

SANATAN DHARAM MAHILA MAHAVIDYALYA, HANSI

NAAC Accredited Grade 'B+'.

PROGRAM OUTCOMES (PO), PROGRAM SPECIFIC OUTCOMES (PSO), COURSE OUTCOMES (CO)

Course Outcomes of English

Semester I		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
EN21	English Compulsory	<ul style="list-style-type: none">○ Describe the concept of essay as a genre of prose fiction and analyzed its specific features and objectives.
		<ul style="list-style-type: none">○ Discuss the concept of Parts of Speech and analysed their relative importance in investing the sentence with a legible meaning as a syntactic unit.○ Describe the concept of Tenses and discuss their uses in the formation of different types of sentences.○ Interpret texts with attention to ambiguity, complexity, and aesthetic value and will be able to enhance the writing ability.○ A robust English vocabulary improves all areas of communication-listening, speaking, reading, and writing. More words can help to express ideas in a meaningful manner○ Give Confidence to students in constructing Sentences in English.○ Enable Students to form their own words with confidence in the written form.○ Build Student's Confidence to speak and Easily Converse with Others in English Language.

Semester II		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
EN22	English Compulsory	<ul style="list-style-type: none"> o Describe the concept of Story as a genre of Prose Fiction and discuss its major components, their relevance and objectives. o A robust English vocabulary improves all areas of communication- listening, speaking, reading, and writing. More words can help to express ideas in a meaningful manner. o Poetry- Enable Students to Understand different poetic expressions and Characteristics which in turn will help students who are inclined gifted to write their own feelings and write poems of different genres. o Students are able to understand important values in life through the writings. Such as patriotism friendship good advice and the importance of having good values in life. o To help the learner get rid of his present flaws and mistakes in pronunciation and grammar. o To build up the learners confidence in oral and interpersonal communication by reinforcing the basics of pronunciation specially focusing on Interviews/ Corporate Meetings/ International a business travels. o Students Learn prove and its various forms. o To develop a taste for poetry reading and writing.
Semester III		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
EN23	English Compulsory	<ul style="list-style-type: none"> o Described the concept of Direct and Indirect Speech and discussed its relevance, function and objectives. o Described the concept of parts of speech and discuss its essential role in providing language with the trait of accuracy and precision. o It enables the students to understand the passage to read fluently to enrich vocabulary and enjoy reading and writing. o Enhance the writing skills of the students. o Give Confidence to students in constructing sentences in English. o Understand a passage and grasp its meaning. o To build up the learners confidence in oral and interpersonal communication by reinforcing the basics of pronunciation specially focusing on interviews corporate meetings/ international business travels. o Critique the use of both active and passive voices.

Semester IV

Course Code	Course Name	COs: After successfully completing this course, students will be able to
EN24	English Compulsory	<ul style="list-style-type: none">○ Describe the concept of translation, its prominent role in a world of diversity of languages; learned the importance of prevalent linguistic norms and conventions of various languages and their role in the act of good translation.○ Describe the concept of Dialogue Writing, Resume Writing, and Writing E mails; their relevance and objectives.○ Robust English vocabulary improves all areas of communication- listening, speaking, reading, and writing. More words can help to express ideas in a meaningful manner.○ Students Should be familiar with representative literary texts within a given history, geographical and cultural context.○ Through Grammar and Composition the learners will gain confidence in spoken English.○ Students should be able to apply critical and theoretical approaches to the reading analysis of literacy and cultural texts in multiple genres.

Semester V

Course Code	Course Name	COs: After successfully completing this course, students will be able to
EN25	English Compulsory	<ul style="list-style-type: none">○ Describe the concept of Novel, its components, salient features and tools of analysis.○ To describe literary terms and to add layers of meaning to the work allowing for it to be read at different levels by the reader. To use symbolism that can be developed in a work through the use of other literary devices, particularly figurative speech devices such as metaphor and simile.○ Identify major literacy genres and explain different forms of literature.○ Critically analyse different forms of novel.○ Critique the prescribed novels and plays with respect to their Socio-economic background.

Semester VI

Course Code	Course Name	COs: After successfully completing this course, students will be able to
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EN26	English Compulsory	<ul style="list-style-type: none"> ○ Described the concept of full-length play, its components, salient features and tools of analysis. ○ Described the concept of Precis Writing and Letter Writing; RTI their relevance and objectives. ○ One word substitution is a way to replace a word phrase with one word to make it more succinct. ○ To describe literary terms and to add layers of meaning to the work allowing for it to be read at different levels by the reader. To use symbolism that can be developed in a work through the use of other literary devices, particularly figurative speech devices such as metaphor and simile. ○ Evaluate topic Selection activities. ○ Evaluate essay Organizational Techniques. ○ Critique the use of nouns and pronouns. ○ Critique the use other part of speech, including adjective, adverbs, précis writing and letter writing, RTI.
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Course Outcomes of Hindi

Semester I		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Hindi Compulsory	<ul style="list-style-type: none"> ○ Through poetry, the description of saints, Sufi poetry, Nirgun Sagun poetry and Ashtachap poetry is to be presented. ○ The knowledge of the naming, characteristics of Hindi literature is obtained. And complete information about the ancient literature is available. ○ Poetry is formed through the development of language, ornamentation, word-powers and rasa. Poetry sparkles beauty.
Semester II		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Hindi Compulsory	<ul style="list-style-type: none"> ○ The drama Dhruva swamini by Jai Shankar Prasad is associated with historicity. The exploitation of women is shown in this play, divided into three parts. ○ Bhaktikal is the golden period. In this era, deep thought is done on Ramakavya, Krishnakavya. ○ Language Forms Standard Language. Official language. National language, medium language, mother tongue Hindi, the solution to the problem of spelling.
Semester III		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Hindi Compulsory	<ul style="list-style-type: none"> ○ Poetry is a powerful medium to express the words of the mind. Modern Hindi poetry gives a solution to the problems of the modern era and the understanding of modernity. ○ Ritikaal literature Shingar is a period of ritual, arts, sexuality and exploitation of women. ○ Computer Internet Media Press Concept is a device leading to modernity.

Semester IV

Course Code	Course Name	COs: After successfully completing this course,students will be able to
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Paper-I	Hindi Compulsory	<ul style="list-style-type: none"> o The story is related to the reality of life. From the story we get the form of society, the form of a woman. The value of art exposes discrimination. o Modern prose literature is the origin and developed form of story, drama, novel essay etc. o The term terminology is the working language form.
Semester V		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
	Hindi Compulsory	<ul style="list-style-type: none"> o Contemporary poetry keeps man connected to the ground. o Modern Hindi poetry is the form of Chhayavad, Experimentalism, Progressivism, New poetry. o The newer prose introduces new genres such as reportage travel, humor, satire etc. o Haryanvi literature is associated with our state and highlights our culture. o Prognostic Hindi modern equipment Computer media journalism is connected to the Internet.
Semester VI		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Hindi Compulsory	<ul style="list-style-type: none"> o Progenitive Hindi modern equipment is connected to the computer, media, journalism, and internet. o Shows the ups and downs of social and personal life through loneliness, memoir etc. o Poems depicting mentality as well as training in letter writing have also been done. Program results <ol style="list-style-type: none"> 1. Students get knowledge of medieval poets and ancient literature in detail. 2 Hindi literatures is studied in depth. Purity leads to intellectual development. 4 Poetry reveals the inner feelings and mind of the students. 5 Drama keeps students connected with theatre. 6 Story, novel etc. keeps students connected with culture. 7 Haryanvi literature keeps the students connected with the folk life and culture of the state.

Course Outcomes of Physical Education

Semester I		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Physical Education	<ul style="list-style-type: none"> ○ Understand the Physical Education: Meaning, definition, scope, Misconceptions, Aim, Objectives and its Importance in modern society. ○ Understand Health & Hygiene: Meaning, definition, importance of Health & Hygiene in life, Factors influencing Health and Hygiene of various body parts. ○ Understand Yoga: Meaning, Concept, Historical development, Types, importance and benefits of Yoga and Pranayama. ○ Understand Human Anatomy and Physiology: Meaning, definition, Importance of Human Anatomy and Physiology in Physical Education and Definition of Cell, Tissue, Organ and System, Structure and Properties of Cell.
Semester II		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Physical Education	<ul style="list-style-type: none"> ○ Understand Health Education & First Aid: Aim, Objectives, Scope, and importance of Health Education. ○ Understand First Aid: Meaning, Aim, Objectives, General Principles of First Aid and First Aid for Bleeding, Burns, Electric Shock, Drowning and Snake Bite and Common injuries. ○ Understand the Historical Prospects of Physical Education: Pre-independence and Post – independence historical development of Physical Education in India, Role of IOA, SAI, NSNIS and YMCA in the development of Physical Education and Sports in India, Sports Policy of Haryana state and India. ○ Understand Physical Fitness: Meaning, definition, importance, Components, Principles, Factors influencing of Physical Fitness. Meaning of Isometric, Isotonic and Isokinetic exercises. ○ Understand Human Bone Anatomy and Physiology: Human Bone, Types and Function of bones in Human Body. Meaning and types of joints in Human Body. ○ Understand kho–kho, Badminton and Cricket games with ground specifications, general rules and general skills. Name and identification of bones in Human Body

		(Measurements & Basic Techniques) Types of Starts - Crouch Start and standing starts (Basic Technique)
Semester III		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Physical Education	<ul style="list-style-type: none"> ○ Understand Safety Education and injuries: Meaning, need and importance of Safety Education, understand types, causes, Principles, General treatment for sports Injuries i.e. Abrasion, Contusion, Sprain , Strain, Fracture and Dislocation of joints. ○ Understand Common Diseases: Meaning of Communicable and Non- communicable diseases, Modes of transmission, prevention and control of communicable diseases i.e. HIV/ AIDS, Hepatitis, Dengue, Typhoid, Malaria, Influenza, Allergy related diseases: Asthma and Sinuses. ○ Understand Balanced Diet: Meaning, importance, Components, sources and Factors affecting balanced diet and Harmful effects of Junk Food on our body ○ Understand Anatomy and Physiology of Circulatory System: Structure, Function of Heart, Systemic and Pulmonary Circulation and Effects of exercise on Circulatory System.
Semester IV		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Physical Education	<ul style="list-style-type: none"> ○ Understand Warming Up and Cooling Down: Meaning, types, significance, Methods and Physiological aspects of warming up and cooling down. ○ Understand Psychological aspects of Physical Education: Meaning Need and importance of Psychology and sports Psychology ○ Understand meaning, laws of Learning and Learning curve ○ Understand Major Sports Events: Ancient, Modern Olympic Games, Asian Games and Common Wealth Games. ○ Understand Anatomy and Physiology of Respiratory system: Respiratory Organs, Physiology of respiratory System, Effect of exercise on respiratory System and Terminology of respiration: Tidal Volume, Residual Volume and Total Lung Capacity.

		Athletics: Basketball, Football, Kabaddi Game (With ground specifications, general rules and skills) and Athletics; Discus throw and Long Jump (Specifications, general rules and general skills)
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Semester V

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Physical Education	<ul style="list-style-type: none"> ○ Understand Growth & Development: Meaning and definition, Stages, Principles and factors influencing of Growth and Development and Age and sex difference in relation to physical activities and sports. ○ Understand Sports Organization and Administration: Meaning, Principles, importance, Intramural and Extramural activities of organization and administration in Physical Education and Sports. Tournaments and their types (League and Knock out) ○ Understand Body Posture: Meaning, importance of good posture, causes of poor posture, Symptoms, causes of Postural Deformities i.e., Lordosis, Kyphosis, Scoliosis, Flat Feet, Knock Knee and Blow Legs, Precautions and Remedies for postural deformities. ○ Understand Anatomy and Physiology of muscle and Blood: Types of Muscles in human body and Effects of exercise on it and Composition and functions of Human Blood.

Semester VI

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Physical Education	<ul style="list-style-type: none"> ○ Understand Motivation and Socialization: Meaning, definition, types and importance of motivation in sports. ○ Understand meaning of Socialization and Socialization through sports and effect of social behavior on performance of sports person. ○ Understand Sports Training and Doping Meaning, definition, factors affecting sports training and types of sports training: Circuit training, Interval Training and Continuous Training. ○ Understand Doping: Meaning, types and its effect on health. ○ Understand Sports Biomechanics: Meaning, definition, Importance of sports biomechanics.

		<ul style="list-style-type: none"> ○ Understand Newton's Laws of motion and their application in sports. Understand Levers: Meaning, types and their application in Sports ○ Understand Anatomy and Physiology: Organs, Structure of Digestive System, Mechanism of food digestion and effects of exercise on Digestive System. ○ Ground Specifications, General rules and General Skill of Athletics.
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Course Outcomes of B.A. History

Semester I		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Ancient India (From Earliest Times to Gupta Age)	<ul style="list-style-type: none"> ○ Understand the human evaluations like the transformations occurred right from Indus valley civilization times to 13th century A.D. ○ Identify and define various kinds of sources and understand how evidences are notified. ○ Compare and contrast various stages of progress from Indus valley civilization to Vedic age and analyse the Jain, Buddhist and Vedic faiths. ○ Increase the awareness of transition from territorial states to emergence of empires. ○ Analyse the emergence of the mauryan and gupta empires during the "Classical age" in India. ○ Critically examine the nature of monarchic rule and develop a comprehensive understanding of cultural evolution during ancient period. ○ Visualize where places are in relation to one another through map pointing.
Semester II		
Course Code	Course Name	COs: After successfully completing this course, students will be able to

Paper-I	History of India (600 A.D. to 1526 A.D.)	<ul style="list-style-type: none">○ Learn about the post Gupta Period & Raj put Art and Architecture○ Learn the foreign invasions on India and their consequences.○ Understand the socio- economic and cultural conditions of medieval India.○ Describe the advent of Islam in India and study the traces of Political and cultural expansion of Turks & Afghans.○ Explain the administration, Art and architecture of Vijayanagara Rulers, Mughals and also analyse the rise of the marthas and contribution of sivaji.○ Evaluate the establishment of the British rule in India and understand the dangerous consequencesdisunity at all levels.○ Analyse the emergence of composite culture in India.
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Semester III		
Course Code	Course Name	COs: After successfully completing this course,students will be able to
Paper-I	Political History of India (1526-1857 A.D)	<ul style="list-style-type: none"> ○ By studying this paper, students identify Europeans arrival, the disintegrations among the kings and the weakness of fleet etc. that led the British invasions on India and finally occupying political power in this country. ○ Understand the Socio, Economic and cultural conditions of medieval India. ○ The student realize that the mistakes of past shouldit be repeated. ○ The student can identify the advent of the European to India; can analyse the reasons for thekarnatic wars and the after effects of it. ○ The student can perceive how India lost its freedoms stage by stage deterioration of freedoms. ○ They can understand the reasons which led tomovements against British Empire.
Semester IV		
Course Code	Course Name	COs: After successfully completing this course,students will be able to
Paper-I	Indian National Movement	<ul style="list-style-type: none"> ○ The students identifies Origins of the National Consciousness. Founding of Indian National Congress. Moderates and Extremists: Ideology, Programmes and Politics Home Rule Movement. ○ They can understand Role of Mahatma Gandhi in Freedom Movement: Non-Cooperation Movement, Civil Disobedience Movement and Quit India Movement. Ideology and Contribution ofRevolutionaries with special reference to Bhagat Singh. ○ They can understand about the Political Reforms: Acts of 1909 and 1919.Rise of Communal Politics:Muslim League – Ideology and Politics Conclusionof Poona Pact and the Act of 1935.Subhash ChandraBoss and Indian National Army Partition and Independence of India.
Semester VI		
Course Code	Course Name	COs: After successfully completing this course,students will be able to
Paper-I	Modern World	<ul style="list-style-type: none"> ○ Transition from Feudalism to Capitalism in Europe Renaissance: Origins, Emergence and Results Reformation: Origins, Emergence and Results. ○ Shift of Economic Balance from the Mediterranean to Atlantic Region Early Colonial

		<ul style="list-style-type: none"> ○ System: Motives, Process and Consequences of Colonization of Americas Mercantile Revolution: Origins and Results. ○ Revolution: Origins and Impact Glorious Revolution: Origins and Results Industrial. Maps ○ Important Centers of Renaissance Important Centers of Reformation Important ○ Mercantile Centers Major Places Connected with Industrial Revolution Capitalist Powers of Europe. ○ Revolution: Origins, Progress and Impact Agricultural Revolution: Origins, Progress and Impacts.
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Semester V

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Rise of Modern World	<ul style="list-style-type: none"> ○ After completion of the course students learnt about French Revolution: Causes, Nature and Consequences Napoleon Bonaparte: Rise to Power, Reforms System and Continental system Congress of Vienna: Motives, Provisions and Significance ○ Conservative Reaction in Europe: Metternich System and the Concert of Europe Glorious Revolution (1688). Nationalism in Europe: Unifications of Italy and Germany Bismarck and his Diplomatic Alliances: Formation of Triple Alliance and Triple Entente ○ World War – I: Causes and Consequences Peace Settlements: Treaty of Versailles - Provisions, Nature and Effects. Bolshevik Revolution: Causes Nature and Impact World War II: Causes and Consequences.

Course Outcomes of Mathematics

Semester I		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I BAMH -111 B.SC (CML -106)	Algebra	<ul style="list-style-type: none"> ○ Symmetric, Skew symmetric, Hermitian and skew Hermitian matrices. Elementary Operations on matrices. Cayley Hamilton theorem and its use in finding the inverse of a matrix. ○ Applications of matrices to a system of linear (both homogeneous and non-homogeneous) equations. ○ Relations between the roots and coefficients of general polynomial equation in one variable. Transformation of equations. ○ Nature of the roots of an equation Descartes' rule of signs. Solutions of cubic equations (Cardan's method). Biquadratic equations and their solutions.

<p>Paper-II BAMH -112 B.SC (CML -107)</p>	<p>Calculus</p>	<ul style="list-style-type: none"> ○ Definition of the limit of a function. Basic properties of limits, Continuous functions and classification of discontinuities. Maclaurin and Taylor series expansions. ○ Asymptotes in Cartesian coordinates, intersection of curve and its asymptotes, asymptotes in polar coordinates. Curvature, radius of curvature for Cartesian curves, parametric curves, polar curves. ○ Tracing of curves in Cartesian, parametric and polar coordinates. Reduction formulae, Rectification, intrinsic equations of curve. ○ Quadrature (area) Sectorial area. Area bounded by closed curves. Volumes and surfaces of solids of revolution.
<p>Paper-III BAMH -113</p>	<p>Mathematics Lab-I</p>	<ul style="list-style-type: none"> ○ The students will be able to solve and calculate the mathematical problems through programming.
<p>Semester II</p>		
<p>Course Code</p>	<p>Course Name</p>	<p>COs: After successfully completing this course, students will be able to</p>
<p>Paper-I BAMH -121 B.SC (CML -206)</p>	<p>Ordinary Differential Equation & Laplace Transforms</p>	<ul style="list-style-type: none"> ○ Divisibility, G.C.D. (greatest common divisors), L.C.M. (least common multiple) Primes, Complete residue system and reduced residue system modulo m. Euler function, Euler's generalization of Fermat's theorem. Chinese Remainder Theorem. ○ De Moivre's Theorem and its Applications. Expansion of trigonometrical functions, Direct circular and hyperbolic functions and their properties. Inverse circular and hyperbolic functions and their properties. Logarithm of a complex quantity.
<p>Paper-II BAMH -122 B.SC (CML -207)</p>	<p>Vector Calculus & Geometry</p>	<ul style="list-style-type: none"> ○ Multiple products of vector, Differentiation of vector, Gradient Divergence and Curl, Gauss's, Green's and Stoke's theorems, Tracing of conics, Polar equation of a conic.

Paper-III BAMH -123	Mathematics Lab-II	<ul style="list-style-type: none"> o The Students will be able to solve and calculate the mathematical problems through programming.

Semester III

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I BAMH -201 B.SC (CML -306)	Advanced Calculus	<ul style="list-style-type: none"> o Continuity, Sequential Continuity, properties of continuous functions, Uniform continuity, chain rule of differentiability. Taylor's theorem for functions of two variables. Lagrange's method of multipliers. Surfaces: Tangent planes, one parameter family of surfaces, Envelopes. o Beta and Gamma Functions.
Paper-II BAMH -202 B.SC (CML -307)	Numerical Analysis	<ul style="list-style-type: none"> o Partial differential equations: Formation, order and degree, Equations reducible to linear equations with constant co- efficient. Solution of linear hyperbolic equations, Monge's method for partial differential equations of second order. Cauchy's problem for second order partial differential equations.
Paper-III BAMH (P) -203 B.SC (CML -310)	Mathematics Lab-III	<ul style="list-style-type: none"> o Composition and resolution of forces. Parallel forces. Moments and Couples. Analytical conditions of equilibrium of coplanar forces. Friction. Centre of Gravity. Virtual work. Forces in three dimensions. Point sets central axis, Wrenches. o To Interpolate the data using Newton's forward interpolation formula, by using Newton's backward interpolation formula. o To find the roots of algebraic and transcendental equation by using Regular falsi Method.

Semester IV		
Course Code	Course Name	COs: After successfully completing this course,students will be able to
Paper-I BAMH -204 B.SC (CML -406)	Partial Differential equation and special function	<ul style="list-style-type: none"> ○ Boundedness of the set of real numbers; least upperbound, greatest lower bound of a set, Neighborhoods. Infinite series: Convergence and divergence of Infinite Series, Infinite series: D-Alembert's ratio test, Raabe's test, Convergence and absolute convergence of infinite products. ○ Power Series.
Paper-II BAMH -205 B.SC (CML -407)	Function Mechanics-I	<ul style="list-style-type: none"> ○ Forces acting at appoint Moments, Couples, Wrenches,Null Lines and Plans, Relative Motion, Newton's Law of Motion, Kepler's Law of Planetary Motion.
Paper-III BAMH (P) -206	Mathematics Lab-IV	<ul style="list-style-type: none"> ○ The students will be able to solve problems by using programming method. <ul style="list-style-type: none"> ● Gauss Elimination Method. ● Power Method. ● Trapezoidal Rule. ● Runge Kutta Method.

Semester V

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I BAMH (P) -301 B.SC (CML -506)(i)	Groups And Rings	o Riemann integral, Integrability of continuous and monotonic functions, The Fundamental theorem of integral calculus. Mean value theorems of integral calculus. Improper integrals and their convergence, Comparison tests, Abel's and Dirichlet's tests, Frullani's integral.
Paper-II BAMH (P) -302 B.SC (CML -507) (i)	Sequences & Series	o Definition of a group with example and simple properties of groups, Subgroups and Subgroup criteria, Rings, Subrings, Polynomial rings over commutative rings, Unique factorization domain.
Paper-III BAMH (P) -303 B.SC (CML -508)(i)	Number Theory & Trigonometry	o Finite Differences operators and their relations. Finding the missing terms and effect of error in a difference tabular value, Central Differences: Gauss forward and Gauss's backward interpolation formulae, Numerical Differentiation, Eigen Value Problems: Power method, Jacobi's method, given's method, House- Holder's method, QR method, Lanczos method.

Semester VI

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I BAMH (P) -304 B.SC (CML -605)(i)	Linear Algebra	o o Vector spaces, subspaces, Sum and Direct sum of subspaces, Linear span, Linearly Independent and dependent subsets of a vector space. Finitely generated vector space, Homomorphism and isomorphism of vector spaces, Linear transformations and linear forms on vector spaces, Vector space of all the linear transformations Dual Spaces
Paper-II BAMH (P) -305 B.SC (CML -606)(i)	Mechanics- II	o Analytical Conditions of equilibrium of co planner forces, friction centre of Gravity, Work Power and Energy, Motion of a partical on Smooth and rough palne Curves, Projectiles.
Paper-III BAMH (P) -306 B.SC (CML -607)(i)	Real & Complex Analysis	o Metric spaces, Completeness in Metric space, Improper Integeal and their convergence, Integral as a function of parameter, Calculus of Complex Functions.

Paper-IV BAMH -307 B.SC (CML 608)(i)	Solid Geometry	<ul style="list-style-type: none"> ○ Equation of tangent plane, Central Conicoids, Director sphere, Normal to the conicoids, Polar Plane of Points, Enveloping of cylinder of conicoids, Paraboloid, Circular Section Plane Section of conicoids, Reduction of Second Degree equations.
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Course Outcomes of Economics

Semester I		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
BECO-101	Principal of Microeconomics- I	<ul style="list-style-type: none"> ○ Understand the basic terminology of micro economics and they will be able to provide definitions for fundamental economic concepts, such as, scarcity, choice, opportunity cost, utility, demand, supply, elasticity, cost and profit. ○ Answer the questions what, how, and for whom should goods and services be produced with limited resources. ○ Understand the factors on which demand of a commodity depends exhibit the measures of demand elasticity relative to change in price, income and price of substitutes. ○ Understand the behavior of consumers in making decisions on the allocation of limited resources in order to get maximum satisfaction ○ Understands the concept of production function in short run and long-run and develop an understanding of law of diminishing marginal product, law of variable proportion and returns to scale ○ understands the factors on which supply of a commodity depends and the students will be able to calculate the price elasticity of supply ○ exhibits the calculation of various production costs fixed, variable and marginal cost ○ understands the total, average and marginal revenue and break-even analysis
Semester II		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
BECO- 201	Principal of Microeconomics- II	<ul style="list-style-type: none"> ○ Compare and contrast the market structures, including perfect competition, monopoly, monopolistic competition and oligopoly. ○ Exhibit how firms under perfect competition, monopoly and monopolistic competition determine their price, output and profit maximization. ○ Gain the knowledge of marginal productivity theory of distribution, theory of wages, identify different types of rent and grasp different theories of rent and interest.

Course Code	Course Name	COs: After successfully completing this course,students will be able to
BECO-503	Economics of Development	<ul style="list-style-type: none"> ○ Understand the Concept and difference between economic growth and development. ○ Understand the Concept of Poverty, vicious circle of poverty, HDI and Population Problem in developing Countries. ○ Understand different measures of development classical theory of development. ○ Understand different growth Modelite Harrod and Domar Robertson, Solow, Joan Robinson.

Semester VI

Course Code	Course Name	COs: After successfully completing this course,students will be able to
BECO - 601	Economic Development and Policy in India	<ul style="list-style-type: none"> ○ Understand Trends & Pattern of Economics development Since Independence and Situation of Indian Economy during Colonial Rule. ○ Understand Role of Primary, Secondary & Teritary Sector in National Income. ○ Understand Objectives Constraints & achievements of different plans. ○ Understand Relation Between Population and Human Development. ○ Understand Indian Economy in Post reform period.

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Semester III

Course Code	Course Name	COs: After successfully completing this course, students will be able to
BECO- 301	Principal of Macroeconomics-I	<ul style="list-style-type: none"> o Understand the nature, scope and importance of macroeconomics. o Demonstrate the process of measuring National Income Statistics, identify its components and analyze the various income identities. o Understand the role of household sector producer sector, government sector and rest of the world in circular flow of income in an economy. o Understand Say’s law of market, classical theory of employment and Keynesian theory of income and employment; demonstrate the principle of Effective Demand. o Understand the meaning of consumption function, relationship between APC and MPC, Keynesian Psychological Law of consumption. o Understand the meaning of capital and investment; types of investment and understand the relation between MEC and MEI.

Semester IV

Course Code	Course Name	COs: After successfully completing this course, students will be able to
BECO- 401	Principal of Macroeconomics-II	<ul style="list-style-type: none">o Understand the concept of IS- LM Analysis.o Understand Relationship Between Inflation and unemployment and theories of inflation.o Understand different phases of trade Cycle and Policies to control it.o Understand concept of Balance of Payments and Exchange rate.

Semester V

Course Code	Course Name	COs: After successfully completing this course,students will be able to
BECO-503	Economics of Development	<ul style="list-style-type: none">o Understand the Concept and difference between economic growth and development.o Understand the Concept of Poverty, vicious circle of poverty, HDI and Population Problem in developing Countries.o Understand different measures of development classical theory of development.o Understand different growth Modelite Harrod and Domar Robertson, Solow, Joan Robinson.

Semester VI

Course Code	Course Name	COs: After successfully completing this course,students will be able to
		<ul style="list-style-type: none">o Understand Trends & Pattern of Economics development Since Independence and Situation of Indian Economy during Colonial Rule.

BECO - 601	Economic Development and Policy in India	<ul style="list-style-type: none"> ○ Understand Role of Primary, Secondary & Tertiary Sector in National Income. ○ Understand Objectives Constraints & achievements of different plans. ○ Understand Relation Between Population and Human Development. ○ Understand Indian Economy in Post reform period.
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Course Outcomes of Music Instrumental

Semester I		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I T-101, P-102	Fundamental of Music Instrumental	<ul style="list-style-type: none"> ○ Definition of Music. ○ Classification of Different Musical Instruments. ○ Introduction of Sitar and Taanpura. ○ Definition of Some terms as bol, Theka, Sum, Khali, Bhari, Peshkar etc. ○ Definition of laya, and its explain as Barbar, Dugan, Tigun, Chagn.
Semester II		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I T-103, P-104	Fundamental of Music Instrumental	<ul style="list-style-type: none"> ○ Basic Knowledge of Rags KAfi, Varindavani Sarang. ○ Knowledge of the different Classical and SemiClassical forms of Music. ○ Classification and Knowledge of Musical Instruments Tabla and Harmonium.

		o Students could get the knowledge of Musical History of India from Ancient period to 12th Century.
Semester III		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I T-201, P-202	Basic of Music Instrumental	<ul style="list-style-type: none"> o Knowledge of the Writing Notations of Vadan Compositions and Talas. o Gain knowledge of the Different Musical Instruments. o Students could get the knowledge of Musical History in Ancient Period. o Students have the Knowledge of Contributions of Towards Music by: Swami, Haridas, Pt. Ravi Shankar etc.

Semester IV

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I T-201, P-202	Basic of Music Instrumental	<ul style="list-style-type: none"> o Practical Playing perfectly all the musical notes in different pitches on the Instrument. o Basic Knowledge of all the Ragas and Talas mentioned in the syllabus. o Knowledge of the Violin and Santoor Instruments. o Students have the Knowledge of Calculation 72 Thaats by Pandit Vyankatmukhi.

Semester V

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I T-301, P-302	Music Instrumental (Sitar)	<ul style="list-style-type: none"> o Students could get the knowledge of Musical History of India from 17th and 19th Century. o They get Knowledge the Importance of Electronic musical Instruments. o Proficiency in writing Notations of Compositions and Talas. Learning of Ragas and talas mentioned in the syllabus. o They get to know the origin of Gharanas and the reasons behind the evolution of different Gharanas in Indian Classical Music. o Students Gain Knowledge of the Notation System of Classical Music.

Semester VI

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I T-303, P-304	Music Instrumental (Sitar)	<ul style="list-style-type: none"> o Practical Proficiency in Vadan of Ragas and Talas mentioned in the syllabus. o Knowledge of the different Classical and Semi Classical forms of Music. o Tuning the Instruments and to develop the skills of accompaniment.

Course Outcomes of Political Science

Semester I		
Course Code	Course Name	COs: After successfully completing this course,students will be able to
Option-I	Indian Constitution	<ul style="list-style-type: none"> ○ Introducing Indian Constitution- Its Origins and structure, the preamble, the fundamental Rights duties and the guiding principles of State policy. ○ Students know about Union Executive - President, Vice-President, Prime Minister, Council of Ministers and State Executive- Governor, Chief Minister and Council of Ministers. ○ To Study of the Union Legislature- Lok Sabha, Rajya Sabha Composition and Functions; ○ Students Know State Legislature- Vidhan Sabha; Vidhan Parishad. ○ To Comprehend the history, Fundamental characteristics and 73rd Amendment of the Panchayati Raj Institutions. ○ To study Judiciary-Supreme Court, High Courts, Judicial Review and Judicial Activism.
Semester II		
Course Code	Course Name	COs: After successfully completing this course,students will be able to
Option-I	Indian Politics	<ul style="list-style-type: none"> ○ To Present Federalism and Know it operates in relation to center State relations the need. For State Autonomy and new development in Indian federalism. ○ To Comprehend the election Commission the election process, Voting behavior election reforms and the defection problem. ○ To learn about interact and pressure groups, National and Regional Political Parties, and the Indian party System. ○ Role of Caste, Religion, Language, Regionalism in india, Politics of reservation, Emerging Trends and challenges before Indian political system.

Semester III		
Course Code	Course Name	COs: After successfully completing this course,students will be able to
Option-II	Indian Political Thinkers	<ul style="list-style-type: none"> ○ Students will grasp the concept of Raja Ram Mohan Roy, Swami Dayanand, Dada Bhai Narojee & Gopal krishan Gokhle. ○ To learn about the opinions of Lala Lajpat Rai and bal Gangadhar Tilak. ○ To Examine the perpectives of Swami Vivekanad and Aurbind Ghosh.
Semester IV		
Course Code	Course Name	COs: After successfully completing this course,students will be able to
Option-II	Indian Political Thinkers	<ul style="list-style-type: none"> ○ Present the opinions of J.P. Narayan & Ram Manohar Lohia. ○ Students will Comprehend the Mahatma Gandhi & M.N Roy, Jawaharlal Nehru & B.R.Ambedkar. ○ To know about the ideas of Subhash Chander Bose & Bhagat Singh.
Semester V		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Option-I	Comparative Politics	<ul style="list-style-type: none"> ○ An Overview of Comparative Politics-Definition, Scope; Traditional & Contemporary issues, Comparative Approaches. ○ Input-Out (David Easton), ○ Structural Function (G. Almond), ○ Political Development (Lucian W. Pye), ○ Political Culture (G. Almond) ○ Overview of Constitutionalism: Its nature, History, Type and Current issues. ○ To be aware of the constitutional framework: Political Parties and Pressure groups are examples of informal Structures: :(a) Formal Executive, Legislative and judicial.
Semester VI		
Course Code	Course Name	COs: After successfully completing this course,students will be able to
Option-I	Comparative Constitutions of UK & USA	<ul style="list-style-type: none"> ○ Students understand the socio economic foundations of the constitutions of the United kingdom and the united states, as well as their evolution conventions, legacies and basic features. ○ To Comprehend and evaluate the comparative analysis of the US and UK judicial, Legislative and Executive system.

		<ul style="list-style-type: none">○ To gain information through comparative analyses of the roles, functions and structures of pressure organizations and political parties in the USA & UK.○ Students gain knowledge of bureaucracy, voting behavior, electoral process and current developments in the operation of the US and UK Political system.
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Course Outcomes of Commercial Arts

Semester I		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I CADP -101	Advertising Foundation Theory	<ul style="list-style-type: none">o To Understand about the difference between advertising and publicity.o To Know about commercial artist qualities.o To Know the various medium in art material.
Semester II		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I CADP -102	Advertising Foundation Theory Practical	<ul style="list-style-type: none">o Students will demonstrate technical ability and craftsman ship in their art works.o After giving submission they know about the various skills.

Semester III		
Course Code	Course Name	COs: After successfully completing this course,students will be able to
Paper-A CADP(Theory) 201 CADP 202 (Practical)	Advertising Foundation	<ul style="list-style-type: none"> ○ Students will demonstrate understanding of the elements of art and principal of design through effective compositions. ○ History & Development of printing. Latest technologies of Printing.
Semester IV		
Course Code	Course Name	COs: After successfully completing this course,students will be able to
Paper-I CADP (Theory) 203 CADP (Practical) 204	Advertising Foundation	<ul style="list-style-type: none"> ○ Students arte works will communicate concepts effectively. ○ Students will perfectly design Advertising Campaign & main Objectives of advertising.
Semester V		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I CADP(Theory) 301 CADP (Practical) 302	Advertising Foundation	<ul style="list-style-type: none"> ○ Students Art Works. ○ To Understand about the difference between advertising & Publicity. ○ To Interact about Indoor Media Outdoor media, Print Media & Designing & Printing Advertisement.

Semester VI

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I (Theory) CADP 301 CADP (Practical) 302	Advertising Foundation	<ul style="list-style-type: none">○ Students will be responsible for earning in the market.○ With the introduction to Advertisement agency & can design the campaign in productive way & Social Campaign.

**Course
Outcomes of
Sanskrit****Semester I**

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Sanskrit	<ul style="list-style-type: none">○ 'Hitopdesa' interprets social behavior, ethical stories of 15th century. That is helpful to understand disciplined aspects of society.○ 'Nitishatakam' by Bhartrhari is a collection of shlokas pertaining to moral values.○ Sanskrit grammar provides knowledge of 'Shabdroop' & 'Dhaluroop' that help students to identify the gender.○ 'Sandhi' is a perfect grammatic combination of alphabets that reveals the formation of Words based on vowels as well as consonants.

Semester II

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Sanskrit	<ul style="list-style-type: none">○ 'Shrimadbhagwad Geeta' from the Bhishma Parva of 'Mahabharta' represents the teachings of Lord Krishna to Arjuna as well as for all human beings regarding 'Karma' & 'Kartaya'.○ 'Nitishatkam' is a collection of 100 'Shlokas' pertaining to moral values by which students can learn to behave perfectly in society.○ Grammar is helpful for students for the identification of genders, verbs etc.○ (i) 'Chhandas' are the main source to pronounce the phrases with accent.(ii) Translation from Hindi to Sanskrit is beneficial to remove the grammatical errors to be done by the students.

Semester III

Course Code	Course Name	COs: After successfully completing this course, students will be able to
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Paper-I	Sanskrit	<ul style="list-style-type: none"> o 'Panchratram' by Bhasa represents the way to take one's own right diplomatically. o History of Sanskrit provides the knowledge of authors like Bana, Dandi, Subandhu, Ambikadutt Vyas, Vishnu Sharma etc. & work done by them. That reflects the political, social, religious scenario as well as life style of that, era. o Sanskrit grammar reveals the knowledge about – Samasas, Pratyaye, Pratyahaar sutras etc. o Sanskrit Letter Writing improves the writing skills of Sanskrit among students. o Poetry is a source of knowledge related to vedas, upnishadas, Ramayana etc. for students. o Text provides the knowledge of Yajurveda, charak Samhita as well as Panchtantra. o 'Shabdroop' reveals the nouns in Sanskrit grammar. o Swara 'Sandhi' helps students to form the words pertaining vowels.
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Semester IV

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Sanskrit	<ul style="list-style-type: none"> o 'Raghu Vansham' by Kalidasa represents the story of Suryavanshi kings. One of them king 'Dilip' & his wife 'Sudakshina' served Nandhi cow of RishiVashistha, for desiring their own son. o 'Shivrajvijay' is an historic novel by Ambika DuttVyas that reflects the scenario of 19th century's Mugal epies negative approach pertaining to Hindu society. o Sanskrit grammar as active voice, Passive voice, 'Shabdroop' as well as Dhaturoop' help to make sentences and to identity the gender, verbs etc. o Laghu Sindhanta Kaumudi' by Varadraj that reveals the knowledge of nouns, translation etc.

		<p>All these aspects other grammatical components are based on Panini Sutras.</p> <ul style="list-style-type: none"> ○ Poetry reveals the introduction of Shrimad bhagwat Geeta, & so as... to the students. ○ Text reveals the introduction pertaining to 'Panchtantra' Hitopdesha' for students. ○ 'Dhaturoop' provides knowledge regarding various types of verbs for students in the field of Sanskrit. ○ By Swara Sandhi students can gain skills of various types of formation of words.
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Semester V

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Sanskrit	<ul style="list-style-type: none"> ○ 'Abhigyan Shakuntalam' by Mahakavi Kalidas is seven-digit Play. From which one to three digits are included in this semester that represents the story of king Dushyant & Shakuntla's love within the limitations of society, it refers four stanzas regarding the discipline for girls after marriage which are beneficial for today's society as those were for ancient society. ○ Introduction of Kalidasa relates to the various works done by Kalidasa like writing of drama, epic etc. After study of these, students can learn about various aspects of society of ancient time which are also relevant in modern society. ○ History of Sanskrit provides the knowledge of Vedas, Brahmanas, Aaranyakas, Upnishadas as well as vedangas which reflect the vast knowledge of Vedic literature. ○ 'Laghu Siddhanta Kaumudi' helps to study grammatical terms pertaining to sentence making. 'Alankaras' Play very important role to enhance the grace of political stanzas.

Semester VI

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Sanskrit	<ul style="list-style-type: none"> ○ 'Abhigyan Shakuntalam' by Kalidasa contains fifth to seventh digits in this semester by which students gain knowledge of the significance of Name 'Abhigyan Shakuntalan' of this play with the help of various eventual facts. ○ Literary works done by Mahakavi Kalidasa reveals such as-vision of life, National spirit, nature illustration and adornments used for literary attractiveness in various compositions that create interest of students to study Kalidasa's works. ○ History of Sanskrit Provides the knowledge about valmiki, Vyas Bhavbhuti, Ambikadutt Vyas,

Bharvi, Vishnu Sharma, Bhartrhari Jaidev as well as their work done for the literary world.

- (i) 'Laghusiddhanta Kaumudi' is a famous work done by Varadraj for the grammatical knowledge to the students related to 'Stri Pratayaye'
- (ii) Sanskrit Essay writing improves the knowledge of various grammatical aspects among students.

Course Outcomes of Commerce

Course title	BCOM-101 Financial Accounting-I
Co No	Course Outcome
1	Recognize the basic accounting concept and conventions
2	Cultivate accounting skills to manage the profits and losses of any trading organization
3	Apply the rules of double entry book keeping for the preparation of final accounts
4	Understanding various provisions related to depreciation

Course title	BCOM-102 Micro Economics
CO No.	Course Outcome
1.	To understand the concepts of cost, nature of production and its relationship to Business operations
2.	To analyse the causes and consequences of different market conditions.
3.	To understand the concepts related to elasticity of demand
4.	To understand the theories of demand and their applications in real life world.

Course title	BCOM-103 Principles of Business Management
CO No.	Course Outcome
1.	Apply managerial roles and managerial skills
2.	Evaluate different approaches for organizational control
3.	Recognize the theory of management and manager's role in organization
4.	To understand the evolution and importance of globalization in today's business world.

Course title	BCOM-104 Computer Applications in Business
CO No.	Course Outcome
1.	To understand the basic concepts of computers
2.	To familiarize candidates with use of word processors, spreadsheets and presentation software
3.	To introduce students with the working of network

4.	To equip students with basic applications of computers and technology in managing a business.
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Course title	BCOM-105 Business Mathematics
CO No.	Course Outcome
1.	To equip students with concepts of differentiation and integration
2.	To understand about solution of a system of linear equations
3.	Students will be able to understand about different types of matrices and determinants
4.	To familiarize with calculus

Course title	EVS 201 Environmental Studies
CO No.	Course Outcome
1.	Understanding the Multidisciplinary Nature of Environmental Studies.
2.	To Make Students understand about renewable and non- renewable resources.
3.	Cultivate habit of regarding for safeguarding the environment.
4.	To Make Students aware about social issues and Environment.

Course title	BCOM-201 Financial Accounting II
Co No	Course Outcome
1	Illustrate the accounting procedures of death and insolvency of a partner.
2	Cultivate accounting skills under hire purchase.
3	Relate the accounting procedures relating to admission and death of partners.
4	Cultivate accounting skills under branch accounting system.

Course title	BCOM-202 Macro Economics
Co No	Course Outcome
1	To familiarize students with basic concepts of macro economics

2	To equip students about Classical & Keynesian theory of income
3	To understand about different business cycles
4	To make students aware about the concept of inflation and ways to measure and control inflation

Course title	BCOM-203 Business Communication
CO No.	Course Outcome
1	To develop Communication skills of students.
2	To equip students with formal communication techniques for use in corporate world.
3	Skills of writing business letter, e-mails, notices, circulars, memos and reports.
4	To help students in performance in business self- development for better future.

Course title	BCOM-204 Marketing Mangement
CO No.	Course Outcome
1	To help students in developing basic Marketing Skills.
2	Equipping students with the Market Segmentation Stratigies.
3	To help students understand the pricing and promotion aspect of Marketing.
4	To make students understand the product concept of Marketing.

Course title	BCOM-205 Organizational Behaviour
CO No.	Course Outcome
1	To develop interpersonal behavior Skills in students.
2	To deeply understand the role of individual, groups and structure and efficiently.
3	To Critically evaluate and analyze various theories and Models that Contributes in the Overall understanding of the discipline.
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Course title	BCOM-206 Business Environment
CO No.	Course Outcome
1	Understand the Meaning of Environment Change.
2	Understand and evaluate different economic system.
3	Helps in Identifying by government influences over economic activity.

4	Assess the role of Macro Economics factors such as economic, taxation and legal Constraints.
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Course title	BC-301 Corporate Accounting-I
CO No.	Course Outcome
1 .	Understand the concept of amalgamation and applies the accounting standards with respect to Amalgamations and mergers
2 .	Recording journal entries for accounting for share capital
3 .	Equipping students about methods of preparation of final accounts of companies
4 .	Understanding internal reconstruction of Companies.

Course title	BC-302 Business Statistics-I
CO No.	Course Outcome
1 .	To introduce basic concepts of statistics
2 .	To provide an overview of mean, median, mode, harmonic mean and geometric mean.

Course title	BC-303 Business Laws-I
CO No.	Course Outcome
1	Understand the rules regarding offer, acceptance, consideration and capacity to contract
2	Explaining the rules pertaining to Sale of Goods Act,1930
3	To make students aware about the rights under Consumer Protection Act, 1986

Course title	BC-304 Company Law-I
CO No.	Course Outcome
1	Understanding the meaning, characteristics and types of Companies
2 .	Understanding about Memorandum of Association and Articles of Association
3 .	To familiarize students with the basics of prospectus issued by Companies

4	To introduce the process of transfer and transmission of shares and debentures
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Course title	BC-305 Indian Financial System
CO No.	Course Outcome
1	Making students understand the basic financial structure of India
2	Understanding the role of financial institutions in India
3	Introducing the concepts of Payment Banks and Development Banks
4	Cultivating the skills of managing finance

Course title	BC- 306 (ii) Foreign Trade of India
CO No.	Course Outcome
1	Understanding export procedure and documentation
2	Understanding import procedure and documentation
3	To familiarize with the concepts of SEZ and EOUs
4	To provide information about International economic/financial institutions: WTO, World Bank and IMF.

Course title	BC- 401 Corporate Accounting-II
CO No.	Course Outcome
1	The main objective of this subject to provide the knowledge of companies, Shares and regulatory of companies.
2	This subject describes the pattern of final accounts of the company.
3	It provides the knowledge of issue of a shares
4	It also provides the methods of valuation of goodwill and shares

Course title	BC- 402 Business Statistics-II
CO No.	Course Outcome
1	To Estimate the mean and standard deviation of the marginal distribution of the response variable and use this information to inform a business decision.
2	To make them aware about confidence interval for the

.	slope of the regression line
3	To develop the student's ability to deal with numerical and quantitative issues in business
4	Understand how to organize and summarize data by using descriptive statistics and appropriate statistical graphics

Course title	BC- 403 Business Laws-II
CO No.	Course Outcome
1	Students can Identify the legal constraints faced by the business professional as well as the legal options available to the business professional in responding to and resolving legal issues.
2	Apply the global business laws to current business environment
3	Integrate concept of business law with foreign trade
4	Understand about the partnership act rules and regulations

Course title	BC- 404 Company Laws-II
CO No.	Course Outcome
1	To understand about the types of meetings conducted in the company
2	To know about the number of members in company and transferability of shares and debentures
3	To make them aware about the amalgamation and reconstruction of company
4	To make them aware about the company management and reconstruction policies.

Course title	BC- 405 Computerized Accounting System
CO No.	Course Outcome
1	To define a computerized accounting system
2	To distinguish between a manual and computerized accounting system
3	To highlight the advantages and limitations of computerized accounting system
4	To state the sourcing of a computerized accounting system

Course title	BC- 406 (ii) Entrepreneurship Development
CO No.	Course Outcome
1	To know about the meaning of entrepreneur
2	To understand about the feasibility study of various entrepreneurship plans
3	To know about government policies in entrepreneurship development
4	To understand about the plans of new business in entrepreneurship

Course title	BC- 501 Cost Accounting
CO No.	Course Outcome
1	Students will learn the concepts related to cost, its classification, methods and techniques.
2.	Students will be familiarized with the labour cost, methods of wage payment and incentive schemes.
3.	Gain the knowledge about overheads.
4.	Students will learn how to control cost and how to do cost reduction.

Course title	BC- 502 Financial Management
CO No.	Course Outcome
1 .	Understand basic concepts of financial Management and their application in investment, financing and dividend decisions.
2 .	Understand concepts of cost of capital, leverage analysis, capital structure and dividend theories and identify courses of action in financial environment that would result in maximization of wealth of an organization.
3 .	Understand Management of working Capital and estimate the same for an organization.
4 .	

Course title	BC- 503 Goods and Service Tax
CO No.	Course Outcome
1 .	To Understand about the concept of GST.
2 .	To understand about registration , levy and collection of GST rules.
3 .	To understand about the time and place of supply of GST.
4 .	To understand about computation of input and credit.
5.	To understand about the offences and penalties in GST

Course title	BC- 504 Income Tax-I
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CO No.	Course Outcome
1	Students will learn the concept of Income, Agricultural Income, and Casual Income.
2	Students will be familiarized with the concepts of total income, gross total income, tax planning and tax evasion.
3	They will be able to compute tax on the salary.
4	Concept related to clubbing and aggregation of Income.

Course title	BC- 505 Auditing
CO No.	Course Outcome
1	Introducing basic concepts of auditing, the need and importance of auditing.
2	To understand the conceptual framework that is applied by audit professionals to assess, evaluate, and manage audit risks and evidence
3	Understanding the auditing procedures.
4	Equipping the students with the process of preparing the audit reports.
5	Familiarizing students with the role of a professional auditor

Course title	BC- 506 (i) Supply Chain Management
CO No.	Course Outcome
1	To understand fundamental supply chain Management concepts.
2	Apply knowledge to evaluate and manage an effective supply chain.
3	To understand foundational roll of logistics as it relates to transportation and ware housing.
4	To Analyze and improve supply chain process.

Course title	BC- 601 Management Accounting
CO No.	Course Outcome
1	To equip the students with the ability to analysis interpretand use accounting information in managerial decision making.
2	Understanding of the application of accounting techniques for management
3	Familiarizing students with the methods of accounting for marginal cost
4	Understanding calculations and use of ratios in Companies

Course title	BC- 602 Fundamentals of Insurance
CO No.	Course Outcome
1	To equip students with basic foundation knowledge of insurance in order to develop a better understanding of insurance practice.
2	To Acquire technical and practical skills needed in building careers in the insurance industry.
3	To apply the basic insurance knowledge and skills to his/her work place.

Course title	BC- 603 Human Resources Management
CO No.	Course Outcome
1	Effectively manage and plan by key Human Resources functions within organizations.
2	Examine current issues, trends, practices and processes in HRM.
3	Contribute to apply employee performance management and organizational effectiveness.
4	Problem solve human resource challenges.

Course title	BC- 604 Income Tax- II
CO No.	Course Outcome
1	Understanding Deductions under Section 80
2	Computation of Total Income and Tax Liability
3	Procedure for Assessment
4	Understanding the Recovery of Tax and Refund of Tax

Course title	BC- 605 Business Environment
CO No.	Course Outcome
1	Understand the Meaning of Environmental Change.
2	Understand and evaluate different economic systems.
3	Helps in identify key government influences over economic activity.
4	Assess the role of Macro –Economic factors such as economics, taxation and fiscal constraints.

Course title	BC- 606 (i) Retail Management
CO No.	Course Outcome
1	To familiarize the students with retail Management concepts and operations.
2	To explain the understanding of retail Management and types of retails.
3	To acquired the students with legal and ethical aspects of retail management.
4	To create awareness about emerging trends in retail Management.

Course Outcomes of Chemistry

Semester I		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I, II	Chemistry	<ul style="list-style-type: none">○ Discuss Atomic Structure, Periodic Table and Atomic Properties viz. Ionization Energy, Electron Affinity, Electro negativity, Quantum Numbers, Electronic Configuration of the Elements.○ Study the formation of Covalent Bond, Hybridization, Bond Energy, Bond Length, Crystal Structure, Lattice Energy and Fajan's Rule.○ Understand localized and de-localized Chemical bonds, Electronic Effects, Isomerism, Configuration, E and Z, R and S Nomenclature, Conformations.○ Draw the mechanism of Organic Reactions, study of attacking reagents, Reaction Intermediates,

Semester II		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I, II	Chemistry	<ul style="list-style-type: none"> ○ Discuss the thermodynamics Law's of gas, standard enthalpies of formation, bond dissociation energy Kirchhoff's equation, Le chatellier's principal Relationship b/w K_p, K_c & K_x for reaction involving ideal gases ○ Study of strong & weak electrolytes. Degree of ionization factor affecting degree of ionization, Buffer solution, Solubility product, Solubility & its application. ○ Preparation of benzene, Electrophilic substitution, nitration, Friedal- Craft's reaction, oxidation of alky/benzene preparation of alky Halide from alkane & alcohol Sandmeyer & Gattermann reaction reactivity order. ○ Classification & Preparation of 1° & 2° and 3° alcohol, Pinacol-pinacolone rearrangement, Preparation of phenol, Reimer Tiemann reaction, gattermann- Koch reaction. Cleavage of ether, preparation of aldehyde & ketone from acid chloride, wolff kishner reduction, Meerwein pondo of verly reduction.

Semester III		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I, II	Chemistry	<ul style="list-style-type: none"> ○ Study of solution, ideal solution Raault's Law. A Zoetrope's, Colligative properties, Partial miscibility of liquids degree of freedom, Gibbs phase rule, clausis clapeyron equation, eutectics, congruent & incongrecent melting point.(lead- silver). ○ Conductivity, equivalent & molar conductivity Kohlrausch law of independent migration of ions transference number, ionic mobility concept of PH & PKA, buffer solution, buffer action, Handerson Hazel Blac equation. Reversible & irreversible cells. EMF of ull, Nernst equation standard electrode potential. ○ Carboxylic acids & their derivatives its preparation Hell- Vohlard Zelinsky reaction, Reformatsky reaction, perkin condensation, preparation of a mines & its properties, Hofmann & saytzefflin nation, schotten reaction. ○ Prepartion of Aminoacid, Peptides & proteins and its properties, classification & structure of 1° & 2° and 3° proteins. synthesis of simplipeptides classification, preparation & general properties of carbohydrates like glucose & fructose, Structure of disachorrides & poly sacharrides.

Semester IV

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I, II	Chemistry	<ul style="list-style-type: none">○ General trend of 3 d_ Transition metal, electronic configuration, color magnet & catalytic properties, ability to form complex Latimer diagram. Lanthanoids & Actinoids of Electronic configuration, Lanthanide contraction.○ Coordination chemistry, Valence bond theory inner and outer orbital complexes of Cr, Fe, Co, Ni & Cu, Structural & Stereoisomerism in complexes. Crystal field effect, Octahedral Symmetry. Crystal field & stabilization energy. Tetrahedral symmetry. Comparison of CFSE for O_h & T_d complexes. Tetragonal distortion of octahedral geometry Jahn teller distortion.○ Postulates of kinetic theory of gases & derivation Deviation of real gas from ideal behavior, compressibility factor, Boyle temperature calculation from Vander waals equation, Maxwell Boltzmann distribution. Most probable, average & root mean square velocity, Collision diameter, surface tension, Viscosity of liquid. Effect of temperature on surface tension and coefficient of viscosity of liquid solids.○ Bravais lattice types, Laws of crystallography Miller indices, Bragg's Law, Collision theory & activated complex theory of bimolecular. Arrhenius equation half life of general equations.

Semester V

Course Code	Course Name	COs: After successfully completing this course, students will be able
Paper-I, II&III	Chemistry	<ul style="list-style-type: none">○ Acids & Bases, Bronsted Lowry Concept conjugate acids & base, relative strengths of acid & bases, application of HSAB process principles of Metallurgy, Ellingham diagrams for reduction of metal oxides, hydrometallurgy zone refining Mond's process, kroll process.○ Periodicity in S and P Block elements with electronic configuration, electro negativity Pauling scale, General characteristics of block metal. Allotropy in SP & S, complex forming tendency of S- Block elements, Structures of basic beryllium acetate, common features such as case of formation, crow ethers & crypatates structures of basic, superoxides, sulphates.○ Diborane & concept of multicentre bonding halide & oxohalide of P & s, Inertness of noble gases, clathrates , properties of XeF_2 & XeF_4. Inorganic polymers and comparison with organic polymer, Borazines & cyclphosphazenes.○ Energy sources, uses of coal in various industries coal gasification, coal liquification, composition of petroleum, refining petroleum, Fractional distillation, cracking, reforming, petroleum & non- petroleum fuels, fuel from waste, synthetic fuels (Gaseous & liquids) to luene & its derivative xylene lubricants, lubricating oils, synthetic lubricants, viscosity index.

Semester VI		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I, II	Chemistry	<ul style="list-style-type: none"> ○ Study of compounds peroxo compound of Cr, $K_2Cr_2O_7$, $KMnO_4$, $K_4[Fe(CN)_6]$, $[Co(NH_3)_6]Cl_3$, structure of methyl lithium, Zeiss salt and ferrocene. EAN rule as applied carbonyl. ○ Properties of Naphthalene, Anthracene Furan, Pyrrole, Thiophene, Pyrrole. Claisen ester condensation, Keto enol tautomerism. Synthetic uses of ethyl acetoacetate. ○ Preparation, structure of polynuclear carbonyls of 3d metal. Synergic effect (VB approach), (Mö- approach) Role of metal ions present in biological system, Na/K pumps, role of Mg^{2+} ions chlorophyll. ○ Applications of visible, ultraviolet and infrared spectroscopy in organic molecules Electromagnetic radiations, Electronic transition Chromophore, Auxochrome, Bathochromic woodward rules for calculating max of conjugated, Infrared radiations and types of molecular vibrations, functional group and fingerprint region.

Course Outcomes of Physics

Semester I		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I & II	Physics	<ul style="list-style-type: none"> ○ Scalar and vector field, Divergence and curl of a vector field, Laplacian operator Gauss's divergence theorem. Motion in plane polar coordinates, Momentum, Conservation of momentum, Motion of rocket Conservation of energy. ○ Elastic and Inelastic collision between particles, Angular Velocity & Angular momentum of inertia, Thin rectangular sheet, Coriolis forces, Basic Concept of central force, Hooke's Law-Stress strain Bending of cantilever & Centrally Loaded beams. ○ Electrostatic field, Gauss's theorem of electrostatics, Application of Gauss theorem Divergence and curl of electrostatic field. Laplace and Poisson's equation, Dielectric medium, Polarization, Susceptibility, Permittivity. ○ Lorentz force law, Magnetic forces Magnetostatics: Biot-Savart's Law & its application. Magnetic vector potential The field of a magnetized object, bound currents, Physical interpretation, Ampere's Law for magnetized objects, The Auxiliary field.

Semester II

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I & II	Physics	<ul style="list-style-type: none">o Constrained Motion, Degree of freedom and generalized Coordinates, Lagrange's Equation of Motion From Hamilton's Principle Oscillations, Simple Harmonic Motion, Simple Pendulum, Damped Oscillations.o Theory of Relativity, Galilean transformation & its inadequacy, Michelson Morley Experiment & its outcomes, Lorentz, Frequency & Wave Number, Relativistic Doppler Effect.o Motion EMF, Faraday's Law of electromagnetic induction, Ac circuit analysis, Ac circuit, Amper' Shaw, Maxwell's Equation in Matter, Pointing Theorem, Moment & Angular Momentum in Electromagnetic Field.o Sinusoidal wave, wave equation of E and B Fields, Propagation in Linear Media Energy & Momentum in EM waves, Gauge Transformation, Coulomb Gauge, Lorentz Gauge, Electric & Magnet Dipole radiation Magnetism as Relativistic Phenomenon.

		(Measurements & Basic Techniques) Types of Starts - Crouch Start and standing starts (Basic Technique)
Semester III		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I & II	Physics	<ul style="list-style-type: none"> ○ Zeroth First Law of Thermodynamics, Work and Heat, State Function, Relation between ΔU & ΔQ Workdone during isothermal Process clausius theorem, Clausius inequality, T-S Diagram, Phase Change, Classification of Phase Change. ○ Extensive and Intensive Thermodynamics Variables, Enthalpy, Gibbs, Hemholtz function and their Defination, Derivation of Maxwell reaction Value of CP & CV, Behaviour of Real Gas, Continuity of liquid and Gaseous State. ○ P and N Type Semi Conductors, PN Junction Diode, Zener Diode, DC Voltage Regulator, Photo Diode, Solar Cell, Bipolar Junction Transistor N-P-N, P-N-P Transistors, Current Gains α, B Q- Point. ○ Amplifiers & their Biasng, RC Coupled Amplifier and its frequency, Application of op Amps as inverting Amplifier, Integrator, Hartley Oscillator, Sinusoidal Oscillators Barkhausen's Criterion, Colpitt's Oscillator
Semester IV		
Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I & II	Physics	<ul style="list-style-type: none"> ○ Statistical Basis, Probability & Frequency Macro state, Fluctuations & their dependence, Density of Quantum State, Maxwell- Boltzmann Law of Distribution, Diffusion Brownian Motion Degree of Freedom. ○ One Dimension Harmonic Oscillator, Thermo Dynamics Function of Ideal Gas Fermi-Dirac Distribution Law, Electron Gas Metal. ○ Wave Equation, Particle & Wave Velocity, Velocity of Transverse Vibrations Stretched Strings Normal Mode of String, Longitudinal Wave, Laplace's Correction, Division of Amplitude, Fresnel's Biprism Newton Ring Measurement. ○ Fresnel Diffraction, Theory of Zone- Plate, Resolving Power of a Telescope, Diffraction Grating, Plane Polarized light, Circular and elliptical Polarization Advantage and Applications of Optical Fiber. ○ Electronic Components, Capacitors types, Single Pole, Single Throw, Applications of SPST, SPDT & DPDT Switches, Relays, Fuses and Disconnect Switches, Voltage drop and Loses across able Real & ideal Voltage Source, AC Source Single Phase Familiarization with Multimeter Digital Circuit, NOT, NAND & NOR Gols.

Semester V

Course Code	Course Name	COs: After successfully completing this course, students will be able to
Paper-I	Physics	<ul style="list-style-type: none"> ○ Special Distribution of Black-Body Radiation, Kirchhoff's Law, Wien's Displacement Law, Plank's Quantum Postulates, Photo- Electric Effect, Production of X-Rays, Bohr Atomic Model, Quantization rule and de-Broglie Wavelength and Wave Particle Duality, Phase and Group Velocity and their Relations. ○ Heisenberg Uncertainty Principle, Properties of Wave Function, Schrodinger Equation, Momentum and Energy Operators Sattionary States Laser, Absorption and Emissiuon of Rradiation, Einstein's Coefficient Working of He-Ne Laser, Ruby Laser and Applications of Laser.
Paper II	Physics	<ul style="list-style-type: none"> ○ Nuclear mass ,Size, Spin and Magnetic Dipole Moment, Energy curve, Law of Radioactive Decay, Half Life, Radioactive Series, Liquid drop Modal, Magic Number, Structure in Nuclei, Nuclear Shell Model, Mason's Theory of Nuclear Force. ○ Interaction and Energy Loss of Heavy Charge Particles, Interaction of Light Charged Particle, Gamma Ray, Photoelectric Effect, Compton and Pair Production Effect, G.M Counter, ionization Chamber, Nuclear Fission Reactor, Particle Accelerators, Linear accelerator, Cyclotron.

Semester VI

Course Code	Course Name	COs: After successfully completing this course,students will be able to
Paper-I	Physics	<ul style="list-style-type: none"> ○ Crystalline and glassy form, Liquid Crystal, Lattice and brevis, Unitcell, Permittive, Bravias Lattice in Two and There Dimensions Crystal plane and Miller indices, Nace diamond structure, X-Ray diffraction, Reciprocal lattices, BCC, FCC, Dulroy and petet law, Debay Theory. ○ Band theory, Free electron model, Bloch Function, Hall effect, Magnetic Properties of Matter, Curie law, Super Conductivity, Super Conductor, Isotope effect, Measure Effect, Type I and II SemiConductor Josephson effect (AC and dC) Practical application of super Conductor.
Paper-II	Physics	<ul style="list-style-type: none"> ○ Basics of Quantum mechanics, properties of wave function. Time independent Schrodinger equation, Time dependent equation, Application of Schrodinger wave equation , oscillator problem, Algebric and Analytic solution, Example of $\alpha -$

decay and tunnel diodes.

- Spectroscopic terms and their notation, Bohr magneton LS or Russel Saunders Coupling Scheme, Isotropic effect, Normal Zeeman effect, Energy levels, Rotational spectra of diatomic molecules, Energy levels, Vibrational spectra, Raman effect, Molecules as Harmonic oscillator.

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| | | <ul style="list-style-type: none"> ○ Understand Newton's Laws of motion and their application in sports. Understand Levers: Meaning, types and their application in Sports ○ Understand Anatomy and Physiology: Organs, Structure of Digestive System, Mechanism of food digestion and effects of exercise on Digestive System. ○ Understand Pranayam: Bhramari, Anulom Vilom and Kapal Bhati. Volleyball/ Hockey/ Judo/ Boxing/ Wrestling/ Self-defense game tactics, Ground Specifications, General rules and General Skill. ○ Understand Bandages its types and Arm Slings First Aid: First aid for different injuries and circumstances, items of first aid box and their uses. |
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Course outcomes

Computer Science

B.A. (Pass Course) Ist Year

Semester – I

BACS- 111 Fundamentals of Computer

By the end of the course the students will be able to:

- Understand the basic fundamentals and classification of Computers.
- Understand the working and use of input and output devices of Computer.
- Understand the basics of MS Office (MS Word, MS Excel, MS PowerPoint)
- Understand the concept of Operating System, its types, functions and working.
- Understand various types of computer languages.
- Browsing of the Web with latest web browsers on PCs, Laptops and mobile phones.

BACS- 112 Programming in 'C'

By the end of the course the students will be able to:

- Understand the C programming fundamentals.
- Know the correct and efficient ways of solving problems.
- Analyze different data types and arrays.
- Understand C by using functions, structures and union.
- Understand memory management using pointers.
- Apply the programming language concepts to solve real time problems.

Semester – II

BACS- 121 Data Structure using ‘C’

By the end of the course the students will be able to:

- Knowledge of programming fundamentals including structured and efficient programming.
- Knowledge of arrays, stacks, queues and linked lists and their implementation in C.
- Knowledge and Development of searching and sorting programs in C.
- Apply data structures and algorithms in real time applications.
- Analyze the various algorithm design and implementation.
- Knowledge of trees and Graphs.

BACS- 122 Computer Organization

By the end of the course the students will be able to:

- Knowledge of Number Systems in computer.
- Design a circuit for any digital function
- Use K-map for simplification of Boolean expressions
- Use of Logic and Universal Gates.
- Identify the addressing modes of instructions and calculation of effective address
- Determine which hardware blocks and control lines are used for different instructions
- Classify the parallel processors.

B.A. (Pass Course) 2nd Year

Semester – III

BACS- 201 Database Management System

By the end of the course the students will be able to:

- Explain and differentiate Traditional file system and Database approach.
- Explain DBMS Functions and Components.
- Understand and Explain Data Independence – Logical and Physical Data Independence.
- Understand and explain various Data Models in DBMS.
- Describe Relational Model Concepts & Codd's Rules for Relational Model.
- Implement relational model and relational algebra concepts into a database management system.

- Differentiate Basic DDL, DML and DCL commands in SQL.
- Apply Simple Queries.
- Become proficient in using database management systems (Oracle SQL Plus).
- Understand the Functional Dependencies, Normal Forms.
- Acquire the knowledge of working with database.

Semester – IV

BACS- 202 Operating System

By the end of the course the students will be able to:

- Knowledge of structures of Operating Systems.
- Discuss theory and implementation of processes, resource control, physical and virtual memory, scheduling, I/O and files.
- Calculate waiting time, response time, turnaround time and disk seek time in disk scheduling.
- Compare the memory allocation methods and differentiate the page replacement algorithms.
- Understand the Memory Management techniques like: Page Table, Schedulers, Memory management systems, Virtual Memory, Segmentation and Paging systems.
- Study different disk scheduling algorithms.
- Identify and use UNIX/Linux utilities to create and manage simple file processing operations, organize directory structures with appropriate security, and develop shell scripts, shell variables, system calls, loops in shell and utility programs.
- Gain the necessary knowledge for the employability in teaching profession.

Semester – IV

BACS -204 Software Engineering

By the end of the course the students will be able to:

- Understand and explain Programming paradigms
- Differentiate Program and Software.
- Explain phases in Software Development.
- Explain Software Development Process Models : Waterfall, Prototype, Evolutionary and Spiral Models.
- Design Software Requirement Analysis and Specifications.
- Understand and apply Structured Analysis and Tools: Data Flow Diagram, Data Dictionary, Decision table, Decision tree.

- Explain Software Project Planning, Software Configuration Management.
- Understand and explain Software Implementation and Maintenance: Type of maintenance, Management of Maintenance, Maintenance Process, Maintenance Characteristics.
- Designing test plans.
- The basic software Testing Fundamentals : White box testing, Black Box testing methods and techniques along with different levels of testing.

BACS -205 Computer Network

By the end of the course the students will be able to:

- Describe the general principles of data communication.
- Explain the fundamental knowledge in Computer Network Hardware and Software.
- Analyze the various concepts of Networks related to OSI and TCP Reference Models.
- Explain various transmission media.
- Describe about the types of Transmission Media and understands the working of Public Switches Telephone Network.
- Relate and illustrate the techniques of Error Detection and Correction.
- Express the Elementary Data Link Protocols.
- Illustrate and analyse the Routing and Congestion Control Algorithms in Network Layer.

B.A. (Pass Course) 3rd Year

Semester – V

BACS-311 Object Oriented Programming Using C++

By the end of the course the students will be able to:

- Outline the essential features and elements of the C++ programming language.
- Use the characteristics of an object-oriented programming language in a program.
- Understand and use manipulators.
- Develop simple applications using class, objects.
- Use the basic object-oriented design principles in computer problem solving.
- Design application using friend functions and friend class.
- Design and implementation programs of Constructor, Destructor, and Inheritance.
- Use C++ language to solve problems.

BACS-312 Data Analytics

By the end of the course the students will be able to:

- Knowledge of Business Intelligence tools, skills and Applications.
- Knowledge of Data Warehouse Development Approaches, Architecture and Data Mining Techniques.
- Knowledge of Decision Tree, Regression, Business Applications of Artificial Neural Network.
- Implementation of K- means Algorithm for Clustering
- Representation and Algorithms of Association Rule Mining.
- Knowledge of Apriori Algorithm.
- Knowledge of Web Mining content, structure, usage and algorithms.
- Knowledge of Naive-base Model and SVM Model.
- Knowledge of Big Data technologies and management.

Semester – VI

BACS-321 Computer Graphics

By the end of the course the students will be able to:

- Understand the basic elements and applications of Computer Graphics.
- Explain the concepts used in various computer graphic I/O Devices.
- Draw different primitive drawing objects and apply transformations.
- Apply clipping on points, lines and closed objects with respect to given rectangular window.
- Explain the concepts of interactive computer graphics.
- To learn the basic principles of 2- Dimensional and 3- Dimensional Graphics (Geometric Transformations).
- Provide an understanding of how to scan the basic geometrical primitives.
- Provide an understanding of mapping from a world coordinate to device coordinates, clipping, and projections.

BACS-322 Python Programming

By the end of the course the students will be able to:

- Create your first program in Python IDLE.
- Implement OOPs concepts in python programming.
- Interpret the fundamental Python syntax and semantics and be fluent in the use of Python control flow statements.
- Express proficiency in the handling of strings and functions.
- Determine the methods to create and manipulate Python programs by utilizing the data structures like lists, dictionaries, tuples and sets.
- Write Python programs with conditionals, loops and functions.
- Identify the commonly used operations involving file systems and regular expressions.

