

H.K.E Society's
S.S.Margol College of Arts, Science & Commerce, Shahabad

**PROGRAM OUTCOMES, PROGRAM SPECIFIC OUTCOMES, COURSE OUTCOMES
 IN
 BACHELOR OF SCIENCE (B.SC) PROGRAMME**

B.Sc Program Outcome	After the completion of the B.Sc degree there are various options available for the science students, they can pursue master degree in Science i.e. M.Sc, work in research related fields and can even look for professional job oriented courses.
Program Specific Outcome	<p>Physics: Students are expected to acquire a core knowledge in physics, including the major premises of classical mechanics, quantum mechanics, electromagnetic theory, electronics, optics, special theory of relativity and modern physics. Students should learn how to design and conduct an experiment demonstrating their understanding of the scientific method and processes. Not only that they are expected to have an understanding of the analytical methods required to interpret and analyze results and draw conclusions as supported by their data. Students will develop the proficiency in the acquisition of data using a variety of laboratory instruments and in the analysis and interpretation of such data.</p> <p>Chemistry: Have sound knowledge about the fundamentals and applications of chemical and scientific theories. Every branch of Science and Technology is related to Chemistry. Easily assess the properties of all elements discovered. Apply appropriate techniques for the qualitative and quantitative analysis of chemicals in laboratories and in industries. Will become familiar with the different branches of chemistry like analytical, organic, inorganic, physical, environmental, polymer and biochemistry. Helps in understanding the causes of environmental pollution and can open up new methods for environmental pollution control. Develops analytical skills and problem solving skills requiring application of chemical principles. Acquires the ability to synthesize, separate and characterize compounds using laboratory and instrumentation techniques.</p> <p>Mathematics: Know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand. Formulate and develop mathematical arguments in a logical manner.</p> <p>Computer Science: Apply fundamental principles and methods of Computer Science to a wide range of applications. Design, correctly implement and document solutions to significant computational problems. Impart an understanding of the basics of our discipline. Prepare for continued professional development. Develop proficiency in the practice of computing.</p> <p>Botany: Students will be able to demonstrate the experimental techniques and methods of their area of specialization in Botany. Analytical ability: The students will be able to demonstrate the knowledge in understanding research and addressing practical problems.</p> <p>Zoology: Students will be able to: Explain how organisms function at the level of the gene, genome, cell, tissue, organ and organ-system and develop theoretical and practical knowledge in handling the animals and using them as model organism.</p>

Course : B.Sc	Course Outcomes
Physics	After completion of these courses students should be able to;
B.Sc I Semester DSC - 1	Mechanics : Laws of Motion, Momentum and Energy, Rotational Motion, Dynamics of Rigid Bodies, Gravitation, Elasticity, Oscillations, Special Theory of Relativity. Experiments for Practical Knowledge.
B.Sc II Semester DSC - 2	Electricity and Magnetism : Vector Analysis, Electrostatics, Magnetism, Magnetic Field and Force, Electromagnetic Induction, Magnetic Properties of Materials, Maxwell's Equations and Electromagnetic Wave Propagation, DC Circuit Analysis, Transient Currents, Alternation Currents. Experiments for Practical Knowledge.
B.Sc III Semester DSC - 3	Thermal Physics and Statistical Mechanics : Laws of Thermodynamics, Thermodynamic Potentials, Kinetic Theory of Gases, Transport Phenomena, Theory of Radiation, Statistical Mechanics. Experiments for Practical Knowledge.
B.Sc IV Semester DSC - 4	Waves and Optics : Superposition of Two Collinear Harmonic Oscillations, Superposition of Two Perpendicular Harmonic Oscillations, Waves Motion-General, Fluids, Sound, Wave Optics, Interference, Michelson's Interferometer, Diffraction, Polarization. Experiments for Practical Knowledge.
B.Sc V Semester SEC - 1	Physics Workshop Skills : Introduction, Mechanical Skill, Electrical and Electronic Skill, Introduction to Prime Movers. Experiments for Practical Knowledge
B.Sc V Semester SEC - 2	Basic Instrumentation Skills : Basic of Measurement, Signal Conditioning, Electronic Measuring Meters, Electronic Voltmeters, Digital Multimeter, Signal Generators and Analysis Instruments, Impedance Bridges and Q-Meters, Cathode Ray Oscilloscope, Digital Storage Oscilloscope (DSO). Experiments for Practical Knowledge.
B.Sc V Semester DSE - 1	Quantum Mechanics : Time Dependent Schrodinger Equation, Time Independent Schrodinger Equation, General Discussion of Bound States in an Arbitrary Potential, Quantum Theory of Hydrogen-like Atoms, Atoms in Electric and Magnetic Fields, Atoms in External Magnetic Fields, Many Electron Atoms. Experiments for Practical Knowledge.
B.Sc V Semester DSE - 2	Solid State Physics : Crystal Structure, Elementary Lattice Dynamics, Magnetic Properties of Matter, Dielectric Properties of Materials, Elementary Band Theory, Superconductivity. Experiments for Practical Knowledge.
B.Sc VI Semester SEC - 3	Radiation Safety : Types of Radiation, Interaction of Radiation with Matter, Radiation Quantities and Detection, Radiation effect on human life. Experiments for Practical Knowledge.
B.Sc VI Semester SEC - 4	Renewable Energy and Energy Harvesting : Fossil Fuels and Alternate Sources of Energy, Wind Energy Harvesting, Solar Energy, Ocean Energy, Tidal Energy, Geothermal Energy, Hydro Energy, Piezoelectric Energy Harvesting, Electromagnetic Energy Harvesting. Experiments for Practical Knowledge.
B.Sc VI Semester DSE - 3	Nuclear and Particle Physics : General Properties of Nuclei, Nuclear Models, Radioactivity Decay, Nuclear Reaction, Detector for Nuclear Radiations, Particle Accelerators, Particle Physics. Experiments for Practical Knowledge.
B.Sc VI Semester DSE - 4	Medical Physics : Basic Anatomical Terminology, Mechanics of the body, Physics of Locomotors Systems, Energy Household of the body, Pressure System of Body, Acoustics of the body, Optical System of the body, Electrical System of the body, X-Rays, Radiation Physics, Radiation Detectors, Medical Imaging Physics, Radiography, Computed Tomography Scanner, Radiation Oncology Physics, Radiation and Radiation Protection, Diagnostic Nuclear Medicine, Therapeutic Nuclear Medicine. Experiments for Practical Knowledge.

Course : B.Sc	Course Outcomes
Chemistry	After completion of these courses students should be able to;
B.Sc I Semester Chem 1A	Inorganic Chemistry : Atomic Structure, Chemical Periodicity, Chemical Bonding and Molecular Structure. Organic Chemistry : Fundamentals of Organic Chemistry, Stereochemistry, Aliphatic Hydrocarbons, Alkanes, Alkenes, Alkynes. Experiments for Practical Knowledge
B.Sc II Semester Chem 1B	Physical Chemistry : Chemical Energetics, Ionic Equilibria, Inorganic Chemistry : s-block elements, Alkali Metals Organic Chemistry : Aromatic Hydrocarbons, Alkyl and Aryl Halides, Alcohols, Phenols and Ethers, Aldehydes and Ketones (aliphatic and aromatic). Experiments for Practical Knowledge
B.Sc III Semester Chem 1C	Physical Chemistry : Solutions - Thermodynamics of ideal solutions, Partial miscibility of liquids. Phase Equilibrium, Conductance, Electrochemistry. Inorganic Chemistry : p-block elements, Compounds of Boron, Pseudo Halogens. Organic Chemistry : Amines and Diazonium Salts, Amino Acids, Peptides and Proteins, Carbohydrates.
B.Sc IV Semester Chem 1D	Transition Elements (3d series), Coordination Chemistry, Crystal Field Theory Physical Chemistry : Kinetic Theory of Gases, Liquids, Solids, Chemical Kinetics.
B.Sc V Semester SEC-Chem 1	Basic Analytical Chemistry : Analysis of Soil, Analysis of Water, Analysis of food products, Chromatography, Analysis of Cosmetics.
B.Sc V Semester SEC-Chem 2	Pharmaceutical Chemistry : Drugs & Pharmaceuticals, Fermentation
B.Sc V Semester DSE-Chem 1	Analytical Methods in Chemistry : Qualitative and Quantitative Aspects of Analysis, Optical Methods of Analysis, Thermal Methods of Analysis, Electro analytical Methods, Separation Techniques.
B.Sc VI Semester SEC-Chem 3	Fuel Chemistry : Coal, Petroleum and Petrochemical Industry, Lubricants.
B.Sc VI Semester SEC-Chem 4	Chemistry of Cosmetics & Perfumes
B.Sc VI Semester DSE-Chem 2	Industrial Chemicals and Environment : Industrial Gases and Inorganic Chemicals. Industrial Metallurgy : General Principals of Metallurgy, Environment and its Segments, Energy & Environment, Biocatalysis.

Course : B.Sc	Course Outcomes
Mathematics	After completion of these courses students should be able to;
B.Sc I Semester BMDSC-1	Algebra-I and Calculus-I : Matrices, System of Linear Equations, Successive Differentiation, Differentiability of Functions
B.Sc II Semester BMDSC-2	Real Analysis-I and Calculus-II : Sequences, Infinite Series, Functions of two and three Variables, Integral Calculus
B.Sc III Semester BMDSC-3	Algebra-II, Real Analysis-II and Calculus-III : Groups, Riemann Integration, Fundamentals of Riemann Integral, Theory of Plane Curves
B.Sc IV Semester BMDSC-4	Differential Equations : Ordinary Differential Equations, Linear Differential Equations, Total Differential Equations, Partial Differential Equations
B.Sc V Semester BMDSE-5A	Complex Analysis : Complex Variables, Functions of Complex Variables, Complex Integration, Calculus of Residues
B.Sc V Semester BMDSE-5B	Graph Theory – I : Basic Concepts of Graphs, Sub-graphs, Matrix Representation of Graph and Connectivity, Trees
B.Sc V Semester BMDSE-5C	Numerical Analysis-I : Solution of Non-Linear Equations, Solution of Linear System of Equations, Finite Differences, Interpolation
B.Sc V Semester BMSEC-5A	Linear Programming Problems : Scope of O.R. and L.P.P., Solution of LPP
B.Sc V Semester BMSEC-5B	Laplace Transforms : Introduction to Laplace transform, Applications of Laplace transform
B.Sc V Semester BMSEC-5C	Linear Algebra : Vector Space, Linear Transformation
B.Sc V Semester BMSEC-5D	Calculus of Variations
B.Sc VI Semester BMDSE-6A	Mathematical Analysis : Line and Multiple Integrals, Improper Integrals, Legendre Differential Equation, Bessel's Differential Equation
B.Sc VI Semester BMDSE-6B	Graph Theory-II : Eulerian and Hamiltonian Graphs, Planar Graphs, Colorability, Directed Graphs
B.Sc VI Semester BMDSE-6C	Numerical Analysis – II : Numerical Differentiation, Numerical Integration, Solution of IVP, Predictor-Corrector Methods
B.Sc VI Semester BMSEC-6A	Transportation and Assignment Problems : Transportation Problems, Assignment Problem
B.Sc VI Semester BMSEC-6B	Fourier Series and Fourier Transforms : Fourier;s Series, Fourier Transforms
B.Sc VI Semester BMSEC-6C	Lattices and Boolean Algebra : Lattices, Boolean Algebra
B.Sc VI Semester BMSEC-6D	Vector Calculus : Vector Differentiation, Vector Integration

Course : B.Sc	Course Outcomes
Computer Science	After completion of these courses students should be able to;
B.Sc I Semester DSC-3A	Object Oriented Programming using C++ : Programming Concepts, Object Oriented Concepts, Introduction to Structured Programming, Writing a C++ Program. Lab Assignments on Object Oriented Programming using C++
B.Sc II Semester DSC-3B	Data Structures and File Processing : Basic Data Structures, Searching, Physical Devices, File Organizations. Lab Assignments on Data Structures and File Processing Using C++
B.Sc III Semester DSC-3C	Numerical Computing : Solution to Transcendental and Polynomial Equations, Interpolation, Numerical Differentiation and Integration, Numerical Solutions of Ordinary Differential Equations. Lab Assignments on Numerical Computing Using C++
B.Sc IV Semester DSC-3D	Design and Analysis of Algorithms : Introduction, Searching and Sorting Techniques, String Processing, Lower Bonding Techniques. Lab Assignments on Design and Analysis of Algorithms Using C++
B.Sc V Semester SEC 1(a)	Office Automation Tools : MS-Word, MS-Power Point. Lab Assignments on Office Automation Tools
B.Sc V Semester SEC 1(b)	PHP Programming : Introduction to PHP, PHP Conditional Events and Loops, PHP Functions, String Manipulation and Regular Expression, Array. Lab Assignments on PHP Programming
B.Sc V Semester SEC 2(a)	Android Programming : Introduction, User Interface Architecture. Lab Assignments on Android Programming
B.Sc V Semester SEC 2(b)	XML Programming : XML Programming Introduction, XML Basics, Other XML Concepts. Lab Assignments on XML Programming
B.Sc V Semester DSE 3(a)	Java Programming : Introduction to Java, Classes, Objects, Constructors, GUI Components, Mouse Event Handling, Packages, Access Protection. Lab Assignments on Java Programming
B.Sc V Semester DSE 3(b)	Database Management Systems : Introduction to Databases, Relational Model, The Relational Algebra, Entity-Relationship Modeling, Enhances Entity-Relationship Modeling, Functional-Dependencies, Normalization, SQL Simple Queries, SQL Data Types, Advanced SQL, Transaction Management, Security. Lab Assignments on Database Management Systems
B.Sc V Semester DSE 3(c)	Data Communication and Networks : Basic Concepts, Transmission Media, Telephony, Devices, Transport and Upper layers in OSI Model. Lab Assignments on Data Communication and Networks
B.Sc V Semester DSE 3(d)	Software Engineering : Software Life Cycle Models, Software Requirements Analysis & Specifications, Software Architecture, Function Oriented Design, Object Oriented Design, Detailed Design, Coding. Lab Assignments on Software Engineering
B.Sc VI Semester SEC 3(a)	System Administration & Maintenance : Linux, Windows. Lab Assignments on System Administration and Maintenance
B.Sc VI Semester SEC 3(b)	Software Testing : Introduction, Functional Testing / Black-box Testing, Structural Testing / White-box Testing. Lab Assignments on Software Testing
B.Sc VI Semester SEC 4(a)	MySQL : SQL Vs SQL * Plus, Transaction Control Statements, Introduction to PL/SQL. Lab Assignments on MySQL
B.Sc VI Semester SEC 4(b)	Information Security : Overview of Security, Cryptography. Lab Assignments on Information Security
B.Sc VI Semester DSE 6(a)	Python Programming : Introduction, List, Dict, Set and Generator-Comprehensions, Modules, Packages and Programs, Classes, Objects, Inheritance, Testing and Debugging. Lab Assignments on Python Programming
B.Sc VI Semester DSE 6(b)	Web Technologies : Introduction to Web Design, Customized Features, Java Script, Query, Bootstrap. Lab Assignments on Web Technologies
B.Sc VI Semester DSE 6(c)	Data Mining : Introduction, Data Processing, Data Warehouse OLAP Technology An Overview, Mining. Lab Assignments on Data Mining
B.Sc VI Semester DSE 6(d)	Operating Systems : Introduction, Operating System Organization, Process Management, Scheduling. Lab Assignments on Operating Systems

Course : B.Sc	Course Outcomes
Botany	After completion of these courses students should be able to;
B.Sc I Semester CCBOT - I	Biodiversity : Preamble, Microbes, Algae, Fungi, Introduction to Archegoniate, Bryophytes, Pteridophytes, Gymnosperms. Practical
B.Sc II Semester CCBOT - II	Plant Ecology and Taxonomy : Preamble, Introduction to Ecology, Ecological Factors, Plant Communities, Ecosystem, Phytogeography, Introduction to Plant Taxonomy, Taxonomical Aids, Taxonomic Hierarchy, Botanical Nomenclature, Classification, Biometrics, Numerical Taxonomy and Cladistics. Practical
B.Sc III Semester CCBOT - III	Plant Anatomy and Embryology : Preamble, Meristematic and Permanent Tissues, Organs, Secondary Growth, Adaptive and Protective Systems, Structural Organization of Flower, Pollination and Fertilization, Embryo and Endosperm, Apomixis and Polyembryony. Practical
B.Sc IV Semester CCBOT - IV	Plant Physiology and Metabolism : Preamble, Plant-Water Relations, Mineral Nutrition, Photosynthesis, Enzymes, Respiration, Translocation in Phloem, Nitrogen Metabolism, Plant Growth Regulators, Plant Response to Light and Temperature. Practical
B.Sc V Semester DSE - 1	Cytology, Genetics and Molecular Biology : Preamble, The Cell Theory, Genetics, Cytoplasmic Inheritance and Polygenic Inheritance in Plants, Nucleic Acid, DNA. Practical
B.Sc V Semester SEC - 1	Biofertilizers : General Account about the Microbes used as Biofertilizer, Mycorrhizal Association, Types and Method of Vermicomposting. Practical
B.Sc V Semester SEC - 2	Herbal Technology : Herbal Medicines, Pharmacology. Practical
B.Sc VI Semester SDE - 2	Plant Pathology, Biotechnology and Plant Breeding : Preamble, Plant Pathology, Introduction, Disease Triangle, Terminologies, Causal Organism, Symptoms, Etiology and Control Measures of diseases, Biotechnology, Plant Breeding. Practical
B.Sc VI Semester SEC- 3	Nursery and Gardening : Nursery, Gardening. Practical
B.Sc VI Semester SEC- 3	Floriculture : Introduction, Importance and Scope of Floriculture and Landscape Gardening, Commercial Floriculture. Practical

Course : B.Sc	Course Outcomes
Zoology	After completion of these courses students should be able to;
B.Sc I Semester DSC – 1Z	Animal Diversity : Kingdom Protista, Phylum Porifera, Phylum Cnidaria, Phylum Platyhelminthes, Phylum Nematelminthes, Phylum Annelida, Phylum Arthropoda, Phylum Mollusea, Phylum Echinodermata, Protochordates, Agnatha, Pisces, Amphibia, Reptiles, Aves, Mammals. Practical
B.Sc II Semester DSC – 2Z	Comparative Anatomy and Developmental Biology of Vertebrates : Integumentary System, Osteology, Digestive System, Respiratory System, Circulatory System, Urinogenital System, Nervous System, Sense Organs, Early Embryonic Development, Late Embryonic Development, Control of Development. Practical
B.Sc III Semester DSC – 3Z	Physiology and Biochemistry : Nerve and Muscle, Digestion, Respiration, Excretion, Cardiovascular System, Reproduction and Endocrine Glands, Carbohydrate Metabolism, Lipid Metabolism, Protein Metabolism, Enzymes. Practical
B.Sc IV Semester DSC – 4Z	Genetics and Evolution : Introduction to Genetics, Mendelian Genetics and its Extension, Linkage, Crossing Over and Chromosomal Mapping, Mutations, Sex Determination, History of Life 2 Major Events in History of Life, Introduction to Evolutionary Theories, Direct Evidences of Evolution, Processes of Evolutionary Change, Species Concept, Macro-Evolution, Extinction. Practical
B.Sc V Semester SEC – 1Z	Apiculture : Biology of Bees, Rearing of Bees, Diseases and Enemies, Bee Economy, Dntrepreneurship in Apiculture. Practical
B.Sc V Semester SEC – 2Z	Sericulture : Introduction, Biology of Silkworm, Rearing of Silkworms, Pests and Diseases, Entrepreneurship in Sericulture. Practical
B.Sc V Semester DSE – 1Z	Cell and Molecular Biology : Cell Theory, Ultrastructure of Animal Cell, Chromosomes, Cell Division, DNA, RNA, Protein Synthesis, Gene Expression, Molecular Biology Techniques, Mendel’s Laws of Inheritance and Non-Medelian Inheritance, Sex Determination and Sex-Linked Inheritance, Chromosomal Mutations, Gene Mutations, Inborn Errors of Metabolism. Practical
B.Sc VI Semester SEC – 3Z	Immunology : Overview of the Immune System, Cells and Organs of the Immune System, Antigens, Antibodies, Working of the Immune System, Immune System in health and disease, Vaccines. Practical
B.Sc VI Semester SEC – 4Z	Medical Diagnostics : Introduction to Medical Diagnostics and its Importance, Diagnostics Methods Used for Analysis of Blood, Diagnostic Methods Used for Urine Analysis, Non-Infectious Diseases, Infectious Diseases, Tumours. Practical
B.Sc VI Semester SEC – 4Z	Insect Vectors and Diseases : Introduction to Insects, Concept of Vectors, Insects as Vectors, Dipteran as Disease Vectors, Siphonaptera as Disease Vectors, Siphunculata as Disease Vectors, Hempitera as Disease Vectors. Practical
B.Sc VI Semester DSE – 2Z	Ecology, Wildlife Biology & Animal Behaviour. Practical

**PROGRAM OUTCOMES, PROGRAM SPECIFIC OUTCOMES, COURSE OUTCOMES
IN
BACHELOR OF ARTS (B.A) PROGRAMME**

<p>B.A Program Outcome</p>	<p>Student seeking admission for B.A. programme are expected to imbue with following quality which help them in their future life to achieve the expected goals.</p> <ol style="list-style-type: none"> a. Realization of human values. b. Sense of social service. c. Responsible and dutiful citizen. d. Critical temper e. Creative ability.
<p style="text-align: center;">Program Specific Outcome</p>	<p>Economics :</p> <ol style="list-style-type: none"> 1. To able to understand basic concepts of economics. 2. To able to analyze economic behavior in practice. 3. Understand the economic way of thinking. 4. The ability to analyze historical and current events from an economic perspective. 5. The ability to write clearly expressing an economic point of view. 6. Be exposed to alternative approaches to economic problems through exposure to coursework in allied fields. 7. To create students ability to suggest of the various economic problems. <p>Political Science:</p> <ol style="list-style-type: none"> 1. Political Science goes beyond the politics carried out in a national social system. 2. Political Science helps to understand the concept and origin of power and different types of power relationships. 3. In each and every field of society there is politics (e.g. in sports club in companies, in the pub, even in the relationship of couples). 4. It raises many questions: who decides? Who has more influence? How are the decisions being made? What are the consequences of a decision? 5. Raising questions is not enough: A political scientist also tries to find the answers in a responsible, scholarly and scientific way. 6. It makes to understand the inter-connection between local, state, national and international politics. <p>Sociology:</p> <ol style="list-style-type: none"> 1. Understand the various sociological concepts and basic theories 2. Understand the ideas inculcated in western and Indian sociological thoughts 3. Understand the praxis of sociological thoughts 4. Understand the social problems of Indian society with relation to its structure and culture. <p>History:</p> <ol style="list-style-type: none"> 1. Understand background of our religion, customs institutions, administration and so on. 2. Understand the present existing social, political, religious and economic conditions of the people. 3. Analyze relationship between the past and the present is lively presented in the history. 4. Develop practical skills helpful in the study and understanding of historical events. They: • (a) Draw historical maps, charts, diagrams etc. • (b) Prepare historical models, tools etc. 5. Develop interests in the study of history and activities relating to history. They: • (a) Collect ancient arts, old coins and other historical materials; • (b) Participate in historical drama and historical occasions; • (c) Visit places of historical interests, archaeological sites, museums and archives; • (d) Read historical documents, maps, charts etc. • (e) Play active roles in activities of the historical organizations and associations; and 6. The study of history helps to impart moral education. 7. History installs the feeling of patriotism in the hearts of the pupils.

Course : B.A	Course Outcomes
Economics	After completion of these courses students should be able to;
B.A I Semester	Micro Economic Theory : Introduction, Consumer Behavior and Demand, Theory of Production and Supply, Product Pricing, Factor Pricing, Introduction to Welfare Economics
B.A II Semester	Macro Economic Theory : Introduction to Macro Economics, National Income Accounting, Classical Theory of Income and Output Determination, Keynesian Economics-I, Keynesian Economics-II, Business Cycles
B.A III Semester (Core)	Public Economics : Overview of Fiscal Functions, Tools of Normative Analysis, Market Failure, Public Good, Club goods, Elementary Theories of Product and Factor Taxation, Working of Monetary and Fiscal Policies in India, Current Issues of India's Tax System, Analysis of Budget and Deficits, Fiscal Federalism in India, Finance Commissions, State and Local Finances
B.A III Semester (Generic Elective)	Indian Economy : Introduction, Human Resource of India, Agriculture Sector in India, Industrial Sector in India, Banking Trade and Public Finance, Planning and Economic Reforms
B.A IV Semester (Core)	Statistical Methods for Economics : Introduction and Overview, Elementary Probability Theory, Random Variables and Probability Distributions, Random Sampling and Jointly Distributed Random Variables, Sampling Principal Steps in a Sample Survey, Point and Interval Estimation
B.A IV Semester (Generic Elective)	Monetary Economics : Introduction, Value of Money, Money and Capital Markets, Banking, Central Bank, Monetary Policy
B.A V Semester (SEC)	Financial Economics : Deterministic Cash-Flow Streams Basic Theory of Interest, Single-Period Random Cash Flows Random Asset Returns, Capital Asset Pricing Model (CAPM)
B.A V Semester (Core)	Indian Economy – I : Introduction, Human Resource of India, Agriculture Sector, Industrial Sector, Infrastructure, Industrial Labour
B.A V Semester (DSE-A)	Economic of Growth and Development : Introduction, The Classical Theories of Growth, Neo-Classical Theories, Partial Theories of Economic Growth, Components of Economic Development, Poverty and Income Inequalities
B.A V Semester (DSE-B)	Economic Thought : Classical Economic Thought, Karl Marx, Early Indian Economic Thought, Mahatma Gandhi, Dr.B.R.Ambedkar, Amartyasen
B.A VI Semester (SEC)	Environmental Economics : Introduction Key Environmental Issues and Problems, The Design and Implementation of Environmental Policy Overview, Environmental Valuation
B.A VI Semester (Core)	Indian Economy – II : Banking Industry in India, India's Foreign Trade, Public Finance-I, Public Finance-II, Planning and Economic Development, Economic Reforms
B.A VI Semester (DSE-A)	Karnataka Economy : Introduction, Human Resources, Agriculture Development, Industrial Development, Co-operative Movement in Karnataka, Regional Imbalances
B.A VI Semester (DSE-B)	Rural Development : Introduction, Approaches to Rural Development in India, Issues in Rural Development, Poverty Alleviation and Employment Generation Programmes, Panchayat Raj Institutions and NGO's, Self Help Groups

Course : B.A	Course Outcomes
Political Science	After completion of these courses students should be able to;
B.A I Semester DSC – 1A	Introduction to Political Theory : Explanatory Frameworks of Politics, Approaches to the Study of Politics, Concepts, Democracies, State, Debates in Political Theory
B.A II Semester DSC – 1B	Indian Government and Politics : Approaches to Study of Indian Politics, Indian Constitution, Institutional Functioning, Power Structure in India, Religion and Politics, Social Movements
B.A II Semester	Indian Constitution : Citizen and the Constitution, The Union and State Governments
B.A III Semester DSC – 1C	Comparative Government and Politics : Understanding Comparative Politics, Comparing Regimes, Classifications of Political Systems, Electoral Systems, Party Systems, Contemporary Debates on the Nature of the State
B.A III Semester Generic Elective – I	Gandhian Political Thought : Gandhiji's way of Life, Role of Gandhi in Freedom Struggle, Hind Swaraj, Concept of God, Truth and Non-Violence, Theory of State and Satyagraha, Views on Ends and Means, Views on Caste and Untouchability
B.A IV Semester DSC – 1D	Introduction to International Relations : Approaches to International Relations, Cold War & Post-Cold War Era, India's Foreign Policy, International Organisations, Structural Aspects, Contemporary Challenges
B.A IV Semester Generic Elective – II	Human Rights and Gender : Understanding Social Inequality, Human Rights, Gender
B.A V Semester DSE – 1A	Themes in Comparative Political Theory : Distinctive Features of Indian Western Political Theory, Aristotle on Citizenship and Classifications of Governments, Lock on Rights, J.S Mill on Liberty, Marx and Bakunin on State, John Rawls- Theory of Justice, Indian Political Thought, Kautilya on State and Saptanga Theory, Tilak and Gandhi on Hind Swaraj, Pandita Ramabai on Patriarchy, Dr.B.R.Ambedkar and Lohia on Social Justice, Nehru and Jayaprakash Narayan on Democracy
B.A V Semester DSE – 1B	Indian Political Thought : Traditions of Ancient Indian Political Thought, Renaissance Thought, Early Nationalism, Religious Nationalism, Democratic Egalitarianism
B.A V Semester SEC – 1B	Legislative Support : Legislature, Supporting the Legislative Process, Supporting the Legislative Committees, Reading the Budget Document
B.A VI Semester DSE – 2A	Administration and Public Policy : Concepts and Theories : - Public Administration as a discipline, Administrative Theories, Citizens and Administration Interface, From Development Administration to New Public Management, Budget, Citizen and Administration Interface
B.A VI Semester DSE – 2B	Local Governments in India : Concept of Democratic Decentralization, Evolution of Local Government, Constitutional Amendments, Rural Local Bodies, Urban Local Bodies, Challenges to Local Governance
B.A VI Semester SEC – 2.1	Public Opinion and Research Methodology : Introduction to Public Opinion, Research Methodology, Techniques of Research Methodology, Quantitative Data Analysis and Report Writing

Course : B.A	Course Outcomes
Sociology	After completion of these courses students should be able to;
B.A I Semester DSC – 1A	Introduction to Sociology : Introduction, Uses of Sociology, Basic Concepts of Sociology, Individual and Society, Social Stratification and Mobility, Social Control and Social Change
B.A II Semester DSC – 1B	Foundations of Sociological Thought : The Emergence of Sociology, The Pioneers of Sociology, School of Classical Theory, Schools of Sociological Theory, Sociological Thought in India, Modern Sociological Thought
B.A III Semester GE - 1	Crime and Society : Introduction, Sociological Perspectives, Changing Profile of Crime and Criminals in Contemporary India
B.A III Semester DSC – 1C	Social Research Methods : Introduction, Scientific Study of Social Phenomena, Methods of Research, Types of Research, Source of Data Collection, Classification and Presentation of Data
B.A IV Semester GE - 2	Society in India : Introduction, Cultural and Ethnic Diversity, Basic Institutions of Indian Society
B.A IV Semester DSC – 1D	Indian Society Issues & Problems : Introduction, Familial Problems, Developmental Issues, Social Disorganization, Violence against Women, Intolerance
B.A V Semester SEC – 1	Science, Technology and Society : Introduction Science and Technology, History of Science in India, Technology and Social Change
B.A V Semester DSE – 1	Population and Society : Introduction, Fundamental Concept of Population Science, Theories of Population, Population Growth, Population Education, Population Policy of India
B.A V Semester DSE – 2	Sociology of Health : Introduction, Indian Medicine System, Community Health in India, Social Epidemiology in India, National Health Policy, Swacha Bharat Abhiyan
B.A VI Semester SEC – 2	Culture and Society in India : Society, Culture, Relationship between Culture and Society
B.A VI Semester DSE – 3	Social Welfare and Social Legislation : Introduction, Social Welfare Programmes, Social Legislations, Legislations Initiated by State Legislative Bodies, Organizations Promoting Social Welfare Programmes, New Approaches and Efforts
B.A VI Semester DSE – 4	Sociology of Social Movements : Social Movements, Religious Movements in India, Peasant Movements in India, Backward Class Movements in India, Women's Movements in India, Trade Union Movement in India

Course : B.A	Course Outcomes
History	After completion of these courses students should be able to;
B.A I Semester DSC – 1A	Ancient Indian History (From the Beginning to the Kushanas)
B.A II Semester DSC – 1B	Ancient Indian History (From the Guptas to the 1206 AD)
B.A III Semester GE - 1	Indian National Movement (From 1857nAD to 1947 AD)
B.A III Semester DSC – 1C	Medieval Indian History (1206 AD – 1565 AD)
B.A IV Semester GE - 2	Intellectual History of Modern India
B.A IV Semester DSC – 1D	Medieval Indian History (From 1526 AD – 1707 AD)
B.A V Semester SEC – 1	Modern India (1707 AD to 1850 AD)
B.A V Semester DSE – 1	History of Karnataka (From Beginning to 1336 AD)
B.A V Semester DSE – 2	Modern European History (From 1789 – 1871 AD)
B.A VI Semester SEC – 2	Modern India (1850 – 1950)
B.A VI Semester DSE – 3	History of Karnataka (Post Vijayanagar to 1956 AD)
B.A VI Semester DSE – 4	Modern European History (1871 AD to 1990 AD)

Course : B.A	Course Outcomes
Optional Kannada	After completion of these courses students should be able to;
B.A I Semester DSC	Halle Kannada Sahitya : Kannada Sahitya Charitray, Kavi-Kruti Visheshathe, Halle Kannada Sahitya Sangaraha
B.A II Semester DSC	Nadu Kannada Sahitya : Nadu Kannada Sahitya Charitray, Kavi-Kruti Visheshathe, Nadu Kannada Kavya, Nadu Kannada Sahitya Sangraha
B.A III Semester DSC	Hosa Kannada Sahitya : Hosa Kannada Sahitya Charitray, Pragati Shilla, Hosa Kannada Patya : Aayda Hosa Kannada Kathegallu
B.A IV Semester DSC	Kavyamimanse : Bharatiya Kavyamimanse, Pashchatya Kavyamimanse
B.A V Semester DSC	Halle Kannada Vyakarana : Shabdamannidharpanna Sangraha
B.A VI Semester DSC	Bhasha Vignayana Mathu chandhsastu : Bhasha Vignayana, Kannada Bhasha Vignayana, Chandhustu

**PROGRAM OUTCOMES, PROGRAM SPECIFIC OUTCOMES, COURSE OUTCOMES
IN
BACHELOR OF COMMERCE (B.COM) PROGRAMME**

Program Outcome	The students will be ready for employment in areas like banking, accounting, insurance, taxation and corporate law. Students will be ready to work in a business environment. Students will gain knowledge in various disciplines of commerce, accounting, business, marketing, economics, finance and auditing.
Program Specific Outcome	Students also acquire skills to work as tax consultant, audit assistant and other financial supporting services. Students have choices to continue the higher educational courses such as M.COM, MBA, CA, CS, etc Students are able to play roles of consultant, entrepreneur, and managers, businessmen which will help to possess knowledge and other soft skills and to react aptly with critical decision making.
Course : B.Com	Course Outcomes
B.Com I Semester	After completion of these courses students should be able to;
Financial Accounting – I DSC - 1	Financial Accounting Systems & Principals, Preparation of Financial Statements of Sole Trading Concern, Accounting for Consignment Transactions, Bank Reconciliation Statement, Sale of Partnership to a Limited Company
Principles of Marketing DSC - 2	Introduction, Market Segmentation, Product, Price, Advertising and Publicity, Recent Developments in Marketing
Business Economics DSC - 3	Introduction, Demand Function, Production Function, Theory of Costs, Market Structures
B.Com II Semester	After completion of these courses students should be able to;
Financial Accounting – II DSC - 4	Departmental Accounts, Branch Accounts, Royalty Accounts, Hire Purchase Accounts, Dissolution of Partnership Firms
Principles of Management DSC - 5	Meaning and definition of management, Evolution of management, Nature and Importance of Planning, Organization Meaning, Direction and Supervision
Industrial Economics DSC - 6	Introduction, Industrial Policy of India, Industrial Finance, Industrial Labour, Foreign Direct Investments
B.Com III Semester	After completion of these courses students should be able to;
Quantitative Techniques for Business - I SEC - I	Introduction, Diagrams, Measure of Central Tendency and Dispersion, Probability, Mathematics of Finance
Corporate Accounting - I DSC - 7	Share Capital of Company, Underwriting of Shares and Debentures, Final Accounts of Companies, Mergers and Acquisition of Companies, Internal Reconstruction and Accounting for Intangible Assets
Human Resource Management DSC - 8	Human Resource Management, Human Resource Planning & Recruitment, Training and Development, Performance Appraisal and Job Analysis, Welfare and Safety
Small Business Management DSC - 9	Concept, Entrepreneurship, Policy and Promotion, Project, Industries
Disaster Management AECC – 3C	Introduction to Disaster, Disaster Preparedness, Disaster Response, Rehabilitation, Reconstruction and Recovery

B.Com IV Semester	After completion of these courses students should be able to;
Quantitative Techniques for Business - II SEC - II	Correlation and Regression, Index Numbers, Linear Programming Problem, Network Analysis, Present Worth and Discounts
Corporate Accounting - II DSC - 10	Accounts of Banking Companies, Accounts of Insurance Companies, Accounts of Holding Companies, Valuation of Shares, Liquidation of Companies
Corporate Administration DSC - 11	Introduction, Documents, Management, Meeting of Shareholders and Board, Books of Accounts and Winding Up
Indian Banking DSC - 12	Introduction to Indian Banking System, Indian Commercial Banks, Reserve Bank of India, Recent Trends in Indian Banking, Banking Sector Reforms