST117	Historical Tourism: Theory and Practice	<ul style="list-style-type: none">• Students learned about importance of historical monuments and importance of historical monuments and its role in historical tourism

3. Fifth semester students

Sr. No.	Course Code	Course Name	Expected outcome
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5.	HIST111	Women Studies in India	<ul style="list-style-type: none"> • Students learned about condition of Indian women from earliest time to modern era. • students learned about causes of bad conditions of Indian women and historical regions • students learned about Basic Concepts & Theories: - Defining Gender, -Patriarchy: Ideology & Practice - Relationship between Gender, Caste, Class, Religion & Politics • Emergence of Women Studies in India • Gender & Social History: - Family & Marriage -Women's Question in the 19th century - Women' Movement in Colonial & Post Colonial periods in India
6.	HIST114	Gender and Education in India	<ul style="list-style-type: none"> • Students learned about gender education and Education in Early and medieval times: Formal & Informal • Colonial Period: Socio-religious reform women & education for females. • Role of School and Colleges in Colonial and Post Colonial Period.
7.	HIST107	Some Aspects of European History: c. 1780- 1945	<ul style="list-style-type: none"> • Students learned about The French Revolution: Genesis Nature & Consequences • Napoleonic Era and aftermath. • Revolutions of 1830 & 1848. • Unification of Italy &Germany. • Social and economic Changes. • Imperialist Conflicts: World War I • Rise of Fascism and Nazism. • Origin of World War II

Table: Course outcomes for Pol. Science

1. First Year Students

Sr. No.	Course Code	Course Name	Expected outcome
1.	POLS 201	Indian government and politics	<ul style="list-style-type: none"> Students learned about nature of Indian state, fundamental rights, parliament, cast, and secularism
2.	POLS 102	introduction to political theory	<ul style="list-style-type: none"> Students learned about politics, state civil society, concept liberty , concept of equality, justice, concept of rights.

2. Third semester students

Sr. No.	Course Code	Course Name	Expected outcome
3.	POLS302	Legislative Support	<ul style="list-style-type: none"> Students learned about meaning, characteristics and function of local government, local government rural, local government urban, state legislature, parliament legislative process
4.	POLS301	Comparative government and politics	<ul style="list-style-type: none"> Students learned about comparative politics definition, nature and scope, comparative method, authoritarian and democratic regimes , federal and unitary system, the party system, and notion of welfare state .

3. Fifth semester students

Sr. No.	Course Code	Course Name	Expected outcome
5.	POLS502	Themes in comparative political theory	<ul style="list-style-type: none"> Students learned about Indian and western political thought , john locke's views and about rights, JS Mills' views about liberty, Kautilya views about state bal Gangadhar Tilak views about Swaraj.

6.	POLS0409	Society, economy and politics in Himachal Pradesh	<ul style="list-style-type: none"> Students learned about movement for attaining status of separate state, politics of statehood, geography, climate And population of HP, economy of HP tourism and hydro-electric projects in HP, major political parties, their support base and performance in the election caste politics in HP and politics of sub-regionalism in HP
7.	POLS501 sec	Democratic awareness with legal literacy	<ul style="list-style-type: none"> Students learned about outlining the legal system in Indian criminal and civil courts: juvenile courts, Mahila Courts role of tribunals. Understanding the application of law. Criminal jurisdiction, filing an FIR, arrest, bail, search and Seizure. Prevention of atrocities on scheduled castes and scheduled tribes. Dowry, sexual harassment and violence against women. Consumer rights and cybercrimes. Functioning of legal system legal service authorities act prevention detention act and NSA.

Table: Course outcomes for Zoology

1. First Year Students

Sr. No.	Course Code	Course Name	Expected outcome
1.	ZOOL 101 (TH)	ANIMAL DIVERSITY	<ul style="list-style-type: none">• To make students aware with the non-chordate and chordate world around human beings.• To learn the diversity in structure and habitats of vertebrates and describe the hierarchy, classification and evolutionary process of different vertebrates• To understand the complexity and process of evolution of different phylum with various examples
2.	ZOOL 101 (PR)	ANIMAL DIVERSITY	<ul style="list-style-type: none">• To identify the invertebrates and vertebrates and classify them up to the class level on the basis of different features observed
3.	ZOOL 102 (TH)	COMPARATIVE ANATOMY AND DEVELOPMENTAL BIOLOGY OF VERTEBRATES	<ul style="list-style-type: none">• Describe the various systems of the body across animal kingdom to get a comparative account.• Understand the various stages of embryo development, types of fertilization, eggs, and placenta, etc.
4.	ZOOL 102 (PR)	COMPARATIVE ANATOMY AND DEVELOPMENTAL BIOLOGY OF VERTEBRATES	<ul style="list-style-type: none">• Describe various types of eggs• Various types of placenta

2. Third semester students

Sr. No.	Course Code	Course Name	Expected outcome
5.	ZOOL 301 (TH)	PHYSIOLOGY AND BIOCHEMISTRY	<ul style="list-style-type: none">Describe the functions of various systems of the human bodyDescribe the basic principles in physiologyUnderstand the various biomolecules and knowledge of biochemical pathways
6.	ZOOL 301 (PR)	PHYSIOLOGY AND BIOCHEMISTRY	<ul style="list-style-type: none">Familiar with important body parts to understand their functionsKnowledge of simple biochemical laboratory procedures
7.	ZOOL 302 (TH)	MEDICAL DIAGNOSTICS	<ul style="list-style-type: none">To understand the various clinical methods for blood & urine analysisInsights into experimental and analysis techniques

3. Fourth semester students

Sr. No.	Course Code	Course Name	Expected outcome
8.	ZOOL 401 (TH)	GENETICS AND EVOLUTIONARY BIOLOGY	<ul style="list-style-type: none">Understanding of various aspects in the field of classical and molecular geneticsKnowledge of various cell or sex-linked disorders, heredity and variationsTo understand the evolution of organisms through the course of time with different adaptations
9.	ZOOL 401 (PR)	GENETICS AND EVOLUTIONARY BIOLOGY	<ul style="list-style-type: none">To learn cell structure and functions, cell division, etc.
10.	ZOOL 402 (TH)	APICULTURE	<ul style="list-style-type: none">To study bee culture with respect to control the economic benefits they cause and their breeding and control measures.

CLASS/SEM	COURSE CODE	COURSE TYPE	TITLE OF PAPER	OUTCOME After completing the corresponding course students will be able to
I	MATH101TH	CORE COURSE	DIFFERENTIAL CALCULUS	Evaluate the limit of function using L' Hospital rule Find points of discontinuity and differentiability Identify the extrema of a function Apply Leibnitz theorem, Taylor Series, McLaurin Series Find the asymptotes, curvature concavity and convexity and Jacobean Compute the limit and continuity of function of several variables
I	MATH102TH	CORE COURSE	DIFFERENTIAL EQUATIONS	Apply the concept of Wronskian on functions Recognize and solve ODE PDE using different methods Find the complete solutions of ODE, Total and simultaneous Differential equations Solve pde by clariut and charpit and lagrange methods
III	MATHS301TH	CORE COURSE	REAL ANALYSIS	Search countable and uncountable sets Differentiate bounded unbounded sets bounded sequences and unbounded sequences Apply the concept of convergence and uniform convergence Solve problems based on series of functions and power series.
III	MATH304TH	SEC 1	INTEGRAL CALCULUS	Integrate by partial fraction methods, using properties of definite integrals and reduction formulae Find the length of curves, area of curves, volume and surface area with the use of double and triple integration
IV	MATH401TH	CORE COURSE	ALGEBRA	Distinguish sets, groups, semigroups, subgroups

				<p>normal subgroups and quotient subgroups</p> <p>Examine the homomorphisms of group</p> <p>Characterize rings, ID, fields, subrings ideals.</p> <p>Apply theorem based on homeomorphisms and isomorphism's</p>
IV	MATH402TH	SEC 2	VECTOR CALCULUS	<p>Explain the physical and geometrical meaning of dot and cross product of vectors</p> <p>Apply gradient to solve the problems involving steepest ascent and normal vectors to level curves</p> <p>Make use of Gauss, Green and Stokes theorems</p> <p>Explain physical meaning of curl and divergence</p>
V	MATH503TH	DSE 1A	LINEAR ALGEBRA	<p>Find basis dimensions quotient subspaces of given vector space</p> <p>Make use of linear transformations to find matrices dual spaces dual basis double dual Eigen values and vectors and characteristic polynomials.</p>
V	MATH504TH	SEC 3	PROBABILITY AND STATISTICS	<p>Understand and apply the concepts of random variables probability distribution.</p> <p>Find mathematical expectation</p> <p>Binomial distributions uniform distributions normal distributions normal distributions Bivariate expectations.</p>
VI	MATH601TH	DSE 1B	NUMERICAL METHODS	<p>Make use iterative methods, bisection method and newton raphson method in solving Nonlinear equations</p> <p>Distinguish interpolation and extrapolations</p> <p>Apply gauss's central difference formulae sterling formulae</p> <p>Numerically integrate the functions using the Trpezoidal, Simpson and Wddele Rule</p>
VI	MATH604TH	SEC 4	TRANSPORTTION	Solve transportation problem using

			AND GAME THEORY	NWCM LCEM, Vogel approximations methods Assignment problems using mathematical formulation and Hungarian Method. Solve two person Zero sum Games using different methods
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Table: Course outcomes for Physics

1. First Year Students

Sr. No.	Course Code	Course Name	Expected outcome
1.	PHYS101TH	MECHANICS	<ul style="list-style-type: none"> • Help the students to study Ordinary Differential Equations, Coordinate systems and motion of a particle: Volume, velocity and acceleration in Cartesian and Spherical co-ordinate systems, Solid angle. • To study Space Time Symmetry and Conservation Laws, Frames of Reference, Galilean transformation and Galilean invariance, Coriolis force and Foucault's pendulum. • Predict the Gravitation and Inverse Square Force Law Central and non-central forces, Inverse square force, Centre of mass. Reduced mass, Kepler's laws and GPS. • To understand the concepts of Rotational Motion and Kinematics of Elastic and Inelastic Collisions : Angular velocity, angular momentum, Torque, , Elastic collisions in laboratory and C.M. systems, Cross-section for elastic scattering, Rutherford scattering • Special Theory of Relativity, Michelson- Morley experiment, postulates of special theory of relativity. Lorentz transformations. Relativity of simultaneity. • Effects of Relativity: Length contraction. Time dilation. Relativistic addition of velocities. Relativistic Doppler effect and Minkowsky space.
2.	PHYS101 PR	MECHANICS	<ul style="list-style-type: none"> • Measurements of length (or diameter) using vernier caliper, screw gauge and travelling microscope. • To determine the Height of a Building using a Sextant. • To determine the Moment of Inertia of a Flywheel. • To determine the Young's Modulus of a Wire by Optical Lever Method. • To determine the Modulus of Rigidity of a Wire by Maxwell's needle. • To determine the Elastic Constants of a Wire by Searle's method. • To determine g by Bar Pendulum. • To determine g by Kater's Pendulum. • To determine g and velocity for a freely falling body using Digital Timing Technique
3.	PHYS102TH	ELECTRICITY, MAGNETISM AND EMT	<ul style="list-style-type: none"> • To study vector analysis: Scalar and Vector product, gradient, divergence, Curl and their significance, Gauss-divergence theorem, Stokes's theorem and Green's theorem. • Electrostatics: electric flux, Gauss's theorem of electrostatics and its Applications electrostatic potential, electrostatic potential energy. Electric potential due to a dipole and quadrupole, Method of Electrical Images. Poisson and Laplace equations. • Electric Current and Fields of Moving charges, Magnetism Ampere circuital law and its applications. Hall Effect, Definition of vector potential A and derivation. Field of Moving Charges. • Surface current density: Dielectrics, parallel plate capacitor with a dielectric, dielectric constant, polarization and polarization vector, displacement vector D, Claussius - Mossotti equation. • Electrostatic Fields in Dielectrics, Magnetic Fields in Matter: Magnetic permeability and Ferromagnetism. Domain theory of ferromagnetism, magnetization curve, hysteresis loss, ferrites. • Maxwell's equations and Electromagnetic wave propagation.
			<ul style="list-style-type: none"> • To verify the Thevenin and Norton theorem.

4.	PHYS102 PR	ELECTRICITY, MAGNETISM AND EMT	<ul style="list-style-type: none"> To verify the Superposition, and Maximum Power Transfer Theorem. To determine unknown capacitance by flashing and quenching method. To study the a series LCR circuit and determine its (a) Resonant Frequency, (b) Quality Factor. To study a parallel LCR circuit and determine its (a) Anti-resonant frequency and (b) Quality factor Q.
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2. 3rd Semester Students

Sr. No.	Course Code	Course Name	Expected outcome
5.	PHYS301TH	THERMAL PHYSICS & STATASTICAL MECHANICS	<ul style="list-style-type: none"> Laws of Thermodynamics: Zeroth Law and First law, conversion of heat into work, Second law & Entropy, Carnot's cycle & theorem, Third law of thermodynamics. Thermodynamic Potentials: Enthalpy, Gibbs, Helmholtz and Internal Energy functions, Joule-Thompson Effect, Clausius-Clapeyron Equation, Study of Kinetic Theory of Gases: Mean free path (Zeroth Order), Transport Phenomena: Viscosity, Conduction and Diffusion Law of equipartition of energy Recognize Theory of Radiation: Blackbody radiation, Spectral distribution, Derivation of Planck's law, Deduction of Wien's distribution law, Rayleigh-Jeans Law, Stefan Boltzmann Law and Wien's displacement law from Planck's law. Study the concept of Statistical Mechanics: Phase space, Macrostate and Microstate, Entropy and Thermodynamic probability, Maxwell-Boltzmann law, Quantum statistics - Fermi-Dirac distribution law, Bose-Einstein distribution law.
6.	PHYS301 PR	THERMAL PHYSICS & STATASTICAL MECHANICS	<ul style="list-style-type: none"> To determine the coefficient of thermal conductivity of copper by Searle's Apparatus To determine a Low Resistance by Carey Foster's Bridge To determine the magnifying power of a telescope.
7.	PHYS303TH SEC I	COMPUTATIONAL PHYSICS SKILLS	<ul style="list-style-type: none"> To understand the concepts of Algorithms and Flowcharts: Definition, properties and development. Flowchart: Concept of flowchart, symbols, guidelines, types. Scientific Programming: Development of FORTRAN, Character Set, Constants and their types, Variables and their types, Keywords, Operators: Arithmetic, Relational, Logical and Assignment Operators. Fortran Statements. Scientific word processing: TeX/LaTeX word processor, Defining LaTeX commands and environments. Visualization: Introduction to graphical analysis and its limitations. Gnuplot, basic Gnuplot commands,

3. Fourth semester students

Sr. No.	Course Code	Course Name	Expected outcome
8.	PHYS401TH	WAVES & OPTICS	<ul style="list-style-type: none"> • To Study the Superposition of Two Collinear Harmonic oscillations: Linearity and Superposition Principle. (1) Oscillations having equal frequencies and different frequencies (Beats). • Superposition of Two Perpendicular Harmonic Oscillations: Graphical and Analytical Methods. Lissajous Figures with equal and unequal frequency and their uses. • Waves Motion- General: Transverse waves on a string. Travelling and standing waves on a string. Normal Modes of a string. Group velocity, Phase velocity. • Study of Fluids: Surface Tension: Viscosity: Poiseuille's formula. Physics of low pressure - Rotary pump - Diffusion pump - Molecular pump - Knudsen. • Sound: Simple harmonic motion, Fourier's Theorem - Intensity and loudness of sound - Decibels - Intensity levels - musical notes - musical scale. Acoustics of buildings: Reverberation and time of reverberation - Absorption coefficient - Sabine's formula - Acoustic aspects of halls and auditoria. • Wave Optics: wave front, Huygens Principle. Interference: Interference: Young's Double Slit experiment, Lloyd's Mirror and Fresnel's Biprism, Haidinger Fringes, Fizeau Fringes. Newton's Rings: Michelson's Interferometer: wavelength, Wavelength difference, Refractive index and Visibility of fringes.
9.	PHYS401PR	WAVES & OPTICS	<ul style="list-style-type: none"> • To determine the Resolving Power of a Plane Diffraction Grating. • To determine the Refractive Index of the Material of a given Prism using Sodium Light. • To determine Dispersive Power of the Material of a given Prism using Mercury Light • To determine the value of Cauchy Constants of a material of a prism. • To determine the Resolving Power of a Prism. • To determine wavelength of sodium light using Newton's Rings
10.	PHYS403TH SEC II	BASIC INSTRUMENTATION SKILLS	<ul style="list-style-type: none"> • Provide knowledge of Basic of Measurement: Instruments accuracy, precision, sensitivity, Multimeter: Electronic Voltmeter: AC millivoltmeter: Type of AC millivoltmeters: Amplifier- rectifier, and rectifier- amplifier. Block diagram ac millivoltmeter, specifications and their significance. • Cathode Ray Oscilloscope, Signal Generators and Analysis Instruments: Block diagram, pulse generator, Impedance Bridges & Q-Meters: Block diagram of bridge. working principles of basic RLC bridge. Digital LCR bridges. • Digital Instruments: Principle and working of digital meters. Comparison of analog & digital instruments. Working principles of digital voltmeter. • Digital Multimeter: Block diagram and working, Working principle of time interval accuracy and resolution

Course Outcomes for Geography

1. First Year Students

Sr. No.	Course Code	Course Name	Expected outcome
1.	(GEOGP101CC) DSC-2A	PHYSICAL GEOGRAPHY	<ul style="list-style-type: none">To understand the origin and evolution of the earth as a part of solar system.To know the internal structure of the earth and the internal and external process those shape earth.To understand the composition and structure of the atmosphere, different classifications of the climate and to know about the ocean movements and relief features.
2.	(GEOGP102CC) DSC-2B	GENERAL CARTOGRAPHY (PRACTICAL)	<ul style="list-style-type: none">To learn the map reading and understand the scales and its types.To understand the map projections and data representation on various graphs and diagrams.

2. Third Semester Students

Sr. No.	Course Code	Course Name	Expected outcome
3.	(GEOGP303CC) DSC-2C	GENERAL CARTOGRAPHY (PRACTICAL)	<ul style="list-style-type: none">To learn the map reading and understand the scales and its types.To understand the map projections and data representation on various graphs and diagrams
4.	(GEOGP301SEC)	REGIONAL PLANNING AND DEVELOPMENT	<ul style="list-style-type: none">To understand the concept of regional planning and know about the regional planning and agro-ecological regionalisation in India.

3. Fourth Semester Students

Sr. No.	Course Code	Course Name	Expected outcome
5.	(GEOGP404CC) DSC-2D	ENVIRONMENTAL GEOGRAPHY	<ul style="list-style-type: none"> To learn about the components of environment, ecosystem and biome and to know about the man environment relationships. To study the environment problems and biodiversity loss and its management initiatives in India.
6.	(GEOGP402SEC)	REMOTE SENSING AND GPS	<ul style="list-style-type: none"> To study the remote sensing platforms and aerial photography. Learn about satellite remote sensing, image interpretation and global positioning system.

4. Fifth Semester Students

Sr. No.	Course Code	Course Name	Expected outcome
7.	(GEOGP503SEC)	GEOGRAPHIC INFORMATION SYSTEM	<ul style="list-style-type: none"> To know about the GIS components and its data structures. To understand Georeferencing and GIS based mapping techniques.
8.	(GEOGP501-1DSE)	GEOGRAPHY OF INDIA	<ul style="list-style-type: none"> To study the physiographic, regions, and population characteristics of India. To study the settlements and resource base in India.
9.	(GEOGP501-2DSE) DSE- 2A	ECONOMIC GEOGRAPHY	<ul style="list-style-type: none"> To understand the concepts and theories of economic geography. To study the economic activities, world distribution of industrial regions and international trade.
10.	(GEOGP501GE)	GE-2 DISASTER RISK REDUCTION	<ul style="list-style-type: none"> Understanding risk, its types and assessment. To study the risk reduction measures and major national initiative.

5. Sixth Semester Students

11	(GEOGP604-SEC)	FIEDL TECHNIQUES AND SURVEY BASED PROJECT REPORT (PRACTICAL)	<ul style="list-style-type: none"> • Learn the role of field work in the geographic studies and selections of the appropriate technique. • To understand the interview and questionnaire and designing and interpretation of field report.
12	(GEOGP602-1DSE)	DISASTER MANAGEMENT	<ul style="list-style-type: none"> • To study the risk, disaster and related concepts and understand its distribution in India. • Understand human induced disaster and learn about response and mitigation management.
13	(GEOGP602-2DSE) DSE-2B	GEOGRAPHY OF TOURISM	<ul style="list-style-type: none"> • Study the nature scope and recent trends of tourism at national and international level. • Study the impact of tourism on economy and environment and tourism infrastructure in Himachal Pradesh.
14	(GEOGP602GE)	SUSTAINABILITY AND DEVELOPMENT	<ul style="list-style-type: none"> • Understand the concept, goals of sustainability and its national and international experiences. • Learning about sustainable development and national and international policies and programmes on it.

Outcomes of economics

Economics is mainly divided into two branches i.e. micro economics and macro economics. By studying economics at graduation level, student can develop the ability to explain terms, concept and theories of economics. They know about how a market function and prices and other economic variables are affected when there are changes in demand and supply factors. The students can know and identify the main indicators of economic growth and how the changes can be brought in economic variable like income, output, employment etc. They became able to identify the laws of failure of markets. Besides students gets acknowledged with the allocateive mechanism of the economy especially in country like India where a large portion of population is still living below the poverty line and where government is seen trying hard to revive the inequality of income and wealth. The students gets developed the ability to collect, process, interpret data including statistical methods. The students will be able to calculate, present and discuss statistic in descriptive manner. They can become professional by getting higher education and serve the nation in many fronts.

Table: Course outcome for English**First Year Students**

Sr. No.	Course Code	Course Name	Expected outcome
1.	ENGCE101	Core English (Compulsory)	<ul style="list-style-type: none">Students are taught the basics of English language and literature. This improves their command over English.Students are taught the basic writing skills required to communicate in English thereby improving their communication skills.
2.	ENGAECC 104	AECC-2 Writing skills	

Third semester students

Sr. No.	Course Code	Course Name	Expected outcome
3.	ENGCE 201	English – 2 Core English (Compulsory)	<ul style="list-style-type: none">This is a continuation of first semester compulsory course. This improves the language of the students.
4.	ENG DSC 203	Literary Cross currents	<ul style="list-style-type: none">This course is for students pursuing the major and minor course. The students are made conversant with English literature.

Fifth semester students

Sr. No.	Course Code	Course Name	Expected outcome
5.	ENGL 502	DSE – 1A Soft Skills	<ul style="list-style-type: none">Students are taught the soft skills required to use in their workplace. This would provide them an edge in starting their new life.

Course Outcome for Hindi

BA 1st year

S.No.	Paper code	Paper Name	Course Outcome
1	DSC-IA HIND 102	Hindi sahitya ka ithas	Students learned about the Adikaleen, Madhyakaleen poets, their literature and tendencies
2.	DSC-IA HIND-103	Madhya Kaleen Hindi Kavita	Students learned about sant poets, sant Kabeer, Meera, Tulsi, Soordas etc.
3.	SKT/HIND/HIND 101	Prayojan Mulak Hindi	Students learned basic structure of Hindi and official working like drafting, noting, reporting etc

BA 3rd sem

S.No.	Paper code	Paper Name	Course Outcome
1.	DSC-IC/HIND 301	Adhunik Hindi Kavita	Students learned modern poet and their poetry like Bhartendu, Mariaudh, Gupt, Prasad, Pant, Nirala etc
2.	SEC HIND 303	Karyaly Hindi	Students learned about different form of language like Rastrabhasa, Rajbhasa, Janbhasa problems and solution etc.
3.	MIL-I/HIND-I HIND-300	Prayojan Mulak Hindi	Students learned basic structure of Hindi and official working like drafting, noting, reporting etc

BA 5th sem

S.No.	Paper code	Paper Name	Course Outcome
1.	DSC-IA HIND-503	Lok sahitya	Students learned about folk lore, folk songs, folk plays, folk stories, idiom, proverbs, riddle, their structure and rituals.
2.	SEC-3HIND-501	Rang Alekha aur Rangmanch	Students learned about origin of plays, different forum, stage and related component regarding dramatization
3.	HIND-504	Adhunik Bhartiya Sahitya	Students learned about role of modern literature like Hindi, Marathi, Malayalam, Bangla, Tamil , expression and lore patriotism towards our country

Programme Outcome

- Bachelor of commerce develops in students the ability to understand current forms of business organization and challenges faced by it, change in business environment which is caused mainly by Technology, Political, Economic and Demography of nation.
- Fabricate understanding about importance of Finance to any organization (Profit or Non Profit Org.). Specially planning of finance at micro and macro level of Economy.
- Students are able to illustrate their understanding about Security Market and Securities in India, and also able to describe various Investment avenues available for an individual
- Programme articulate the knowledge of Accounting concept, principles to find out profits of business organization, interpretation of its financial result . Students are also able to interpret financial statements of sole proprietor, Partnership Firms and company.
- Develops understanding about various Laws which affect business such as Business Law, Company Law, Income Tax and practices.
- Students get familiar with Banking, Insurance and other private and public sectors of Economy.
- Develops understanding about various Mathematical and Statistical approaches to interpret Data
- Develops understanding about qualities of Leadership and Entrepreneurship.

Course outcomes of Bachelor of commerce

S.no.	Paper code	Paper name	Course outcome
1.	B.C 1.1	Financial Accounting	<ul style="list-style-type: none"> • This paper will help the student to know basic concept of accounting • Enable students to record, classify and interpret business transactions • Accounts preparation for Sole proprietor, Partnership Firms, Hire purchase and Branches . • Use of Computer in Accounting
2.	B.C 1.2	Business organization and Management	<ul style="list-style-type: none"> • Subject aims at providing knowledge about various forms of business organizations. • India's experience about Liberalization, Privatization and Globalization, Make in India. • Create understanding about Management techniques • Theories of Management, leadership and Motivation
3	B.C 1.3	Business Law	<ul style="list-style-type: none"> • The objective of course is to impart Knowledge about importance of Laws and regulatory framework influencing business such as <ul style="list-style-type: none"> (i) Indian Contract Act 1872 (ii) Sale of Goods Act 1930 (iii) Negotiable

			<p>instrument Act 1881</p> <p>(iv) Indian Partnership Act 1932</p>
4	B.C 1.4	Business Statistics and Mathematics	<ul style="list-style-type: none"> • Paper aims at making students aware of different statistical tools to interpret and analyse data such as <ul style="list-style-type: none"> (i) Mean (ii) Mode (iii) Median (iv) Range (v) Standard Deviation (vi) Quartile Deviation (vii) Correlation (viii) Regression analysis • To make students acquaint with Time series analysis and Index number • Develops understanding about tools of Simple interest, Compound interest, Discounting of fund using various techniques
5	B.C 3.1	Company Law	<ul style="list-style-type: none"> • To introduce students with basic administration of company, types of company. • Providing knowledge about major Documents of a Company. • Imparting knowledge about Laws relating to procedure of convening Meeting. • Laws relating declaration of Dividend. • Laws relating to appointment, removal of Company's Director

			<ul style="list-style-type: none"> • Procedure of winding up of Company.
6	B.C3.2	Income Tax Laws and Practices	<ul style="list-style-type: none"> • Enabling students to develop understanding about Tax structure, Direct Tax Laws and practices in India • Rules for residential status • Different sources of Incomes and calculation of income under each head • Calculation of total income of Individual • Deductions, Exemptions and rebates. • Use of computer in taxation
7.	B.C 4.2	Corporate Accounting	<ul style="list-style-type: none"> • This paper focuses on Accounting aspect for recording of issue share, preference share, debenture and redemption of debentures • Rules for preparation of final accounts of company • Accounting for holding companies • Accounting in case of two or more companies Merges or Amalgamated. • Valuation of Goodwill of companies and valuation of shares of a company
8	B.C 4.3	Cost Accounting	<ul style="list-style-type: none"> • Objective of this paper is to make students familiar with various techniques to record cost of acquiring material, labour and overheads • To introduce students with techniques of costing such as Job, contract, batch and services.

			<ul style="list-style-type: none"> • Reconciliation of cost statements and financial statements.
9.	B.C 4.4	E-Commerce	<ul style="list-style-type: none"> • To make students aware of impact of technologies on modern business • Helps students to understand importance of conducting business on-line • Impart knowledge about Security and Encryption And IT Act 2000 • Use of HTML language for website designing
10.	B.C 5.1(a)	Human resource management	<ul style="list-style-type: none"> • Paper aims at making student aware of concept of human resource management • Imparting knowledge about quantitative and qualitative aspect to acquire human resource in organization • Training and maintenance of employees
11.	B.C 5.2(b)	Fundamentals of Financial management	<ul style="list-style-type: none"> • This subject introduce students with objective and importance of financial management, time value of money • Tells students about capital budgeting decisions and its techniques • Impart knowledge about capital structure, its techniques and theories • Dividend decisions and management of working capital
12	B.C 5.3	Entrepreneurship	<ul style="list-style-type: none"> • Subject aims to develop entrepreneurial qualities

			<p>among students</p> <ul style="list-style-type: none"> • Important determinants of entrepreneurship and MSME SECTOR • Develop understanding about importance of start-ups to Indian and basics of start –up.
13	B.C 6.2(c)	Fundamentals of Investments	<ul style="list-style-type: none"> • This paper aims at understanding Investment and various avenues available for Investment • Impart knowledge about how to determine value of securities by using tools of fundamentals analysis and technical analysis • Helps students to understand impact of risk and return on securities. • Better management of Portfolio and analysis of portfolio. • Laws and regulation of SEBI
14.	B.C 6.1(C)	Management Accounting	<ul style="list-style-type: none"> • Course provide knowledge about tools and technique of Management Accounting • Develop the understanding among students how marginal costing, standard costing, budgetary control help the management in decision making process. • Analysing and interpretating financial statements to take decision for growth of business