

Program Outcomes and Course Outcomes

PROGRAM OUTCOME: B.A.

B.A. Programme enables the students to gain a thorough knowledge and skills in the disciplines of Arts stream. This will equip the students to analyse the past, present and plan for the future with a better understanding of the society.

Program Specific Outcome: History

- I. Students shall be able to demonstrate specific understanding of History: Pre-history, Ancient History, Medieval History, Modern History, and Contemporary History along with the identification of the sources of History
- II. Students shall be able to examine the History of religions, customs, institutions and administration
- III. Develop thinking skills by analyzing, synthesizing, and evaluating historical sources. And develop an understanding of the social, political, religious and economic conditions of the people
- IV. Analyze the relationship between the past and the present
- V. Develop practical skills by identifying the boundaries and places on historical maps
- VI. Enables the students to develop knowledge and competency required for research, profession, career and competitive examinations like IAS, KAS, ASI, etc.

Course Outcome:

Semester	Subject	Subject Code	Outcome
I	India in the Early Historical Period (to A.D.300)	BASHTC – 102	<ul style="list-style-type: none"> • Students will gain knowledge about sources of history, historiography and geographical features • Gain understanding about pre-historic period, Harppan culture, Vedic Age, Mahajanapadas, Mauryan Empire and Post-Mauryan India.
II	India in the Early Medieval Period (A.D. 300-1300)	BASHTC – 152	<ul style="list-style-type: none"> • Understanding about the Age of the Guptas Chalukyas, Pallavas and Cholas • Familiarising about the age of Rajputs and Muslim Invasion in India.
III	Medieval India (A.D. 1206-1556)	BASHTC – 202	<ul style="list-style-type: none"> • Gaining knowledge about Delhi Sultanate, Economy, Society, and Polity • Have better understanding about Vijayanagar Empire and South India in Early 14th Century A.D.

IV	Early Modern India (A.D. 1605-1856)	BASHTC – 252	<ul style="list-style-type: none"> • Information about Afghan Mughal Struggle and consolidation of the Mughal Empire • Identify the condition of India under the Mughal domination • Explain the Polity, Society, Culture, Literature, Music, art and architecture • Analyse about the rise of the Marathas • Examine the early phase of European Domination and consolidation of the British Empire
V	Colonial India (A.D. 1856-1885)	BASHTC – 304	<ul style="list-style-type: none"> • Understand about Colonialism, Government under East India Company, Society and Culture • Gain a thorough knowledge about the 1857 movement, genesis of Indian Nationalism and colonial policy in the post mutiny India
VI	History of Europe (A.D. 1789-1990)	BASHTC – 305	<ul style="list-style-type: none"> • Understand causes and results of French Revolution, Rise of Napoleon, Unification of Italy and Germany • Examine the World Wars I &II, League of Nations and UNO
	Making of the Indian Nation (A.D. 1885-1964)	BASHTC – 355	<ul style="list-style-type: none"> • Understanding three phases of the Indian National Movement, Gandhi and Struggle for Swaraj • Understanding the role of Shubhas Chandra Bose and INA • Examine the social cultural aspects and legacy of freedom movement • Understanding of Karnataka in 16th C, Karnataka after Vijayanagara, Karnataka towards colonial Domination and British rule
	History of Karnataka (A.D. 1565-1956)	BASHTC – 356	<ul style="list-style-type: none"> • Understanding about rendition of Mysore, Social, Cultural and Political Developments in Mysore • Understanding the unification of Karnataka

PROGRAM OUTCOME: B.A.

B.A. with Combinations: HEP & JKP

Political Science is studied as a part of History, Economics, and Political Science group, as well as with Journalism, Kannada, and Political Science group for B.A. degree. The study of Political Science enables the students to have better understanding of Politics, Political Theory, Political Systems, Constitution, Government, Governance, Public Administration, Human Rights and International Relations.

Program Specific Outcome: Political Science

The Political Science as a discipline enables the students to understand the basic principles of Politics and Governance including governing institutions and their bodies at various levels, political wings and organizations, including political behaviour. It helps the students to understand the working of various administrative bodies through Public Administration and Management. It also helps in understanding government and politics in a global context through Comparative Politics and International Relations. In totality, Political Science equips a student to pursue Civil Services Examinations and other Competitive Exams. Student will be able to pursue their career in teaching and research.

Course Outcome:

Semester	Subject	Subject Code	Outcome
I	Introduction to Political Science	BASPSC 102	<ul style="list-style-type: none">• Understanding of the basic concepts and their divergent views• Having a sensitive and broader vision of politics
II	Comparative Government and Politics	BASPSC 152	<ul style="list-style-type: none">• Students gain the knowledge about the major Political Systems, operations on a comparative basis
III	Indian Political System	BASPSC 202	<ul style="list-style-type: none">• Students gain awareness on Indian Political System• Develop understanding and a sense of respect towards the Constitution of India• Students gain awareness on Fundamental Rights and Duties
IV	Political Thinkers and Ideologies	BASPSC 252	<ul style="list-style-type: none">• Students gain understanding about Western and Indian Political Thinkers and their political thoughts.
V	Public Administration	BASPSC 303	<ul style="list-style-type: none">• Understanding the basics of public Administration• Understanding the working of public institutions, civil services and organisational structure

VI	Introduction to International Relations	BASPSC 304	<ul style="list-style-type: none"> • Acquire knowledge about planning and budget making processes • Familiarity about nature, working, and need of International Relations • Gain awareness about International Peace and Security
	Contemporary Issues and Trends in International Relations	BASPSC 353	<ul style="list-style-type: none"> • Gain knowledge about trends in International Relations and Global issues
	Theory and Practice of Management	BASPSC 354	<ul style="list-style-type: none"> • Development of Management skills and techniques • Understanding of new developments in management

B.COM Program Outcome			
<ol style="list-style-type: none"> 1. The course focuses mainly on enhancing the employability skills of the commerce students. 2. It make a student employable and at the same time confident in his/her day to day transactions. 3. The course also meets the requirement of the young and enterprising Indians to nurture their dreams of entrepreneurship. 4. The course enables the students to pursue higher education in the respective stream. 5. The course helps the student to take up professional courses like CA/CS/ICWA/ICMA. 			
Program Specific Outcome			
B.Com General		B.Com Vocational	
<ol style="list-style-type: none"> 1. The course focuses mainly on enhancing the employability skills of the commerce students. 2. It make a student employable and at the same time confident in his/her day to day transactions. 3. The course also meets the requirement of the young and enterprising Indians to nurture their dreams of entrepreneurship. 4. The course enables the students to pursue higher education in the respective stream. 		<ol style="list-style-type: none"> 1. The course focuses mainly on enhancing the employability skills of the commerce students. 2. Gives the knowledge of Direct Tax and Indirect Tax. 3. Gives practical knowledge of e-filing of returns. 4. The course enables the students to pursue higher education in the respective stream. 5. The course helps the student to take up professional courses like CA/CS/ICWA/ICMA. 	
Course Outcome: B.COM (General)			
Semester	Subject	Subject Code	Outcome
I	Language: Kannada		
	Language: Hindi		
	Language: Sanskrit		
I	English		
I	Economics		
I	Financial Accounting I	BCMCMC 106	<ul style="list-style-type: none"> - Record business activity in the ledger - Methodological approach to describe the activities of business - Learn accounting standards - Financial reporting process
I	Principals Of Management	BCMCMC 107	<ol style="list-style-type: none"> 1. To study about organization functions and organization structure. 2. To study various Theories of Management. 3. To know about selection and recruitment process 4. To study about training and

			development procedure.
I	Business Statistics and Mathematics	BCMCMC108	Descriptive Statistics- measures of central tendency and measures of dispersion. Index numbers like- CPI, and formulation using various methods. Matrices and determinants. Matrix algebra and solving simultaneous equations using matrices.
II	Language: Kannada	BCMCMC	
	Language: Hindi		
	Language: Sanskrit		
II	English		
II	Economics		
II	Financial Accounting II	BCMCMC 156	<ul style="list-style-type: none"> - Dealing in bills - Preparation of financial statements - Reconciliation of errors in recording business transactions - Educate the students in hire purchase , instalment and consignment system
II	Modern Banking	BCMCMC 157	<ol style="list-style-type: none"> 1. To have knowledge of banking structure in India. 2. To have knowledge about general and special functions of banking. 3. To have knowledge about Negotiable Instruments.
II	Business Statistics and Mathematics	BCMCMC158	Correlation and Regression Analysis. Time Series. Basics of banking arithmetic like – Simple and Compound Interest, Discount etc.
III	Language: Kannada		
	Language: Hindi		
	Language: Sanskrit		
III	English		
III	Business Taxation I	BCMCMC 205	<ol style="list-style-type: none"> 1. It helps the student to prepare Income statements. 2. It helps to file the returns 3. Compute the deductions and allowances <p>Helps to assess the companies' transactions for the purpose of taxation.</p>
III	Economics		
III	Financial Accounting III	BCMCMC 202	<ol style="list-style-type: none"> 1. How to calculate sacrifice ratio, new profit sharing ratio and gain ratio. 2. Treatment of goodwill- accounting

			<p>standard 3 and 10</p> <ol style="list-style-type: none"> How to calculate the amount paid to executors account in case of death of a partner.
III	Cost and management Accounting I	BCMCMC 203	<ol style="list-style-type: none"> Understanding the concept of cost and financial accounting. Preparation of cost sheet Knowing different methods of pricing the materials. Calculation of remuneration plans.
IV	Language: Kannada		
	Language: Hindi		
	Language: Sanskrit		
IV	English		
IV	Business Taxation II	BCMCMC 255	<ol style="list-style-type: none"> To study income under various heads To study how to compute depreciation
IV	Economics		
IV	Cost and Management Accounting II	BCMCMC 253	<ol style="list-style-type: none"> Knowing different overheads and distribution of overheads. Computing machine hour and labour hour rate in factory. Understanding integrated accounting systems. Preparing non integrated accounts and reconciliation statement.
IV	Financial Accounting	BCMCMC 252	<ol style="list-style-type: none"> Preparation of branch account Preparation of departmental accounts SEBI guidelines regarding underwriting of shares.
V	Financial Accounting V	BCMCMC 304	<ol style="list-style-type: none"> Students can prepare companies Financial Statement of companies Act of 2013 Gives practical knowledge of preparation of liquidator's final statement of account at the time of liquidation. Calculation of various accounts and statement of Holding and Subsidiary Company.
V	Cost and Management Accounting III	BCMCMC 305	<ol style="list-style-type: none"> To study the cost of each job and each batch. To ascertain the value of abnormal loss, abnormal gain and normal loss. <p>To find out the Notional profit, reserves and profit & loss under contract account</p>

V	Marketing	BCMCMC 302	<ol style="list-style-type: none"> 1. To have knowledge about consumer behaviour 2. To know about advertising and sales management 3. To study about National and International Standards
V	Business Taxation III	BCMCMC 307	
V	Business Law	BCMCMC 301	<ol style="list-style-type: none"> 1. To have knowledge about basic knowledge about law of the country 2. They will get to know about various intricacies of mercantile law.
V	Financial Management	BCMCMC 303	<ul style="list-style-type: none"> - To educate about the basic pre-requisites needed to get started career in finance - Educates students about how to help clients managing finance - Understand specific responsibilities of financial professionals - Tracking investment activities - Knowledge of stock exchange of India
VI	Cost and Management Accounting IV	BCMCMC 355	<ol style="list-style-type: none"> 1. How to prepare fund flow statement. 2. To know the accounting standard 3 in cash flow statement 3. To know how to prepare the different budgets.
VI	Auditing	BCMCMC 352	<ol style="list-style-type: none"> 1. To study about Company Audit. 2. To study about audit of Computerized accounts 3. To know about Vouching and Verification
VI	Financial Management	BCMCMC 353	<ul style="list-style-type: none"> - Developing cash management strategies - Knowledge about investment in Mutual funds - Learn how to become decision makers for stock holders and financial organizations - How to evaluate and price different types of securities

VI	Business Taxation IV	BCMCMC 357	<ol style="list-style-type: none"> 1. Understanding goods and services tax Act provisions, rules, and regulations. 2. Registration procedure under GST. 3. Computation of taxes under GST. 4. Understandings custom provisions and payment of taxes.
VI	Financial accounting VI	BCMCMC354	<ol style="list-style-type: none"> 1. Understanding of NPA, rebate on bill discounted and final accounts of banking company 2. Maintenance and preparation of final accounts at the time of amalgamation, merger, external and internal reconstruction. 3. Calculation of ratio for external and internal purpose of accounting, taxation, banking.
VI	Cost And Management Accounting		<ol style="list-style-type: none"> 1. How to prepare fund flow statement. 2. To know the accounting standard 3 in cash flow statement 3. To know how to prepare the different budgets.

B.COM (VOCATIONAL) COURSE OUTCOME

Semester	Subject	Subject Code	Outcome
I	Language: Kannada		
	Language: Hindi		
	Language: Sanskrit		
I	English		
I	Financial Accounting I	BCMCMC	
I	Business Statistics and Mathematics	BCMCMC 108	Descriptive Statistics- measures of central tendency and measures of dispersion. Index numbers like- CPI, and formulation using various methods. Matrices and determinants. Matrix algebra and solving simultaneous equations using matrices.
I	Income Tax Law And Practice I	BCMTPV 151	<ol style="list-style-type: none"> 1. learn about the fundamentals of income tax and the scope. 2. Learning important definitions under Income tax Act 3. Learn about deductions under chapter VI A 4. Computing the gross income and total income
I	Goods and Service Tax Law and Practice I	BCMTPV 152	<ol style="list-style-type: none"> 1. Understanding basis concepts under GST. 2. Learning various definitions under GST. 3. Understanding GST council, administration and structure 4. Learning about levy and collection of GST.
II	Language: Kannada	BCMCMC	
	Language: Hindi		
	Language: Sanskrit		
II	English		
II	Financial Accounting II	BCMCMC	
II	Business Statistics and Mathematics	BCMCMC 158	Correlation and Regression Analysis. Time Series. Basics of banking arithmetic like – Simple and Compound Interest, Discount etc.
II	Income Tax Law And Practice II	BCMTPV 251	<ol style="list-style-type: none"> 1. Learning about the different heads of income with its components. 2. Calculations of allowances and perquisites 3. Computing income under the head salaries

II	Goods and Service Tax Law and Practice II	BCMTPV 252	<ol style="list-style-type: none"> 1. Learning about computation of GST payable 2. Understanding the importance of time of supply of service and goods 3. Computing place of supply of service 4. Computing value of taxable goods 5. Knowing about E-Way Bill and its implications.
III	Language: Kannada		
	Language: Hindi		
	Language: Sanskrit		
III	English		
III	Financial Accounting III	BCMCMC 307	<ol style="list-style-type: none"> 4. It helps the student to prepare Income statements. 5. It helps to file the returns 6. Compute the deductions and allowances 7. Helps to assess the companies' transactions for the purpose of taxation.
III	Cost and management Accounting I	BCMCMC 203	<ol style="list-style-type: none"> 1. Understanding the concept of cost and financial accounting. 2. Preparation of cost sheet 3. Knowing different methods of pricing the materials. 4. Calculation of remuneration plans.
III	Income tax Law and practice III		
III	Goods and Service tax Law III		<ol style="list-style-type: none"> 1. Understanding the concepts of input tax credit under GST 2. Computing Input Tax Credit under various circumstances 3. Allowing credits and conditions for allowing credit under GST.
IV	Language: Kannada		
	Language: Hindi		
	Language: Sanskrit		
IV	English		
IV	Cost and Management Accounting II	BCMCMC 253	<ol style="list-style-type: none"> 1. Knowing different overheads and distribution of overheads. 2. Computing machine hour and labour hour rate in factory. 3. Understanding integrated accounting systems. 4. Preparing non integrated accounts and reconciliation statement.
IV	Financial		

	Accounting IV		
IV	Income tax Law and practice III		
IV	Goods and Service tax Law III		<ol style="list-style-type: none"> 1. Knowing and learning account and documents under GST 2. Computation of interest, tax, penalty, fines under various circumstances 3. Liability to tax under GST in special cases 4. Understanding Appeals and revisions procedures.
V	Financial Accounting V	BCMCMC 304	<ol style="list-style-type: none"> 1. Students can prepare companies Financial Statement of companies Act of 2013 2. Gives practical knowledge of preparation of liquidator's final statement of account at the time of liquidation. 3. Calculation of various accounts and statement of Holding and Subsidiary Company.
V	Cost and Management Accounting III		
V	Business Law		
V	Financial Management I		
V	Entrepreneurship Development I		<ul style="list-style-type: none"> - To educate about the basic pre-requisites needed to get started career in finance - Educates students about how to help clients managing finance - Understand specific responsibilities of financial professionals - Tracking investment activities - Knowledge of stock exchange of India
V	Advance Income Tax		
VI	Financial accounting VI	BCMCMC35 4	<ol style="list-style-type: none"> 1. Understanding of NPA, rebate on bill discounted and final accounts of banking company 2. Maintenance and preparation of final accounts at the time of amalgamation, merger, external and internal reconstruction. 3. Calculation of ratio for external

			and internal purpose of accounting, taxation, banking.
VI	Cost and Management Accounting IV		
VI	Company Law		
VI	Financial Management II		
VI	Entrepreneurship development II		<ul style="list-style-type: none"> - Developing cash management strategies - Knowledge about investment in Mutual funds - Learn how to become decision makers for stock holders and financial organizations <p>How to evaluate and price different types of securities</p>
VI	Customs Duty		

Department of Physics
PROGRAM OUTCOME: BSc
<ol style="list-style-type: none"> 1) To understand the basic concept, fundamental principles and the scientific theories related to various scientific phenomena and their relevancies in day to day life. 2) To acquire skills in handling Scientific instruments, planning and performing in laboratory experiments 3) Develop Scientific outlook not only with respects to science subjects but also in all aspects related to life. 4) Analyse the given Scientific data critically and systematically and the ability to draw the objective conclusion 5) Understand set of physical laws, describing the motion of bodies under the influence of system of forces. 6) Able to relate the structure of atom and subatomic particle, 7) Apply conceptual understanding of the physics to general real-world situations. 8) Basic Knowledge for their Higher studies.
Program Specific Outcome
<p>Physics Chemistry Maths :Students can understand material science better with this combination</p> <p>Physics Maths Statistics: Students can gain more knowledge about mathematical physics and statistical physics.</p> <p>Physics Maths Computer Science: Students will gain basic working principle of digital electronics.</p>

Course Outcome			
Semester	Subject	Subject Code	Outcome
I	General Physics I	PHC 103	<p>Student is expected to</p> <ol style="list-style-type: none"> 1) To learn the conservation laws of energy and linear and angular momentum and apply them to solve problem. 2) Become familiar with various thermodynamic process and work done in each of these processes. 3) To learn the fundamentals of thermodynamics and laws of thermodynamics. 4) Gain the knowledge of Low temperature and pressure.
I	Practical -I	PHC104	<p>Student is able to understand the concept of</p> <ol style="list-style-type: none"> 1) Surface tension of water 2) Acceleration due to gravity using spiral spring and bar pendulum 3) Young's modulus of the bar 4) Terminal velocity and coefficient of viscosity of the given liquid, to find the density of the unknown liquid. 5) Verification of parallel axes theorem and MI of the table
II	General Physics II	PHC153	<p>The student will be</p> <ol style="list-style-type: none"> 1) Able to understand the basics properties of matter, how Young's modulus and rigidity modulus defines 2) Able to grasp the basic ideas of special theory of relativity such as length contraction, time dilations and mass energy invariance 3) Able to understand the introduction part of Astrophysics. 4) Able to study the fundamentals of simple harmonic motions, damped and forced oscillations and grasps the significance of quality factor and damping coefficients. 5) Able to analyze the wave patterns using Fourier Theorem.
II	Practical -II	PHC154	<p>Student is able to understand the concept of</p> <ol style="list-style-type: none"> 1) Interfacial tension between two different Liquids 2) Linear and material densities of a wire using Sonometer. 3) Verification of perpendicular axes theorem and determination of rigidity modulus of the wire. 4) Radius of gyration and equivalent length.

III	Optics	PHC203	<p>Student will be expected</p> <ol style="list-style-type: none"> 1) To Understand the basic concepts of wave optics and an ability to compute basic quantities in optics. 2) To use the principles of wave motion and superposition to explain the physics of polarization, interference and diffraction. 3) To gain confidence in their ability to apply mathematical methods to understand electromagnetic problems to real-life situations. 4) Have gained elaborated knowledge about electrostatics and laws governing the charge distribution. 5) To solve a variety of problems related to Faraday's law of induction and Maxwell's equations. 6) To understand the relevance of displacement current in the context of electromagnetic wave propagation. 7) To learn about black body, radiation pressure, solar constant, estimation of surface tension of Sun, LASER and its applications, holography.
III	Practical III	PHC204	<p>Student is able to understand the concept of</p> <ol style="list-style-type: none"> 1) Interference and diffraction experimentally 2) Black body radiation through Stefan-Boltzmann law 3) Moment of inertia of irregular body 4) Melting point of solid using thermocouple 5) Specific rotation of sugar solution using polarimeter. 6) Frequency of a tuning fork using Helmholtz resonator.

IV	Electricity & X-ray Crystallography	PHC 253	<p>Student will be expected to</p> <ol style="list-style-type: none"> 1) Study in depth the transient current response of LR , CR and LCR circuits , which is essential in designing as well as understanding the working of electronic circuits 2) Understand the basic methods of solving electrical dc network using network theorem 3) Learn the different types of filters. 4) study the Force acting on a moving charge and torque on a current loop in a magnetic field 5) Understand the electrical and magnetic measurements 6) Study the X-ray crystallography, Miller indices and Structure of NaCl and KCl 7) Learn the Superconductivity, Meissner effect and applications of Superconductivity.
IV	Practical IV	PHC 254	<p>Student is able to understand the concept of</p> <ol style="list-style-type: none"> 1) Interference through Newton's ring 2) Charge sensitivity of a BG 3) Bandwidth, quality factor and self inductance using Series resonance circuit 4) Charging of a capacitor 5) Verification of Maximum power transfer theorem.

V	Modern Physics	PHC 307	<p>Student will be expected</p> <ol style="list-style-type: none"> 1) To become familiar with Blackbody radiation, Ultraviolet catastrophe, Photoelectric effect and Compton Effect and hence be aware how quantum theory emerged 2) Have gained a clear knowledge about wave properties of particles, De Broglie waves and its implications on the uncertainty principle. 3) Study the Bohr Atom model in detail and understand about atomic excitations 4) To be capable of analyzing and solving problems using oral and written reasoning skills based on the concepts of modern physics 5) Have grasped the idea of Wave Mechanics and gain the concept of eigen values, eigen functions and learn the basic postulates of quantum mechanics 6) To find solution to Schrödinger's equation for many systems such as particle in a box, Hydrogen Atom and familiarize with different quantum numbers. 7) Become familiar with molecular spectroscopy and have gained basic ideas regarding microwave spectroscopy, infrared spectroscopy and Raman Spectroscopy.
V	Condensed Matter Physics	PHC 308	<p>Student will be expected to</p> <ol style="list-style-type: none"> 1) Understand basic concepts and mathematical methods of solid state physics. 2) Understand how statistics of the microscopic world can be used to explain the thermal features of the macroscopic world. 3) Learn Einstein's and Debye's theory of specific heat of solid 4) Learn about Nanomaterials and its applications 5) Understand Hall effect and its applications 6) Study the concept of Fermi energy and Boltzmann tail 7) Learn about LEDs, Solar cells 8) Electrical conductivity of a metal 9) Transistor, amplifier, hybrid model of the transistor

V	Practical V	PHC 309	<p>Student will be expected to</p> <ol style="list-style-type: none"> 1) Study the characteristics of pn diode, Zener diode and LED 2) Study the transistor characteristics 3) Learn the measurement of self-inductance using Andersons Bridge 4) Understand the concept of energy gap of a Thermistor 5) Learn the band width, Quality factor using parallel LCR circuit
VI	Nuclear Physics	PHC 357	<p>Students are able to</p> <ol style="list-style-type: none"> 1) Relate the structure of atom and subatomic particle 2) Gain a clear picture of nuclear composition and various nuclear models. 3) Have a deep knowledge about Radio activity, nuclear Fission and Nuclear Fusion, the relevance of nuclear transformation. 4) Understand the working of nuclear detectors and counters, realize the importance of Cosmic rays and its effects on earth 5) Become familiar with nuclear particles and different particle accelerators.
VI	Electronics	PHC358	<p>Student will be expected to</p> <ol style="list-style-type: none"> 1) Have a basic knowledge of semiconductor physics 2) Acquire knowledge about how a semiconductor diode rectifies an input ac signal 3) Learn how to construct a transistor amplifier and how its gain varies with frequency 4) Know about various number systems and their applications, flip flops and counters 5) Familiar with electronic devices and functioning 6) Learn the principles of analog modulation and demodulation 7) Understand basic pulse, digital and advanced communication systems. 8) Understand the theory and applications of satellite communications. 9) Learn the basics of mobile communication 10) Study of Op-Amp parameters and design of inverting and non-inverting amplifier.
VI	Practical VI	PHC359	<p>Student is able to understand the concept of</p> <ol style="list-style-type: none"> 1) Capacitance of capacitor and mutual inductance of a coil using B.G 2) Construction of OR, AND and NOT gate using diode and transistor. 3) Study of Wein Bridge Oscillator 4) Construction of Full wave Bridge rectifier and Common Emitter Amplifier,

Program Specific Outcome: Chemistry

After the completion of the course student will be able to learn periodic trends, chemistry of main group, d and f block elements. They will be able to predict type of hybridization, structures of given compounds. They will understand different processes involved in manufacture of some industrially important compounds. They will learn basic principles of organic chemistry. They will be able to predict and write mechanisms of various addition, elimination, substitution and condensation reactions. They will be well versed with functional group chemistry, important named reactions, basic natural product chemistry. They will be able to derive many thermodynamic relations and use them in problem solving. They will learn various molecular spectroscopic methods and their applications. They will come to know about various analytical methods. They develop analytical skills from the practical course.

Course Outcomes: Chemistry

Semester	Subject	Subject Code	Outcome
I	Chemistry	BSCCHC 103	After completion of the course students will be able to, <ol style="list-style-type: none">1. Draw Born-Haber cycle for ionic crystals.2. Draw molecular orbital diagrams of homo and hetero nuclear diatomic molecules.3. Calculate Miller indices for different planes in a cubic crystal system.4. Determine crystal structure and Avagadro number.5. Understood nature of bonding in organic molecules.6. Learned many named reactions and mechanisms and their evidences.
		CH:102	<ol style="list-style-type: none">1. Find out melting point and boiling point of compounds.2. Find out elements and functional group of organic compounds.3. Analyze mono and bi-functional organic compounds.
II	Chemistry	BSCCHC 153	After completion of the course students will be able to, <ol style="list-style-type: none">1. Differentiate different states of matter based on their physical properties.2. Identify resemblances in chemical properties of elements and their compounds within each main group.3. Understand different processes involved in large scale production of various industrially important compounds.4. Select a particular reagent for given chemical transformation.5. Write mechanism for different electrophilic addition reaction to carbon carbon multiple bonds.
		CH:152	<ol style="list-style-type: none">1. Prepare standard solutions.2. Estimate chemical constituents by neutralization, iodometric, complexometric and redox titration.

			3. Equipped with microscale experiments.
III	Chemistry	BSCCHC 203	After completion of the course students will be able to, <ul style="list-style-type: none"> 1. Derive basic thermodynamic relations. 2. Do calculations for efficiency of carnot's engine, entropy change during various physical and chemical processes etc 3. Calculate magnetic moment for various 'd' and 'f' block elements. 4. Classify different compounds into various types of acids and bases. 5. Use redox potential data for various applications. 6. Predict reactivities of carbonyl compounds and mechanisms.
		CH: 202	<ul style="list-style-type: none"> 1. Identify acid and basic radicals in a given inorganic salt mixture. 2. Develop qualitative analytical skills.
IV	Chemistry	BSCCHC 253	After completion of the course students will be able to, <ul style="list-style-type: none"> 1. Predict type of hybridization, geometry and magnetic properties of coordination compounds. 2. Derive thermodynamic relations for different chemical equilibria. 3. Write phase diagram for some one and two component systems. 4. Solve problems based on colligative properties. 5. Differentiate between S_N1 and S_N2 and E_1 and E_2 mechanism. 6. Write mechanisms for aromatic electrophilic and nucleophilic substitution.
		CH: 252	<ul style="list-style-type: none"> 1. Determine physical parameters like viscosity, surface tension, refractive index etc. 2. Determine the rate constant and order of the reactions.
V	Chemistry	BSCCHC 307	After completion of the course students will be able to, <ul style="list-style-type: none"> 1. Understand uses of metal complexation in metallurgy and chemical analysis. 2. Predict reactivities of metal complexes based on thermodynamic and kinetic aspects. 3. Understand terms like transport number, equivalent conductance etc. 4. Understand applications of conductance and EMF measurements. 5. Understand physical aspects of rotational vibrational Spectroscopy.

			6. Give E Z and R S nomenclature.
		BSCCHC 308	After completion of the course students will be able to, <ol style="list-style-type: none"> 1. Solve problems based on particles in one dimensional box. 2. Write orgel diagrams. 3. Understand applications of flame photometry thermoanalytical methods. 4. Understand roles of different metal ions in biological processes. 5. Understand applications of organometallic compounds as catalysts. 6. Predict structure and reactivities of basic heterocyclic compounds.
			<ol style="list-style-type: none"> 1. Estimate the given compound quantitatively. 2. Determine adulterants in food stuffs. 3. Equip with quantitative analytical skills.
VI	Chemistry	BSCCHC 357	After completion of the course students will be able to, <ol style="list-style-type: none"> 1. Understand preparation and properties of inorganic and synthetic polymers. 2. Calculate quantum yield of photochemical reactions 3. Write various reactions of monosaccharides 4. Classify and predict stereochemistry of amino acids. 5. Predict acidity orders of various aliphatic and aromatic carboxylic acids 6. Write various reactions of carboxylic acids with mechanism.
		BSCCHC 368	After completion of the course students will be able to, <ol style="list-style-type: none"> 1. Differentiate between colorimetry and spectrophotometry 2. Interpret PMR spectra of simple organic molecules. 3. Understand principle of photoelectron spectroscopy 4. Understand principle and working of mass spectrometer. 5. Understand synthesis and mode of action of some drugs and chemotherapeutic agents. 6. Understand preparation, structure and properties of some pesticides and fungicides.
		CH:353	<ol style="list-style-type: none"> 1. Develop instruments handling techniques. 2. Develop organic compound preparation skills. 3. Develop coordination complex preparation skills.

Program/ course outcome of B.Sc.: Mathematics

- After the completion of the three years B.Sc. degree, student will have competence for employment as well as entrepreneurship.
- Analyze problems to arrive at sustained solutions using the basic principles of science.

Program specific outcome:

- Students will be able to apply rigorous analytic, highly numerate approach to analysis execute tasks and solve problems in daily life and that work.
- Apply Ethical principles and commit to the professional ethics and norms.
- Students may be able to work independently and to collaborate effectively in team work and team building.
- Recognize the need to encourage in lifelong learning through continuing education and research.
- Program helps to the overall development as an individual, to lead a successful life.

Program specific outcome of B.Sc Mathematics:

Semester wise Outcome			
Semester	Subject Code	subject	Outcome
First Semester	BSCMTC103	Calculus	<ol style="list-style-type: none">1. To understand the basics of functions such as limits, continuity and differentiability.2. Be familiar with the applications.3. To understand the techniques of integration and reduction formulas.4. Be familiar with Conic sections.5. Gets knowledge about sketching of graphs.
		Number Theory	<ol style="list-style-type: none">1. To understand Division Algorithm, the greatest common divisors.2. To solve Diophantine equations.3. Able to apply Diophantine equations in real life situations.4. To understand the fundamental Theorem of arithmetic.
Second Semester	BSCMTC153	Calculus	<ol style="list-style-type: none">1. To understand the Concept of Mean Value Theorem and Rolle's Theorem.2. Be familiar in tracing curves in polar co-ordinates.3. To have Knowledge in L' Hospitals rule .4. To be thorough with Applications of definite Integrals.
		Group Theory	<ol style="list-style-type: none">1. Be exposed to Binary Operations.2. To understand subgroups.3. Be familiar with cyclic and permutation groups.4. Be familiar with characteristics of these groups.
		Differential Equation	<ol style="list-style-type: none">1. To learn about formation of differential equations.2. To understand the types of differential Equations.3. To be exposed in solving First order First Degree Equations.

			<ol style="list-style-type: none"> To be familiar with Nonlinear Equations. To learn about applications of differential equations.
Third Semester	BSCMTC203	Number Theory	<ol style="list-style-type: none"> To learn about the theory of congruence. To understand linear congruence and its properties. Be familiar with Chinese Remainder theorem, and Fermat's theorem. To have thorough Knowledge about Euler's Phi-functions. To know about representation of integers and decimal as finite continued fractions.
		Partial Derivative	<ol style="list-style-type: none"> Be familiar with Functions of several variables. To understand Level curves, contours and ideas about n-dimensional spaces. To have knowledge about Limits and continuity in higher dimensions. To acquire knowledge in Directional Derivatives and gradient. To understand tangent planes, normal lines. To understand linearization of functions. To specify extreme values of functions of several variables.
		Group Theory	<ol style="list-style-type: none"> To illustrate Groups with examples. To describe Group homomorphism. To have knowledge about Isomorphism and Automorphism. To analyze the concept of normal subgroup. To recognize index of a group and Klein-4 group.
Fourth Semester	BSCMTC253	Calculus	<ol style="list-style-type: none"> To solve double Integral of functions in Cartesian form. To understand double integral of functions in polar form. To acquire knowledge about triple integral in Cartesian form. To know about applications of multiple integrals.
		Complex Variables	<ol style="list-style-type: none"> To understand Polar and exponential form of complex numbers. To understand functions complex variables. To know about limits, continuity, of complex functions. To acquire knowledge about analytic and entire functions. To describe Harmonic functions. To understand exponential functions and trigonometric functions. To illustrate Integration of complex functions.
		Sequence and series	<ol style="list-style-type: none"> To understand Sequences and its convergences and divergence. To find Limits of sequences. To acquire knowledge about Upper and Lower bounds of sequences. Able to test the convergence of series using different methods. To analyze absolute conditional convergence of alternating series.

Fifth Semester	BSCMTC308	Differential Equation	<ol style="list-style-type: none"> 1. To understand Linear Differential Equation of nth order and complimentary functions. 2. To find General and particular solutions of linear equations. 3. To acquire knowledge about homogenous and non-homogenous equations. 4. Able to find Solutions of second order linear equations using different methods. 5. To understand Laplace transform of elementary functions. 6. To know about the applications of Laplace transforms.
		Ring theory	<ol style="list-style-type: none"> 1. Able to give examples of Rings. 2. To understand integral domain and field. 3. To understand ring homomorphism and quotient rings. 4. To acquire knowledge about prime and maximal ideals. 5. To know about Euclidean domain and polynomial rings.
	BSCMTC310	Numerical Analysis	<ol style="list-style-type: none"> 1. To find roots of algebraic and transcendental equations by different methods. 2. To select suitable method to find solution of homogeneous equations. 3. To understand Operations on matrices. 4. To find rank of matrices. 5. To find differences of polynomials. 6. Able to interpolate given set of values. 7. To select appropriate formula to find interpolation. 8. To understand Numerical differentiation. 9. To solve ordinary differential equations by numerical methods.
Sixth Semester	BSCMTC358	Partial Differential Equation	<ol style="list-style-type: none"> 1. Able to form total Differential Equations. 2. To solve total differential equations. 3. To form partial differential equations. 4. To understand methods of solving linear equations.
		Fourier Series	<ol style="list-style-type: none"> 1. To understand Fourier Series expansion of functions. 2. To acquire knowledge about half range series expansions. 3. To understand complex Fourier coefficients. 4. To understand finite fourier transforms.
		Linear Algebra	<ol style="list-style-type: none"> 1. To understand vector spaces and inner product spaces. 2. To understand Linear transformation and its associated matrices. 3. To find rank of a matrix. 4. To solve linear equations. 5. To understand minimal and Characteristics polynomials.
	BSCMTC359	Graph theory	<ol style="list-style-type: none"> 1. To understand finite and infinite graph. 2. To know about walk, path, circuits. 3. To acquire knowledge about connected and disconnected graphs. 4. To know about operation on graphs. 5. To have knowledge about trees and its properties. 6. To understand cut-set, planar graphs.

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| | | | <ol style="list-style-type: none">7. Able to find different representations of planar graphs.8. To represent graphs in Matrix.9. To find Chromatic number of a graph. |
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PROGRAM OUTCOME: BOTANY

1. Think logically and organize tasks into a structured form. Assimilate knowledge and ideas based on wide reading and through the internet. Transfer of appropriate knowledge and methods from one topic to another within the subject. Understand the evolving state of knowledge in a rapidly developing field. Construct and test hypothesis. Plan, conduct and write a report on an independent term project.
2. Students learn to carry out practical work, in the field and in the laboratory, with minimal risk. They gain introductory experience in applying each of the following skills and gain greater proficiency in a selection of them depending on their choice of optional modules. Analyze data using appropriate statistical methods and computer packages.

Program Specific Outcome

Knowledge and understanding of: 1. The role of flora and fauna in the functioning of the global ecosystem.

Intellectual skills – able to: Assimilate knowledge and ideas based on wide reading and through the internet. Transfer of appropriate knowledge and methods from one topic to another within the subject. Understand the evolving state of knowledge in a rapidly developing field. Plan, conduct and write a report on an independent term project.

Practical skills: Students learn to carry out practical work, in the field and in the laboratory, with minimal risk. They gain introductory experience in applying each of the following skills and gain greater proficiency in a selection of them depending on their choice of optional modules.

Transferable skills: Use of IT (word-processing, use of internet). Communication of scientific ideas in writing and orally. Ability to work as part of a team. Ability to use library resources. Career planning.

Scientific Knowledge: Apply the knowledge of basic science, life sciences and fundamental process of plants to study and analyze any plant form.

Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and development of the information to provide valid conclusions.

Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern instruments and equipments.

Environment and sustainability: Understand the impact of the plant diversity in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Ethics: Apply ethical principles and commit to environmental ethics and responsibilities and norms of the biodiversity conservation.

Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Course Outcome			
Semester	Subject	Subject Code	Outcome
I	Protophyta & Phycology	BSCBOC101	1. Understand the diversity among Algae. 2. Know the systematic, morphology and structure, of Algae. 3. Understand the life cycle pattern of Algae. 4. Understand the
II	Mycology, Plant Pathology & Bryophyta	BSCBOC151	useful and harmful activities of Algae. 1. Understand the Biodiversity of Fungi & Economic Importance 2. Understand diversity of Bryophytes & economic importance of the Bryophytes. 3. To learn about the causes and control measures of some plant diseases.
III	Pteridophyta, Gymnosperms, Histology and Anatomy	BSCBOC201	1. Know the scope and importance of the discipline.
IV	Cell Biology, Molecular Biology and Genetics	BSCBOS251	1. Gain knowledge about “Cell Science”. 2. Learn the scope and importance of molecular biology & genetics
V	Plant Physiology-I & Ecology - I	BSCBOC301	1. Learn and understand about mineral nutrition in plants. 2) Understand the growth and developmental processes in plants & physiological & ecological aspects.
V	Angiosperm Morphology,	BSCBOC302	1. Know the vegetative &

	Biotechnology & Microbiology		reproductive characteristics, plant morphology and basic taxonomy. 2. Understand the concept, principle and types of sterilization methods. 3. Understand the fundamentals of Recombinant DNA Technology, Genetic Engineering & Plant Tissue Culture.
VI	Plant Physiology –II & Ecology - II	BSCBOC351	1. Understand the growth and developmental processes in plants like physiological, biochemical & ecological aspects.
VI	Taxonomy & Economic Botany	BSCBOC352	1. Understand the plant morphology, basic taxonomy and economic botany. 2. Plant identification.

PROGRAM OUTCOME: ZOOLOGY			
Developing academically sound future researchers and intellectuals in the area of general biology, Molecular biology, Biotechnology, Genetics, Cell biology, and Environmental Conservation. Producing Contributors in the area of Biological Research, Teaching and Biodiversity Conservation Cultivating a generation with Scientific Ethics and Temper.			
Program Specific Outcome			
Equipped with an in-depth knowledge in the area of Zoology Opportunities of continuing education and professional development. Widen the scope of the learners for careers in different sectors of employment. Enable the students to avail career opportunities in teaching, industry and research.			
Course Outcome			
Semester	Subject	Subject code	Outcome
I	Animal diversity - I	BSCZO102 BSCZO103	1. Familiar with the non-chordate world that surrounds us. 2. Able to identify the invertebrates and classify them up to the class level with the basis of systematic
II	Animal diversity - II	BSCZO152 BSCZO153	1. Describe the diversity in form, structure and habits of vertebrates. 2. Explain general characteristics and classification of different classes of vertebrates
III	Physiology, Biochemistry and Immunology	BSCZO202 BSCZO203	1. Understand the function of various systems, Apply the knowledge to lead a healthy life. 2. Understand the importance of Bio molecules, Familiar with various biochemical pathways 3. Appreciate the contribution of great immunologists, Distinguish Innate immunity and Acquired Immunity, Understand the importance of Immune system
IV	Histology, Animal Behaviour, Applied Zoology and Toxicology	BSCZO252 BSCZO253	1. Understand the cell, tissue, organ, system and organisms. 2. Generate an interest in Ethology in order to understand the complexities of animal behaviour. 3. Identify various methodology and perspectives of applied branches of zoology for the possibilities of self-employment. 4. Understand the effects of toxins on the humans and environment
V	Cell Biology and Biotechnology	BSCZO304 BSCZO306	1. Develop deeper understanding of what life is and how it functions at cellular level and Perform a variety of molecular and cellular biology techniques.

			2. Understand the applications of Biotechnology and Familiar with the tools and techniques of Biotechnology.
	Genetics, Biostatistics, Evolution and Palaeontology	BSCZO305 BSCZO307	1. Appreciate the contribution of great scientists, Distinguish Classical Genetics and Molecular Genetics. 2. Able to manage the statistical data. 3. Understand the Lamarkism, Neo-Lamarkism and Darwinism, Understand the Geological time scale, 4.To aware the students for Palaeontology ie. Fossils and its significance.
VI	Reproductive and Developmental biology	BSCZO354 BSCZO356	1. Understand the reproductive systems. 2. Familiar with various stages involved in the developing embryo and Understand the initial development al procedures involved in Amphioxus, frog and chick.
	Environmental science and Wildlife biology	BSCZO355 BSCZO357	1. Identify the contributions of various evolutionists. Identify different zoogeographical realms with fauna. 2. Develop respect for nature, Acquire basic skills in the observation and study of nature, biological techniques, experimental skills and scientific investigation.

Program Specific Outcome: STATISTICS

BSc(MSP):

- A student who studies statistics as a subject has a chance of joining the teaching profession.
- High chance of entering banking industry.
- Almost every company and industry has a designation of ‘Analyst’ and the qualification required is good knowledge of statistical techniques.
- A student can acquire proficiency in ‘Actuarial Statistics’ and pursue their career as an Actuary.
- Students also have a chance of joining government bodies such as NSSO, CSO etc.

BSc(MSCs):

- Along with all the above mentioned opportunities, a student studying Statistics along with Computer Science has a greater opportunity in the field of Machine learning, Data analysis, Database management, Big data analysis, Data science etc.
- Opportunities in Statistical software companies like SAS, SPSS etc.

BCom:

- Statistical techniques are very useful tools to a student of commerce.
- A student studying subject of Statistics has scope for joining banking sector.
- Statistical tools are used in Accounting and auditing, Business, Economics, etc.
- Statistics is very useful to students who attempt exams related to civil services.

Course Outcome

Semester	Subject	Subject Code	Outcome
I	Descriptive Statistics and Probability Theory	BSCSTC102	Students learn basic tools of Statistics such as mean, median, mode, variance etc. Also basics related to probability theory are learnt. Real life problems are solved using these techniques.

II	Theoretical discrete distributions and regression analysis	BSCSTC152	<p>Most important theoretical discrete distributions like- Bernoulli, Binomial, Poisson, Geometric, Negative binomial, Hyper geometric distributions are learnt. Basic tools of correlation and regression are learnt. Real life problems related to these concepts are solved practically.</p>
III	Continuous Probability Distributions	BSCSTC202	<p>After discrete distributions, we take up continuous distributions here. Students learn distributions like uniform, exponential, normal, gamma, beta, chi square, etc. Real life problems related to these are solved practically.</p>
IV	Sampling Theory	BSCSTC252	<p>Students learn basics of sampling. Difference between census and sampling. Also sampling methods like Simple Random Sampling (with and without replacement), Stratified sampling, Systematic sampling, Sampling for attributes etc. Real life problems related to these are solved practically.</p>
V	Statistical Inference-I	BSCSTC305	<p>Students learn concepts of point estimation like unbiasedness, consistency,</p>

VI	Statistical Quality Control	BSCSTC306	<p>efficiency and sufficiency. They also learn Interval estimation, basics of testing of hypothesis. Some important tests are derived using LRTP. Large sample and chi square tests are learnt. Real life problems related to these are solved practically.</p> <p>SQC has major applications in industries. Basic concepts related to this area are learnt. Control charts for variables, attributes, special control charts and their techniques are learnt. Acceptance Sampling plans are formulated. Real life problems related to these are solved practically.</p>
	Statistical Inference-II	BSCSTC355	<p>Tests are derived using SPRTTP techniques. Non parametric tests are learnt. ANOVA techniques along with designs of experiments like CRD, RBD, LSD are learnt. Real life problems related to these are solved practically.</p>
	Operations Research	BSCSTC356	<p>Students learn history and phases of OR. Types of models like LPP, TP, AP and procedures to solve them. Game theory and Inventory theory</p>

I Sem BCom	Business Statistics and Mathematics	BCMCMC108	<p>along with different cases. Real life problems related to these are solved practically.</p> <p>Descriptive Statistics- measures of central tendency and measures of dispersion. Index numbers like- CPI, and formulation using various methods. Matrices and determinants. Matrix algebra and solving simultaneous equations using matrices.</p>
II Sem BCom	Business Statistics and Mathematics	BCMCMC158	<p>Correlation and Regression Analysis. Time Series. Basics of banking arithmetic like – Simple and Compound Interest, Discount etc.</p>

BACHELOR OF COMPUTER APPLICATION PROGRAM OUTCOME			
P01: More Employability P02: Companies prefer BCA students P03: When they are in post graduation, students are able to apply their knowledge during their internship P04: Industries prefer computer literate employees, So BCA is more preferable P05: To develop the foundation for higher studies in the field of computer application P06: Focuses on preparing student for roles pertaining to computer application and IT industry			
Program Specific Outcome			
PS01: Students will able to understand, analyze and implement computer programs in the areas related to web design and other high level languages PS02: Apply standard software engineering strategies and practices in software project development PS03: Students will able to solve different issues , to know new trends in technologies and thereby applying innovative ideas and solutions to existing problems PS04:Able to analyse the given problem and find appropriate solution to solve the problem PS05: Students are able to apply appropriate techniques, resources and modern IT tools PS06: function effectively as an individual and as a member or leader or project manager in project team			
Course Outcome: (Specify outcome of Each subject in each semester)			
Semester	Subject	Subject Code	Outcome
II	C++ Programming	BCACAC204	1. To know the importance of Object Oriented programming 2. Be able to understand the difference between object oriented programming and procedural oriented programming 3. C++ is a basic language to understand java, javascript and many other languages 4. In future, students are able to develop many entertainment software, high performance client and server applications and embedded systems 5. Students know to distinguish between compile time from runtime 6. It increases logic reasoning power
I	Computer Organization and Architecture	BCACAC105	1. Learned to convert from one number system to another 2. Able to do arithmetic operations on different numbering systems 3. Learned to simplify circuits and Boolean algebra expressions using Boolean algebra theorems and postulates 4. Learned counters to count events and provide a digital output that increments with each input cycle and can be used to

V	Java Programming	BCACAC504	<p>develop embedded systems that calculate time in timers</p> <p>5. To know the importance of flipflops that can be cascaded to form multiple bit storage circuits called Registers and Shift registers</p> <p>7. To know the functionalities of computer systems</p> <ol style="list-style-type: none"> 1. Able to understand the concepts of pure Object Oriented Programming features 2. To understand multi threaded programming and manage error and Exceptions 3. To know the method of inclusion of applets in webpages 4. Able to Analyse and Design the concept of Event handling and Abstract Window Toolkit 5. To develop software in Java Programming language 6. Handle security implementations in java
II	C++ programming Lab	BCACAC159	<ol style="list-style-type: none"> 1. To implement various concepts related to language 2. Be familiar with C++ functions and the concept related to good modular design 3. To know to write inline functions for efficiency and performance 4. Apply the concept of polymorphism and inheritance 5. Be able to apply object oriented or non-object oriented techniques to solve bigger computing problems 6. To learn how virtual functions implement dynamic binding with polymorphism
V	Java Programming Lab	BCACAC508	<ol style="list-style-type: none"> 1. To develop software development skills using Java Programming for real world applications 2. To develop GUI using swing concepts 3. To implement error-handling techniques using exception handling and multithreading

			<ol style="list-style-type: none"> 4. To develop java programs using inheritance, polymorphism, interfaces and packages 5. Be familiar with Applet that can be embedded into a webpage and to be hosted on a web server 6. To know to make the website more dynamic and entertaining
V	Linux	BCACAC502	<ol style="list-style-type: none"> 1. On completion of this subject the student should be able to: Identify and use UNIX/Linux utilities to create and manage simple file processing operations, organize directory structures with appropriate security, and develop shell scripts to perform more complex tasks. 2. Effectively use the UNIX/Linux system to accomplish typical personal, office, technical, and software development tasks. 3. Monitor system performance and network activities. 4. Effectively use software development tools including libraries, preprocessors, compilers, linkers, and make files. Collaborate in teams on system tasks.
II SEM	Networking	BCACAC203	<p>Students will able to:</p> <ol style="list-style-type: none"> 1. Describe the functions of each layer in OSI and TCP/IP model. 2. Explain the functions of Application layer and Presentation layer paradigms and Protocols. 3. Describe the Session layer design issues and Transport layer services. 4. Classify the routing protocols and analyze how to assign the IP addresses for the given network. 5. Describe the functions of data link layer and explain the protocols. <p>Explain the types of transmission media with real time applications</p>

III	Maths	BCACAC301	<ol style="list-style-type: none"> 1. Apply the Set theory and Relation concepts. 2. Apply the Functions and define the recursive functions. 3. Apply Laplace transform to different applications 4. Apply Inverse Laplace transform to different applications. 5. Identify the permutations and combinations. <p>Define variable and also identify the mapping</p>
II	DBMS	BCACAC205	<p>The Student will be able:</p> <ol style="list-style-type: none"> 1. To describe data models and schemas in DBMS 2. To understand the features of database management systems and Relational database. 3. To use SQL- the standard language of relational databases. 4. To understand the functional dependencies and design of the database. 5. To understand the RDBMS oracle ,its commands and query processing 6. To know the language PL/SQL
III	Microprocessors	BCACAC306	<ol style="list-style-type: none"> 1. Know the internal architecture of microprocessors 2. To demonstrate programming proficiency using the various addressing Modes and data transfer instructions of the target microprocessor. 3. Write programs to run on 8086 microprocessor based systems. 4. Analyze AND EVALUATE assembly language programs;
IV	CONA	BCACAC405	<p>The student will be able:</p> <ol style="list-style-type: none"> 1. To learn important theorems, different formulae and practical applications of these statistical and optimization methods in the field of Computer Sciences and Applications 2. Learned the difference between Accuracy and Precision and types of errors. 3. Finding roots using Bisection method and False position, iteration method , Newton's Rapson method,. 4. Solve a Linear System of equation using

			<p>Gauss Jordan and Gauss Seidel, MATRIX INVERSION, Jacobi, METHODS</p> <p>5. Apply Numerical analysis which has enormous application in the field of Science and some fields of Engineering.</p> <p>6. Familiar with numerical integration and differentiation, numerical solution of ordinary differential equations.</p>
III	Data mining	BCACAC305	<p>1.To fully understand standard data mining methods and techniques such as association rules, data clustering and classification.</p> <p>2.Understand the functionality of the various data mining and data warehousing component</p> <p>2. Appreciate the strengths and limitations of various data mining and data warehousing models</p> <p>3. Compare different approaches of data warehousing and data mining with various technologies</p>
IV	E-Commerce	BCACAC404	<p>1. Describe the functions of each layer in OSI and TCP/IP model.</p> <p>2. Explain the functions of Application layer and Presentation layer paradigms and Protocols.</p> <p>3. Describe the Session layer design issues and Transport layer services.</p> <p>4. Classify the routing protocols and analyze how to assign the IP addresses for the given network.</p> <p>5. Describe the functions of data link layer and explain the protocols.</p> <p>6. Explain the types of transmission media with real time applications</p> <p>7Apply the knowledge of cryptographic utilities and authentication mechanisms to design secure applications</p> <p>8. Apply network security basics, analyze different DEPARTMENT OF INFORMATION TECHNOLOGY communication.</p> <p>9. The concepts of cryptographic utilities and authentication mechanisms to design secure applications attacks on networks and evaluate the performance of firewalls and security protocols like SSL, IPsec, and PGP.</p>

V	Web technology	BCACAC 503	<ol style="list-style-type: none">1. Learned working knowledge of C# programming constructs and the .NET Framework.2. Students will able to Use ADO.NET in a web application to read, insert, and update data in a database.3.students will able to design web applications using ASP.NET4.students will be able to debug and deploy ASP.NET web applications5.students will be able to create database driven ASP.NET web applications and web services
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I	Programming in C	BCACAC105	<p>Students will learn :</p> <ol style="list-style-type: none"> 1. Structure of a C program 2. Branching, selection and looping statements 3. Functions 4. Declaring and using arrays 5. Creating structures and using them <p>Working with files</p>
I	C-Lab	BCACAC107	<p>After Completion of the course student should able to know concepts in problem solving .</p> <ol style="list-style-type: none"> 1. To do simple C programs· 2. different type of functions and String manipulation 3. Control structures like if, switch, while, do..while and for. 4. Sorting and Searching : to arrange and find element in an array. 5. Matrices and Strings 6. Opening and closing a file, writing data to file, declaring and usage of pointer operations are being covered 6. Importance of pointers 7. Usage of structures
V	Artificial Intelligence	BCACAC506	<p>Students will be able to:</p> <ol style="list-style-type: none"> 1. Ability to develop a basic understanding of AI building blocks presented in intelligent agents. 2. Ability to choose an appropriate problem solving method and knowledge representation technique. 3. Ability to analyze the strength and weaknesses of AI approaches to knowledge–intensive problem solving. 4. Ability to design models for reasoning with uncertainty as well as the use of unreliable information. 5. Ability to design and develop the AI applications in real world scenario.
V	Distributed Computing	BCACAC505	<ol style="list-style-type: none"> 1.Students will learn basic concepts related to distributed computing 2.Will learn Inter Process Communication and various distributed computing paradigms 3.Familiarize themselves with Socket API, group communication and RMI 4.Client server communication with RMI

III	Data structures	BCACAC303	<ol style="list-style-type: none"> 1. Operations Of Arrays. Describe Asymptotic Notations Algorithm. 2. Methods Of Solving Algorithm. 3. Applications Of Stack Include Checking Of Well Format Of Parenthesis. 4. Evaluation Of Postfix Expression, Conversion Of Infix To Postfix, Recursive Function. 5. Application Of Linked List Includes Polynomial, Sparse Matrices. 6. Tree-Based Algorithms And Their Analysis. 7. Concept In Graph-Based Algorithms.
III sem	DS Lab	BCACAC307	<p>Students will be able to:</p> <ol style="list-style-type: none"> 1. Select appropriate data structures as applied to specified problem definition. 2. Implement operations like searching, insertion, and deletion, traversing mechanism etc. On various data structures. 3. Students will be able to implement Linear and Non-Linear data structures. 4. Implement appropriate sorting/searching technique for given problem. 5. Design advance data structure using NonLinear data structure.
IV sem	Computer Graphics & Multimedia	BCACAC401	<p>Students will be able to:</p> <ol style="list-style-type: none"> 1. Helps To Understand About Computer Graphics And Its Applications 2. To Learn About Video Display Devices 3. Be Well Versed In Line Drawing And Circle Drawing Algorithm. 4. Helps To Learn About Transformations, Character, Attribute Functions And Area Fill Attributes. 5. Analyze The Window To Viewport Co-Ordinate Transformation. 6. Clear Understanding Of Various Clipping Algorithms 7. To Learn About Logical Classification Of Input Devices And Input Functions . 8. Developed understanding of technical aspect

IV sem	CG Lab	BCACAC406	<p>of Multimedia Systems.</p> <p>9. Understand various file formats for audio, video and text media.</p> <p>10. Develop various Multimedia Systems applicable in real time.</p> <p>11. Design interactive multimedia software.</p> <p>12. To evaluate multimedia application for its optimum performance</p> <p>Students will be able to:</p> <ol style="list-style-type: none"> 1. Effectively and creatively solve a wide range of graphic design problems. 2. To implement graphics primitives and demonstrate geometrical transformations. 3. Apply clipping and filling techniques for modifying an object. 4. Understand the concepts of different type of geometric transformation of objects in 2D. 5. Design algorithms for different geometric shapes line, circle, ellipse. 6. Develop design drawings that demonstrate computer graphics and design skills.
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IV	VB.NET	BCACAC402	<p>After the completion of the course, students will</p> <ol style="list-style-type: none"> 1. Understand .NET Framework and describe some of the major enhancements to the new version of Visual Basic. 2. Describe the basic structure of a Visual Basic.NET project and use main features of the integrated development environment (IDE) 3. Design , create, build and debug Visual Basic Programming with .NET 4. Learn to use the controls from toolbox 5. Learn to use Properties methods and events related to different controls 6. Create applications using Microsoft Windows® and console application 7. Write and apply looping structures and decision making statements 8. Learn to write and apply procedures , sub procedures and functions 9. Learns to manage Multiple forms in project 10. Learns different keyboard events and mouse events
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IV sem	VB.NET Lab	BCACAC407	<p>Students will be able to</p> <ol style="list-style-type: none"> 1. Develop console applications using visual basic programming language under .NET Framework 2. Develop Windows Application by using different controls and by developing simple projects 3. Develop projects using MDI forms, list boxes, combo boxes, dialog boxes, menus. 4. Learns database management system concepts, its advantages and disadvantages Using Basic SQL queries, using multiple tables in a project, designing the forms and reports using different controls
IV sem	E- Commerce	BCACAC404	<p>Upon completing the course, the participants will be able to:</p> <ol style="list-style-type: none"> 1. Gain a comprehensive understanding of the E-Commerce landscape, current and emerging business models, and the technology and infrastructure underpinnings of the business. 2. Leverage the E-Commerce platforms to enhance current business or incubate new businesses. 3. Gain an understanding on how innovative use of the E-Commerce can help developing competitive advantage. 4. Develop an understanding on how internet can help business grow 5. Gain an understanding on the importance of security, privacy, and ethical issues as they relate to E-Commerce.
V Sem	Software Engineering	BCACAC501	<ol style="list-style-type: none"> 1. Understand and differentiate the terms Software and Software Engineering 2. Select and apply the knowledge 3. Learn the problems in software engineering and software engineering approaches 4. Learn software development processes including different models 5. Learn software configuration management process 6. Understand SRS and Software Requirement analysis 7. Learn basic design concepts and system design concepts

I sem(SS)	Foundation of Information Technology	BCACAC103	<p>8. Learn testing , debugging and maintenance concepts Learn to used the testing tools like – WinRunnder, SilkTest, SQA Robot, Load Runner and JMeter</p> <p>Students will able to:</p> <ol style="list-style-type: none"> 1. Understanding the concept of input and output devices of Computers and how it works and recognize the basic terminology used in computer programming 2. Design programs connecting decision structures, loops and functions. 3. Basic Anatomy of Computer System, Primary & Secondary Memory, Processing Unit,
IV sem	TCP/IP	BCACAC403	<p>Students will able to:</p> <ol style="list-style-type: none"> 1. Describe the functions of each layer in OSI and TCP/IP model. 2. Explain the functions of Application layer and Presentation layer paradigms and Protocols. 3. Describe the Session layer design issues and Transport layer services. 4. Classify the routing protocols and analyze how to assign the IP addresses for the given network. 5. Describe the functions of data link layer and explain the protocols. 6. Explain the types of transmission media with real time applications

Program/Course Specific Outcomes : ECONOMICS			
Semester	Subject	Course Code	Outcome
I	Micro Economics	ECO 301	<ul style="list-style-type: none"> • Understand the economics concepts like utility, demand, supply , cost and market analysis • Understand demand forecasting and price determination • Understand market equilibrium • Understand the relationship between cost, revenue and price
II	Macro Economics	ECO 302	<ul style="list-style-type: none"> • Understand the concepts like national income , employment, business cycle and budget. • Understand national income accounting • Understand wage policy • Understand the impact of trade cycle • Understand the preparation and impact of budget • Understand the monetary and fiscal policy
III	Monetary Economics	ECO 401	<ul style="list-style-type: none"> • Understand the concepts like money, banking and international monetary institutions • Understand the value of money • Understand the index number • Understand the impact of inflation • Understand the modern banking instruments. • Understand the credit control policy of central bank
IV	International Economics and Public Finance	ECO 402	<ul style="list-style-type: none"> • Know the theories of international trade and public finance • Know the important commercial policies in

			<p>relation to trade</p> <ul style="list-style-type: none"> • Understand the nation's balance of payment position • Know the sources of public revenue to the government. • Understand the principles of taxation and public debt. • Know the public expenditure of the government. • Understand the impact of government budget.
V	Economic thought	ECO 501	<ul style="list-style-type: none"> • Know the contributions of economists to economic theory. • Know the Gandhian economic ideas • Know the Indian economic thought
	Development Economics	ECO 501 (A)	<ul style="list-style-type: none"> • Know the measurement of economic development • Know the concepts like HDI, PQLI, GDI and Sustainable development • Know the capital formation and man power planning • Know the role of state and economic planning
VI	Indian Economics	ECO 601	<ul style="list-style-type: none"> • Understand the basic problems of Indian economy. • Understand the changing trends in Indian economy • Role of the government policies in promoting development of Indian economy • Understand the leading issues in India's economic development • Know the role of agriculture, industry, trade, transport, banking in their economic development

	Environmental Economics	ECO 601 (A)	<ul style="list-style-type: none">• Understand the concepts like sustainable development, pollution, global warming, rain water harvesting, acid rain etc.• Understand the ecological imbalance• Know the value of natural resources.
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PROGRAM OUTCOME: JOURNALISM			
B.A. with Combinations: JKP			
<p>Journalism is studied as a part Journalism, Kannada and Political Science group for B.A. degree. The study of Journalism enables the students to have better understanding of Mass Communication, Various Media, History of Journalism, Reporting, Editing practice, Advertising, Public Relations, Feature Writing and Media Law.</p>			
Program Specific Outcome:			
<p>The Journalism as a discipline that enables the students to understand the nature, scope, process, elements, models and types of Communication. It is a professional programme that equips the students to work in the fields of mass communication, Public Relations, Advertising and Event Management.</p>			
Course Outcome:			
Semester	Subject	Subject Code	Outcome
I	Introduction to Mass Communication and Journalism	J 101	<ul style="list-style-type: none"> • Understanding of the basic concepts and their divergent views • Having a sensitive and broader vision of Journalism
II	Evolution of Media	J 151	<ul style="list-style-type: none"> • Students gain the knowledge about the history of media
III	Reporting	J 201	<ul style="list-style-type: none"> • Gain the knowledge about the values, elements and sources of news. • Competency to write news report and conduct interviews
IV	Editing	J 251	<ul style="list-style-type: none"> • Gain knowledge about editing, news room setup and editorials. • Knowledge on Page design, Photo editing and Translation is gained
V	Feature Writing	J 301	<ul style="list-style-type: none"> • Development of writing skills • Gain knowledge on writing features, articles, profiles, technical writing

VI	Advertising	J 302	<ul style="list-style-type: none"> • Acquire knowledge about Advertising, planning and media selection for Ad campaign and writing advertisements
VII	Public Relations	J 351	<ul style="list-style-type: none"> • Gain knowledge about Public Relations, PR Process and code of ethics
VII	Media Law and Management	J 352	<ul style="list-style-type: none"> • Understanding of Law related to the media • Gain the knowledge about ownership and management of media.