

2.6.1: Teachers and students are aware of the stated Programme and course outcomes of the Programmes offered by the institution.

Under- Graduate courses

- Botany
- Chemistry
- Microbiology
- Computer science
- Statistics (Non Math's)
- Statistics (With Math's)
- Mathematics
- Catering & Hotel Management
- Biotechnology
- Environmental science
- Physics
- B.Com General
- B.Com Computer Applications
- Sanskrit
- Telugu
- History
- Economics
- Political science
- English
- Zoology

Botany

S.No	COURSE	Semester	Course Title	Course Outcomes
1	I B.Sc.	Semester-1	Microbial diversity algae & fungi	After successful completion of course students will able to
				1. Understand the origin of life on the earth.
				2. Describe the characteristics of microorganisms.
				1. The students will get detailed knowledge about virus
				2. Identify the plant diseases caused by virus.
				1. Recall the previous knowledge about bacteria.
				2. Draw the bacteria structure.
				3. Explain economic importance of bacteria
				1. Classify the lower group of plants.
				2. Recognizes various algal members using observation skills.
				3. Explain economic importance of algae.
				1. They gain knowledge about various fungal members.
				2. They become aware of fungus in their daily routine life.
				3. Draw the life cycles of Rhizopus, Penicillium and Puccinia
		Laboratory		1. Prepare solid and liquid medium for culturing of microbes.
				2. Perform techniques in gram staining.
				3. Identify disease symptoms caused by bacteria.
				4. Identify different spores.

S.No	COURSE	Semester	Course Title	Course Outcomes
2	I B.Sc.	semester-II	Diversity of archegoniate and anatomy	1. Recall the evolutionary trends among lower group of plants.
				2. Describe the general characteristics of Bryophytes.
				3. Draw the life history of Marchantia and Funaria.
				1. They gain detailed knowledge on Pteridophytes.
				2. Students will enrich themselves with the concepts of heterospory and seed habit.

				3. Draw the life history of Lycopodium, Selaginella and Pteris.
				4. Explains stelar evolution in Pteridophytes.
				1. Identify seed bearing plants.
				2. Explain significance of wood, essential oils and medicines.
				3. Draw the life history of gymnosperms.
				1. Recognizes the tissues.
				2. Discuss about functions and organization of tissue systems.
				1. Understand the abnormalities in various trees.
				2. Identify wood yielding plants.
		Laboratory		1. Demonstrate double staining techniques.
				2. Recognizes various tissues.

S.No	COURSE	Semester	Course Title	Course Outcomes
3	II B.Sc	semester-III	Plant Taxonomy and Embryology.	1. Describe the plants by following ICBN rules.
				2. Recognize taxonomic status of plants.
				2. Prepare herbarium.
				1. Compare and analyze various systems of classification.
				2. Construct a phylogenetic tree.
				1. Explain economic importance of families.
				2. Identify the plants using observation skills.
				1. Recall previous knowledge on economic importance of plants.
				1. Draw the structure of anther.
				2. Outline the steps involved in endosperm development.
				3. Describe fertilization process.
				4. Illustrate different kinds of pollination.
		Laboratory		1. Perform herbarium techniques.
				2. Observe germination of pollen grains.

				3. Observe and distinguish various ovules.
				4. Draw the structure of endosperm.
				5. Observe and distinguish dicot and monocot embryos.

S.No	Course	Semester	Course Title	Course Outcomes
4	II B.Sc	Semester-IV	Plant physiology and metabolism	1. The students will enrich themselves with the physiological processes which occur in plant body.
				2. Describe components of water potential.
				3. Explain hypothesis of ascent of sap.
				4. Design experiment to examine the hypothesis.
				1. Analyze the role of nutrients in plant life.
				2. Identify the nutrient deficiency symptoms in plants.
				2. Describe the phenomenon of biological nitrogen fixation, protein synthesis and enzyme action.
				1. Explain various pigments present in the plant body.
				2. Illustrate the relationship light with photosynthesis.
				1. Distinguish aerobic and anaerobic respiration.
				2. Outline the steps in glycolysis, TCA cycle and electron transport.
				2. Describe the phenomenon of lipid metabolism and oxidative phosphorylation.
				1. They become aware of applications of various phytohormones on plant growth and development.
				2. Explain concept of photoperiodism.
				3. Summarize
		Laboratory		1. Students upgraded with analytical instrumentation.
				2. Calculate and compare rate of transpiration in various plants.
				3. Observe the process of ascent sap.
				4. Calculate the temperature effect on membrane permeability.
				5. observe mineral deficiency symptoms in plants.
				6. Separate various pigments from the leaves.
				7. Calculate rate of photosynthesis.

S.No	COURSE	Semester	Course Title	Course Outcomes
5	III BSc	Semester-V	Cell biology, Genetics & Plant breeding	1. Distinguish the structure of prokaryotic and eukaryotic cells.
				2. Draw the structure of cell organelle.
				3. Explain structure and function of cell membrane.
				1. Outline the structure of genetic material.
				2. Distinguish the structure of DNA & RNA.
				3. Describe replication of DNA.
				1. Recall the Mendel's law of inheritance.
				2. Construct the punnet board to explain the Mendal laws.
				3. Select and apply experimental procedures and skills to solve genetics problems.
				1. Describe plant breeding.
				2. Explain various methods of crop improvement.
				1. Recall the concept of mutations.
				2. Asses the applications of molecular breeding.
				3. Explain somaclonal variations in crop improvement.
		Laboratory		1. Perform techniques in isolation, observation, identification of plant organs.
				2. Draw the structure of plant cells and cell organelles.
				3. Observe various stages of mitosis in onion root tips.
				4. Select and apply procedures and skills to solve genetics problems and issues.
				5. Perform hybridization techniques.

S.No	COURSE	Semester	Course Title	Course Outcomes
6	III BSc	Semester-V Paper-2	Plant Ecology & Phytogeography	1. Clearly defines ecology.
				2. Identifies various ecological factors.
				1. Construct the flow diagrams for food chain and food web.
				2. Draw the ecological pyramids.
				3. Explain productivity of ecosystem.
				1. Clearly defines population of community.

				2. Understand the interaction between plants growing in community.
				1. Recognizes the phytogeographic regions.
				2. Defines clearly about endemism.
				1. Outline the levels of Biodiversity.
				2. Describe loss of Biodiversity and seed banks.
		Laboratory		1. Use laboratory instruments.
				2. Analyze and interpret permeability of soil samples.
				3. Determine soil pH.
				4. Observe and draw morphological and anatomical adaptations of hydrophytes and xerophytes.
				5. Calculate and analyze the vegetation data in college campus using appropriate methodology.
				6. Observe and draw phytoplanktons.
7	III BSc	Semester- VI	Nursery, Gardening and Floriculture.	1. Analyze the infrastructure of nursery.
				2. Observe seasonal activities in nursery.
				3. Demonstrate garden operations.
				1. Describe landscape.
				2. Critically assess the computer applications in landscape.
				3. Explain Gardening operations.
				3. Know about famous gardens in India.
				1. Apply modern techniques for layering, cutting and propagation of plants.
				2. Illustrate the structure of green house, mist chamber, shade house and glass house.
				1. Describe the ornamental, foliage plants, bulbous, succulents and palms.
				2. Design indoor Gardening.
				3. Explain cultivation of plants in pots.
				1. Apply modern techniques for flower preservation.
				2. Explains methods of harvesting.
				3. Analyze flower arrangement.

S.No	COURSE	Semester	Course Title	Course Outcomes
				COURSE
		Laboratory		2. Identify and describe annuals, perennials, climbers, creepers, shrubs, trees, palms and succulents.
				3. Demonstrate usage of chemicals for prolonging vase life.
				4. Develop observation skills
				5. Write a scientific research paper for project.

1	III BSc	Cluster-A	Plant Biodiversity and human welfare.	1. Define genetic, species and plant Biodiversity.
				1. Develop methods for management of plant Biodiversity.
				2. Explain loss of genetic Biodiversity.
				1. Define EIA and GIS.
				2. Understand the safe disposal of solid and liquid wastes.
				3. Describe the methods for management of solid and liquid wastes.
				1. Define genetic, species and ecosystem diversity.
				2. Design methods for conservation.
				3. Explain importance of awareness programmes.
				4. Describe sustainable development.
				1. Explain significance of forest.
				2. Describe commercial importance of fruits, nuts, wood and fibers.
		Laboratory		1. Give examples to exotic plants.
				2. Identify the forest trees.
				3. Understand the preservation of fruits.
				4. Understand the safe disposal of biodegradable and non biodegradable wastes.

S.No	COURSE	Semester	Course Title	Course Outcomes
2	III BSc	Cluster-B	Ethnobotany and Medicinal Botany.	1. Define scope and objectives of ethnobotany.
				2. Explain various ethnic groups of Tribals.
				1. Explain significance of medicinal plants.
				1. Design strategies for conservation of resources and traditional knowledge.
				2. Illustrate biopiracy.
				1. Describe ayurveda, siddha and unani.
				2. Know the Medicinal properties of plants.

				1. Develop strategies for conservation of endemic, endangered and red listed plants.
		Laboratory		1. Identify and describe the specimens.
				2. Observe morphological and anatomical features of medicinal plants.
				3. Identify and collect medicinal plants used by tribes.
3	III BSc	Cluster-C	Pharmacognosy and Phytochemistry	1. Define pharmacognosy.
				2. Classify the drugs.
				1. Identity various medicinal plants.
				2. Explain properties of medicinal plants.
				3. Analyze phytochemical data of plant material.
				1. Distinguish the primary and secondary metabolites.
				2. Apply modern techniques for extraction of alkaloids.
				1. Increase understanding of drugs Biosynthesis.
				2. Asses the applications of drugs.
				They become aware of pharmaceutical action of drugs.
				2. Discuss role of enzyme inhibitors.
		Laboratory		1. Isolation of drugs by chromatographic techniques.
				2. Identification of bark drugs, fruit drugs, root & rhizome drugs and whole plant drugs.
				3. Understanding ethno pharmacological principles

Chemistry

S.NO	Course	Semester	Course Title	Course Outcomes
1	I. B.SC	SEMESTER-1	Inorganic Chemistry & Organic Chemistry	Acquires Knowledge to identify characteristics of metals and non-metals.
				Provide knowledge of the synthesis of complex molecules from simple starting materials.
				To understand the stability of aromatic compounds.
				Knowledge to predict the relative rates of substitution versus elimination.
2		<u>Semester II</u>	Physical Chemistry & General Chemistry	To understand the application of gas laws to a study of the stoichiometric reactions.
				Student acquire knowledge on the use of liquid crystals in electrical devices.
				To understand the effects of x-ray radiation on matter
				Knowledge to separate and purify materials and to carryout chemical analysis
				Knowledge on chemical formulae to build visual model
				To understand the role of surface chemistry in various chemical processes.
				Knowledge on optical isomerism

S.NO	Course	Semester	Course Title	Course Outcomes
3	II B.Sc.	Semester III	Inorganic Chemistry & Organic chemistry	To gain knowledge on catalysts, complexes and construction materials.
				To understand the electrical properties of solids using band theory.
				To understand the main properties of organic compounds and their uses.
				To understand the electrical properties of solids using band theory.
				Knowledge of the synthesis of alcohols and ether.

				Knowledge to analyze and interpret geological systems.
				To acquire knowledge to determine the molecular mass of a solute
				Knowledge on the basic principle used in the formation of cells and batteries.
				Knowledge on the use of electrical energy for initiating chemical reaction.
				Knowledge on detection of concentrations of different substances and detection of impurities.
				Knowledge on structure elucidation of organic compounds.
				Knowledge on IR is useful in forensic analysis.

S.NO	Course	Semester	Course Title	Course Outcomes
4	III B.Sc.	Semester V	Inorganic Chemistry & Organic chemistry Paper I	Knowledge on its applications towards biological system
				Knowledge on the interaction of metal ions with biological ligands.
				Knowledge of synthesis of medicines, dyes, fertilizers, explosive compounds etc.
				Acquire Knowledge to compute Thermodynamic quantities from Thermodynamic tables.
				Student will be able to acquire knowledge on the role of metal ions.
5		Semester V	Inorganic Chemistry & Physical chemistry paper II	To understand the applications of chemical kinetics in studying enzyme mechanisms.
				To understand photosynthesis vision, and the formation of D vitamin with the sunlight
				To understand their importance in pharmaceuticals, agrochemicals and veterinary products
6		Semester-VI	Analytical Chemistry	To understand the important functions of carbohydrates in humans, animals and plants.
				Knowledge of using instruments for analysis.

MICROBIOLOGY

S.No	Course	Semester	Course Title	Course Outcomes
1	I B.SC	SEM-I	Introduction to Microbiology and Microbial diversity	Learners will understand the history and development of the discipline of Microbiology and the contributions made by prominent scientists in this field.
				Students will be acquired knowledge and understanding the characteristics and classification of bacteria, most important in microbiology.
				Students will be acquired knowledge and understanding the Fungi, Viruses, Algae and Protozoa and microbiology concepts as applicable to diverse areas such as medical, industrial, environment, genetics, agriculture, dairy & food industry, water industry and bioprocess industry etc.
				Learners would work safely in the laboratory with microscope handling to observe various types of microorganisms.
				After completion of this unit students individually expertise in staining.
				Students get knowledge on different methods of sterilization techniques like incineration, Chlorination, operation theatres etc.
				To get trained in performing routine microbiological practices such as culture media techniques, maintenance of microbial culture, etc., which plays a major role in many industries and research laboratories for identification of microorganisms.
2	I B .SC	SEM-II	Microbial Biochemistry and Metabolism	Learners would work safely in the laboratory with various types of pathogenic microorganisms which will boost their performance during practical sessions and working in an industry or research field.
				Students will be acquired knowledge and understanding the basic microbiology practical which are applicable to diverse areas such as medical, industrial, environment, genetics, agriculture, dairy & food industry, water industry and bioprocess industry etc.
				Students will be skilled of characteristics and classification of biomolecules which are the essential components of living organisms.
				Understanding the various analytical techniques which are applied for the estimation of biomolecules in various complex mixtures.
				Learners will acquire complete knowledge on microbial enzymes and microbial metabolism have played valuable in large scale industrial processes shows their curiosity towards biochemistry has contributed more to the growth of health, agriculture and modern medical.
				Students will be prominent in microbial nutrition, culture media which is crucial for their growth. And studied various methods of growth and the factors influencing and their measurement.
				Understanding the microbial biochemistry and metabolism have played valuable role.
				Students will be skilled of practicals having applications in clinical diagnosis, understanding pathology of diseases, treatment of diseases, designing of drugs and understanding their metabolism and manufacture of various biological products like amino acids, proteins, antibiotics, hormones, enzymes, nutrients, etc.

S.No	Course	Semester	Course Title	Course Outcomes
3	II B .SC	SEM-III	Microbial Genetics and Molecular Biology	Molecular Biology basically deals with study of DNA and other biomolecules essential for life and varied mechanisms involved at molecular level.
				The emergence of mutations and their influence on the survival of organisms and the DNA repair methods and mechanism of recombination.
				Topic includes involvement of RNA types and Genetic code importance in protein synthesis.
				Studied the transcription & translation methods and gene expression methods.
				Students get knowledge basic molecular techniques like PCR and their applications in industry, medicine and agriculture.
				Students handle and independently work on lab protocols involving molecular techniques which has major job opportunities in the research areas of biotechnology.
4	II B .SC	SEM-IV	Immunology and Medical Microbiology	Understanding the types of cells, organs of the immune system and functioning of T and B lymphocytes which plays major role in resistance.
				The students learn about molecular basis of antigen recognition, hypersensitivity reaction, antigen-antibody reactions. Begin to appreciate the significance of maintaining a state of immune tolerance sufficient to prevent the emergence of autoimmunity.
				The course develops in the student an overview of normal flora of human body, hospital infections and various methods and principles used in laboratory diagnosis.
				The course develops in the student an account of antimicrobial substances, tests for antimicrobial susceptibility toward drugs and about viruses.
				Discussed about the causal organism, pathogenesis, epidemiology, diagnosis, prevention and control of various microbial diseases have applications in diagnostic laboratory mainly.
				Students will be knowledge about the blood and blood components estimation which have a great future in many clinicals, hospitals, nursing homes and many diagnostic laboratories as a microbial technician.
5	IIIB.SC	SEM-V	Environmental and Agricultural Microbiology	Appreciate the diversity of microorganisms and learn the abundance, distribution and significance of microorganism in the terrestrial, aquatic, atmosphere and extreme environment.
				Expertized to perform established, well-validated tests on water, food, agricultural, environmental samples to detect different types of microbes and about the relationship between microbes and the environment.
				Get expertise in methods of solid waste and liquid waste management and sewage treatment methods employed in waste-water treatment.
				Learn in detail the types and mechanisms of nitrogen fixation and applications of diazotrophs as biofertilizers which are harmless.
				Learn about the various microorganisms causing plant diseases and principles of plant disease control.

				Considers the biological processes that take place in the soil and their importance to soil fertility, plant growth, and environmental quality. Deals with the biochemical basis for soil processes, including microbial ecology, the carbon and nitrogen cycles, mineral transformation, and ecological interrelationships.
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S.No	Course	Semester	Course Title	Course Outcomes
6	III B.SC	SEM- V	Environmental and Agricultural Microbiology	Learners will understand the procedures to be followed in treatment & safety of water along with the methods followed in solid waste and liquid waste management which shows a path to get opportunities in water industries.
				Understand the significance and activities of microorganisms in various food and role of intrinsic and extrinsic factors on microbial growth in foods leading to spoilage, and understand the principles underlying the preservation methods will be used in many food processing industries.
				Used to recognize and describe the characteristics of important food borne pathogens and learn various methods for their isolation, detection and identification which causes food spoilage.
				Understand of the basis of food safety regulations and discuss the rationale for the use of standard methods and procedures for the microbiological analysis of food used to play a good technician at many food industries.
				Appreciate how microbiology is applied in manufacture of industrial products, learn methods in discovery of new useful microorganisms and acquire knowledge of the design of fermentors and process controls.
				Get acquainted with techniques applicable for Improvement of microorganisms based on known biochemical pathways and regulatory mechanisms and learn the methods of immobilization of enzymes and cells.
7	III B.SC	SEM-V	Food and Industrial Microbiology	Learners will grasp the isolation of microorganisms in spoiled foods and the methods to be followed in milk quality by MBRT methods have great opportunities in milk industries.
				Get acquainted with fermentation techniques for the production and estimation of ethanol and citric acid has opportunities in beverage industry.
				Bacterial,Viral,Fungal, parasitic diseases of human body systems, Disease associated clinical samples for diagnosis.
				Make learners collection of clinical samples, Method of transport of clinical samples to laboratory and storage.
				Students acquired interest in the detection of diseases by various clinical laboratory methods.
				Learners will grasp the knowledge of serological methods and Importance, Determination of resistance/sensitivity of bacteria using by various methods.
				Students ignited their minds towards the diagnostic microbiology by recent advanced technology by Immunological methods.

				Know the conceptual basis for understanding pathogenic microorganisms and the mechanisms by which they cause disease in the human body.
				Antimicrobial susceptibility or resistance of an anti biotic of microorganism to be known.

S.No	Course	Semester	Course Title	Course Outcomes
8	IIIB.SC	Cluster	Microbial Diagnosis in Health Clinics	Students handle and independently work on lab protocols involving collection, transport and processing of various clinical specimens which has major job opportunities in the research areas of medicine and will have application in biochemical analysis.
				Students learn about microbial biotechnology an its applications in human therapeutics like Vaccine production, Insulin production, Hormone production, RDNA technology in agriculture and environment.
				Students learn the production of recombinant vaccines(Hepatitis B vaccine)
				Microbial polysaccharides, bio-plastics, bio-pesticides and Microbial biosensors by means of microorganisms.
				Understand the importance of Microbial Steroid transformation, Bio-catalytic processes and their industrial applications. Immobilization methods and their applications.
			Microbial Biotechnology	Student learn commercial productions of Bio-diesel, Bio-ethanol by lignocellulosic waste and algal biomass, Bio-gas production by Methane producing organisms. Degradation of man made compounds.
9	IIIB.SC	Cluster	Microbial Quality Control in Food and Pharmaceutical Industries	Students learn about patents, copyrights and Trademarks of the products.
				Students will be gain knowledge in immobilization techniques have economic convenience, higher stability, and the possibility to be easily removed from the reaction mixture leading to pure product isolation.
				Student will get knowledge about the microbial good laboratory practices. Bio safety cabinets BSL-1, BSL-2, BSL-3.
				Understanding of practical aspects of microbiological safety, various detection methodologies and toxicological testing of products in the food and pharmaceutical industries.
				Student should be knowledge about the molecular methods of detection.
				Understand various methods of enriched techniques of specific microorganisms by different media ex EMB agar. Rapid detection of quality of milk samples by MBRT, COB.
				Student will get knowledge about the principles, flow diagrams, and limitations of HACCP. And about the microbial standards like BIS for different foods & water.
				Full knowledge of procedures for sterility tests for instruments, microbiological media and pharmaceutical products have great opportunities in pharma industries and quantitative & qualitative analysis of water and food samples has opportunities in food and water industries.

S.No	Course	Semester	Course Title	Course Outcomes
10	IIB.SC	Cluster	Biofertilizers and Biopesticides	The students also learn about the large-scale production of biofertilizers and biopesticides and their mechanism of action and application.
				Students would understand the biofertilizers are gaining an importance in use because of the proper maintenance of soil health, minimize environmental pollutions and cut down the use of chemicals.
				To impart knowledge of different components of soil fertility and educate about essentials of coexistence of human being with all other living organisms.
				Learners would be inspired to choose career options in the field of prevention of soil fertility and research.
				Learners would be encouraged to study the importance of biofertilizers over chemical fertilizers.
				Learners will expertise in isolation of Rhizobium and phosphate solubilizers from soil and visiting to a biofertilizer production unit helps in the pros and cons of biofertilizer production.

COMPUTER SCIENCE

S.No	Course	Sem	Couse Title	Course Outcomes
1	B.Sc (Comp uter Science)	First Sem	Fundamentals Of Computer & Programming In C	Understanding the concept of input and output devices of Computers and how it works and recognize the basic terminology used in computer programming.
				Makes students gain a broad perspective about the uses of computers in various fields.
				Able to gain knowledge in various generations Computers and Programming languages.
				Develops the ability to analyse a problem, develop an algorithm to solve it
				Develops the use of the C programming language to implement various algorithms.
				Write, compile and debug programs in C language and use different data types for writing the programs.
				Design programs connecting decision structures, loops ,arrays and functions.
				Explain the difference between call by value and call by address.
				Understand the dynamic behaviour of memory by the use of pointers.
				Use different data structures and create / manipulate basic data files and developing applications for real world problems.
2	B.Sc (Comp uter Science)	Secon d Sem	Object Oriented Programming with C++	Understand the difference between the top-down and bottom-up approach.
				Understand the fundamentals of C++ programming structure, function overloading and constructors.
				Apply the various concepts in object oriented programming in terms of software reuse and managing complexity to solve real-world problems.
				Able to explain programming fundamentals, including statement and control flow and recursion.
				Illustrate the process of data file manipulations using C++
				Apply virtual and pure virtual function & complex programming situations
				Implement files and command line arguments.
3	B.Sc (Comp uter Science)	Third Sem	Object Oriented Programming using Java	Use object oriented programming concepts to solve real world problems.
				Identify classes, objects, members of a class and relationships among them needed for a specific problem.
				Achieve the Knowledge of developing simple java programs.
				Develop computer programs to solve real world problems.
				Demonstrate the behaviour of programs involving the basic programming constructs like control structures, constructors, string handling and garbage collection.
				Use overloading methodology on methods and constructors to develop application programs.
				Demonstrate the implementation of inheritance (multilevel, hierarchical and multiple) by using extend and implement keywords.
				Describe the concept of interface and abstract classes to define generic classes.

				Understand the impact of exception handling to avoid abnormal termination of program using checked and unchecked exceptions.
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S.No	Course	Semester	Couse Title	Course Outcomes
4	B.Sc (Comp uter Science)	Third Sem	Object Oriented Programm ing using Java	Demonstrate the user defined exceptions by exception handling keywords (try, catch, throw, throws and finally).
				Use multithreading concepts to develop inter process communication.
				Illustrate different techniques on creating and accessing packages.
				Design simple GUI interfaces to interact with users, using Applets.
				Understand and implement concepts on file streams and operations in java programming for a given application programs.
5	B.Sc (Comp uter Science)	Fourth Sem	Data Structures	Implement abstract data types using arrays and linked list.
				Describe how arrays, records, linked structures, stacks, queues, trees, and graphs are represented in memory.
				Ability to describe stack,queue and linked list operation.
				Apply the different linear data structures like stack and queue to various computing problems.
				Implement different types of trees and apply them to problem solutions.
				Demonstrate different methods for traversing trees
				Discuss graph structure and understand various operations on graphs and their applicability.
				Ability to analyse algorithms and algorithm correctness.
6	B.Sc (Comp uter Science)	Fifth Sem	MDBMS	Analyse the various sorting and searching algorithms.
				DBMS architecture, physical and logical database designs, database modeling, relational, hierarchical and network models.
				Able to Identify basic database storage structures and access techniques such as file organizations, indexing methods including B-tree, and hashing.
				Learn and apply Structured query language (SQL) for database definition and database manipulation.
				Use ER model for Relational model mapping to perform database design effectively
				Demonstrate an understanding of normalization theory and apply such knowledge to the normalization of a database.
				Understand various transaction processing, concurrency control mechanisms and database protection mechanisms.
				Students can useDML,DDL,DCL commands tomanipulate data in the database.
				Analyse and design a real database application.
				Apply normalization concepts for designing a good database with integrity constraints.

S.No	Course	Semester	Course Title	Course Outcomes
7	B.Sc (Computer Science)	Fifth Sem	Software Engineering	Plan a software engineering process life cycle , including the specification, design, implementation, and testing of software systems that meet specification, performance, maintenance and quality requirements.
				Identify the key activities in managing a software project and recognize different process model.
				Able to elicit, analyse and specify software requirements through a productive working relationship with various stakeholders of the project.
				Analyse and translate a specification into a design, and then realize that design practically, using an appropriate software engineering methodology.
				Know how to develop the code from the design and effectively apply relevant standards and perform testing, and quality management and practice.
				Able to use modern engineering tools necessary for software project management, time management and software reuse.
				Interpret the project schedule, estimate project cost and effort required.
				Outline various risk management activities.
				Ability to work in a team as well as independently on software projects
8	B.Sc (Computer Science)	Sixth Sem	Web Technologies	Able to understand the web architecture and web services.
				Can practice latest web technologies and tools by conducting experiments.
				Analyse a web page and identify its elements and attributes.
				Able to design interactive web pages by using HTML, JavaScript and Style sheets.
				Students will be able to write a well formed / valid XML document.
				Able to Create XML documents and Schemas.
				Able to study the framework and building blocks of .NET Integrated Development Environment.
				Can provide solutions by identifying and formulating IT related problems

STATISTICS (NON- MATHEMATICS)

S.No	Course	Semester	Couse Title	Course Outcomes
1	B.A (Statistic s)	First Sem	Elementar y Mathemati cs	Have an idea about basic mathematical techniques which are necessary to analyze the Statistical techniques
				Able to know the concepts of set theory and operations in sets.
				Able to know the concept of matrices and its operations.
				Able to complete the adjoint and determinate of a square matrix , hence its inverse.
				Capable of solving the simultaneous equations using matrix method.
				Understands the concept of finite differences.
				Set, Subset, Types of Sets, Operations on sets, Demorgan Laws – statements only
2	B.A (Statistic s)	Second Sem	Descriptiv e Statistics	Knowledge of Statistics and its scope and importance in various areas such as Medical, Engineering, Agricultural and Social Sciences etc.
				Knowledge of various types of data in diagrammatic representation.
				Brief analyzing in different types of data and tabulated.
				Knowledge of various types of data, their organization and evaluation of summary measures such as measures of central tendency and dispersion etc.
				Insights into preliminary exploration of different types of data.
3	B.A (Statistic s)	Third Sem	Statistical Methods And Probability	Knowledge related to concept of attributes.
				Knowledge of other types of data reflecting quality characteristics including concepts of independence and association between two attributes.
				knowledge to conceptualize the probabilities of events including frequent and axiomatic approach. Simultaneously, they will learn the notion of conditional probability.
				knowledge related to concept of discrete and continuous random variables and their probability distributions including expectation and moments,
				knowledge related to concept of random variable, Probability mass function and probability density function.
				knowledge related to concept of Mathematical expectation.
4	B.A (Statistic s)	Fourth Sem	Probability Distributio ns, Correlatio n And Regression	Ability to distinguish between discrete and continuous distributions.
				Knowledge related to concept of curve fitting.
				Knowledge of important discrete and continuous distributions such as Binomial, Poisson, rectangular, normal, distributions.
				Acumen to apply standard discrete and continuous probability distributions to different situations.
				Knowledge related to concept of correlations.
				Knowledge related to concept of regressions.
				Knowledge of correlation, regression analysis, regression diagnostics.
5	B.A (Statistic s)	Fourth Sem	Statistical Applicatio ns	Concept of Criteria of a good estimator
				Knowledge of large sampling., Small sampling. & Exact sampling

				Concept of random sample from a distribution, sampling distribution of a statistic, standard error of important estimates such as mean and proportions,
				knowledge about important inferential aspects such as point estimation, test of hypotheses and associated concepts,
				knowledge about inferences from Binomial, Poisson and Normal distributions as illustrations,
				concept about non-parametric method and some important non-parametric tests.

STATISTICS (WM)

S.No	Course	Semester	Course Title	Course Outcomes
1	BA/BS c (Mathematics)	First Sem	Descriptive Statistics and Probability	Knowledge of Statistics and its scope and importance in various areas such as Medical, Engineering, Agricultural and Social Sciences etc.
				Knowledge of various types of data, their organization and evaluation of summary measures such as measures of central tendency and dispersion etc.
				knowledge of other types of data reflecting quality characteristics including concepts of independence and association between two attributes,
				Insights into preliminary exploration of different types of data.
				Knowledge of correlation, regression analysis, regression diagnostics, partial and multiple correlations.
				ability to distinguish between random and non-random experiments,
				Knowledge to conceptualize the probabilities of events including frequent and axiomatic approach. Simultaneously, they will learn the notion of conditional probability including the concept of Bayes' Theorem,
				knowledge related to concept of discrete and continuous random variables and their probability distributions including expectation and moments,
2	BA/BS c (Mathematics)	Second Sem	Probability Distributions and Statistical Methods	Ability to distinguish between random and non-random experiments,
				Knowledge to conceptualize the probabilities of events including frequent and axiomatic approach. Simultaneously, they will learn the notion of conditional probability including the concept of Bayes' Theorem,
				knowledge related to concept of discrete and continuous random variables and their probability distributions including expectation and moments,
				knowledge of important discrete and continuous distributions such as Binomial, Poisson, Geometric, Negative Binomial and Hyper-geometric, normal, uniform, exponential, beta and gamma distributions, to apply standard discrete and continuous probability distributions to different situations.

STATISTICS (WM)

S.No	Course	Semester	Couse Title	Course Outcomes
1	BA/BSc (Mathematics)	Third Sem	Statistical Inference	Concept of law large numbers and their uses
				Concept of central limit theorem and its uses in statistics
				concept of random sample from a distribution, sampling distribution of a statistic, standard error of important estimates such as mean and proportions,
				knowledge about important inferential aspects such as point estimation, test of hypotheses and associated concepts,
				knowledge about inferences from Binomial, Poisson and Normal distributions as illustrations,
				Concept about non-parametric method and some important non-parametric tests.
2	BA/BSc (Mathematics)	Fourth Sem	Sampling Techniques and Designs of Experiments	Introduced to various statistical sampling schemes such as simple, stratified and systematic sampling.
				an idea of conducting the sample surveys and selecting appropriate sampling techniques,
				Knowledge about comparing various sampling techniques.
				carry out one way and two way Analysis of Variance,
				understand the basic terms used in design of experiments,
				Use appropriate experimental designs to analyze the experimental data.

MATHEMATICS

S.No	Course	Semester	Couse Title	Course Outcomes
1	B.Sc / B.A (Mathematics)	1 Semester	Differential Equations	After successful completion of this course, the student will be able to Solve linear differential equations
				Convert non exact homogeneous equations to exact differential equations by using integrating factors.
				Know the methods of finding solutions of differential equations of the first order but not of the first degree.
				Solve higher-order linear differential equations, both homogeneous and non homogeneous, with constant coefficients.
				Understand the concept and apply appropriate methods for solving differential equations.
2	B.Sc / B.A (Mathematics)	2 Semester	Solid Geometry	After successful completion of this course, the student will be able to Get the knowledge of planes.
				Basic idea of lines, sphere and cones.
				Understand the properties of planes, lines, spheres and cones.
				Express the problems geometrically and then to get the solution.
3	B.Sc / B.A (Mathematics)	3 Semester	Abstract Algebra	After successful completion of this course, the student will be able to acquire the basic knowledge and structure of groups, subgroups and cyclic groups.
				Get the significance of the notation of normal subgroups.
				Get the behavior of permutations and operations on them.
				Study the homomorphism and isomorphism with applications.
				Understand the ring theory concepts with the help of knowledge in group theory and to prove the theorems.
				Understand the applications of ring theory in various fields.
4	B.Sc / B.A (Mathematics)	4 Semester	Real Analysis	After successful completion of this course, the student will be able to Get clear idea about the real numbers and real valued functions.
				Obtain the skills of analyzing the concepts and applying appropriate methods for testing convergence of a sequence/ series.
				Test the continuity and differentiability and Riemann integration of a function.
				Know the geometrical interpretation of mean value theorems.

S.No	Course	Semester	Couse Title	Course Outcomes
5	B.Sc / B.A (Mathematics)	5 Semester	Ring Theory and Vector Calculus	Scalar and cross product of vectors in 2 and 3 dimensions represented as differential forms or tensors,
				The vector-valued functions of a real variable and their curves and in turn the geometry of such curves including curvature, torsion and the Frenet-Serre frame and intrinsic geometry.
				Scalar and vector valued functions of 2 and 3 variables and surfaces, and in turn the geometry of surfaces.
				Gradient vector fields and constructing potentials.
				Integral curves of vector fields and solving differential equations to find such curves.
				The differential ideas of divergence, curl, and the Laplacian along with their physical interpretations, using differential forms or tensors to represent derivative operations,
				The integral ideas of the functions defined including line, surface and volume integrals - both derivation and calculation in rectangular, cylindrical and spherical coordinate systems and understand the proofs of each instance of the fundamental theorem of calculus
				Examples of the fundamental theorem of calculus and see their relation to the fundamental theorems of calculus in calculus 1, leading to the more generalized version of Stokes' theorem in the setting of differential forms.
6	B.Sc / B.A (Mathematics)	5 Semester	Linear Algebra	After successful completion of this course, the student will be able to;
				Understand the concepts of vector spaces, subspaces, bases, dimension and their properties
				Understand the concepts of linear transformations and their properties apply Cayley- Hamilton theorem to problems for finding the inverse of a matrix and higher powers of matrices without using routine methods
				Learn the properties of inner product spaces and determine orthogonality in inner product spaces.
7	B.Sc / B.A (Mathematics)	6 Semester	Laplace Transfor ms	Find the Laplace transform of a function by definition and by use of a table.
				Find the inverse Laplace transform of a function.
				Write piecewise functions using the unit step function.
				Find transforms using the first and second translation theorems.
				Find the convolution of two functions and the transform of a convolution.
				Find the transforms of derivatives and integrals.
				Find the transform of a periodic function.
				Solve a basic integral- differential equation using the Laplace transform.
				Solve linear differential equations with constant coefficients and unit step input functions using the Laplace transforms

S.No	Course	Semester	Couse Title	Course Outcomes
8	B.Sc / B.A (Mathematics)	6 Semester	Integral Transforms	On successful completion of the course students will be able to recognize the different methods of finding Laplace transforms and Fourier transforms of different functions.
				They apply the knowledge of L.T, F.T, and Finite Fourier transforms in finding the solutions of differential equations, initial value problems and boundary value problems.
9	B.Sc / B.A (Mathematics)	6 Semester	Advanced Numerical Analysis	Understands the nature and operations of Numerical Analysis, demonstrates familiarity with theories and concepts used in Numerical Analysis, and identifies the steps required to carry out a piece of research on a topic in Numerical Analysis
				Expected to recognize and apply appropriate theories, principles and concepts relevant to Numerical Analysis, critically assess and evaluate the literature within the field of Numerical Analysis, analyze and interpret information from a variety of sources relevant to Numerical Analysis.
				The ability to compare the computational methods for advantages and drawbacks, choose the suitable computational method among several existing methods, implement the computational methods using any of existing programming languages, testing such methods and compare between them, identify the suitable computational technique for a specific type of problems, and develop the computational method that is suitable for the underlying problem.

CATERING, TOURISM & HOTEL MANAGEMENT

S.No	Course	Semester	Couse Title	Course Outcomes
1	B.Sc [CT & HM]	First SEM	Principals Of Tourism - I	Understands the importance of tourism in Indian context.
				Uses the knowledge of unity in diversity for tourism industry.
2	B.Sc [CT & HM]	First SEM	Food Production - I	Understands the criteria for selection of ingredients and raw materials according to menu.
				Uses principles in planning and preparation of menu in kitchen.
3	B.Sc [CT & HM]	First SEM	Food & Beverage Services	Understands the concepts of kitchen order tickets.
				Uses knowledge about glass wares and /crockerries.
4	B.Sc [CT & HM]	Second Sem	Bakery	Understands the role of flours and ingredients in baking.
				Uses techniques for planning and preparation /of bakery products.
5	B.Sc [CT & HM]	Second Sem	Front Office - I	Understands the organization structure of front office
				Uses knowledge to explain professionalized methodology of front office.
6	B.Sc [CT & HM]	Second Sem	Accommodation Operation-I	Uses the knowledge to know about the functions of house keeping department.
				Understands the Duties of housekeeping staff.
7	B.Sc [CT & HM]	Third Sem	Pilgrimage Tourism And Hospitality Management -II	Recognizes Tourism as a revenue generator in a country.
				Reviews tourism destinations in the world.
8	B.Sc [CT & HM]	Third Sem	Food Production - II	Knowledge related to standardization of quantity cooking.
				Reviews standardization of different cuisines.
9	B.Sc [CT & HM]	Third Sem	Food And Beverage Service -II	Understands about history of alcoholic and non-alcoholic beverages.
				Uses the knowledge about storage of cocktails and mock tails.
10	B.Sc [CT & HM]	Fourth Sem	Tourism Marketing -III	Understands challenges in marketing.
				Uses the knowledge to market tourism as a product.
11	B.Sc [CT & HM]	Fourth Sem	Front Office - II	Understands the concept of concierge.
				Express clearly about different shifts in a hotel.

S.No	Course	Semester	Couse Title	Course Outcomes
12	B.Sc [CT & HM]	Fourth Sem	Accommodation Operation-II	Understands the importance of a guest
				Uses knowledge of Science of Cleaning/
13	B.Sc [CT & HM]	Fifth Sem	Industrial Training	Industrial training is one of the most Internal part of the Hotel management course. As this is the time when the students gets a grip on the Practical knowledge of the subject.
				The training add value to the students curriculum variable.This helps them to develop as a hospitality professional
				This is the duration when the students will automatically groomed is different aspects like Communication Body language which makes them fit for future
14	B.Sc [CT & HM]	Sixth Sem	Food Production - III	Understands the importance of training and supervision
				Uses knowledge about registers used in food production.
15	B.Sc [CT & HM]	Sixth Sem	Food And Beverage Services - III	Knowing about different types of kitchen design.
				Understanding the concepts of table plan and seating arrangements
16	B.Sc [CT & HM]	Sixth Sem	Front Office - III	Understand importance of HRM in Hotel.
				Learn the process of Recruitment.
17	B.Sc [CT & HM]	Sixth Sem	Hotel Law	Understand important of Hotel Law in staff life.
				Uses of Knowledge of law in getting Hotel permission
18	B.Sc [CT & HM]	Sixth Sem	Accommodation Operation	Understand important of guest and employee
				Uses of Knowledge of flower arrangement in Hotel
19	B.Sc [CT & HM]	Sixth Sem	Travel and Tour Management	Understand Tour operation
				Study CRS

BIOTECHNOLOGY

S.No	COURSE	SEMESTER	Course Title	COURSE OUTCOME
1	I B.Sc.	SEM-I	Microbiology and Cell biology	After successful completion of the semester students will able to acquire knowledge about microscopes, Basic techniques of Microbiology, Structures, classification of Bacteria and viruses. Microbial nutrition, microbial growth, pure cultures, sterilization techniques. Gain knowledge about eukaryotic cell structure.
2		SEM-II	Macro Molecules, Enzymology And Bioenergetics.	After successful completion of the semester students will able to acquire knowledge about nucleic acids, chromosomes, Aminoacids, lipids and Enzymes.
3	II B.Sc	SEM-III	Bio-Physical Techniques	After successful completion of the semester students will able to acquire knowledge about spectrophotometry, colorimetry, chromatography, Electrophoresis, applications of radio isotopes and different centrifugation techniques.
4		SEM-IV		After successful completion of the semester students will able to acquire knowledge about Different types of immunity, structure and functions of antibodies, hyper sensitivity reactions, role of vaccines in immunity and different Immunological techniques.
5	III B.Sc	SEM-V PAPER-5	Molecular Biology	After successful completion of the semester students will able to acquire knowledge about
				Structure of DNA, Genome, replication, transcription, regulation of replication and features of genetic code.
		SEM-V PAPER-6	DNA Technology	After successful completion of the semester students will able to acquire knowledge about
				Role of different enzymes in molecular cloning, blotting techniques, transfection techniques, cloning vehicles, gene sequencing, gene transfer techniques and applications of r DNA technology in medicine and Agriculture.

S.No	Course	Semester	Course Title	Course Outcome
6	III B.Sc	SEM- VI	Plant And Animal Biotechnology	After successful completion of the semester students will able to acquire knowledge about Plant and animal cell culture, transgenic plants, Recombinant DNA technology, transgenic animals, IVF and IPR.
		(CLUSTER)	Environmental	After successful completion of the semester students will able to acquire knowledge about
			Biotechnology	Ecosystems, carbon cycle, Nitrogen cycle, pollution causative agents, effluent treatment, waste water treatment and super bug.
		(CLUSTER)	Industrial	After successful completion of the semester students will able to acquire knowledge about
			Biotechnology	Sterilization techniques, Bioreactors, Ethanol, Beer, wine productions, production of enzymes, SCP and Therapeutic proteins production by r DNA technology.
		(CLUSTER)	Genetics	After successful completion of the semester students will able to acquire knowledge about
				Mendal laws, Epistatis, chromosomes, gene mutations, DNA damage , Repair and Transposable elements.

Environmental Science

S.No	Course	Semester	Course Title	Course Outcomes
1	II B.Sc,B.Com, &B.A	SEM-III	Natural Resources	Develop attitude in conservation of natural resources and their management.
				Students able to recognize where resource problems and opportunities can or could exist, and they can evaluate and interpret these for others.
				Understand the policies governing resources and the environment and can be able to identify social dimensions
			Eco-System, Biodiversity And Its Conservation	Resolves the gap between science and society in achieving ecosystem restoration.
				Ability to analyse the values of biodiversity and approaches for conservation that leads to sustainability.
				The study plays a platform on basic concept of eco-systems to ensure their stability.
			Environmental Pollution	Analyze different types of pollution and their effects
				Examine the link between pollution and human health
				Understand the mode of various diseases by the spread of contaminants in air, water and soil.
			Social Issues And The Environment	Develop understanding between social thoughts and environmental issues.
				Enable to understand environmental politics, environmental legislation in modern india and issues in global environmentalism
				Introduces the media and educational dimensions of environmental awareness in contemporary societies
			Human Population And The Environment	Develop understanding about population dynamics and various patterns of population distribution.
				Enable to know about various initiatives taken to control population growth
				Demonstrates the technology changes in the direction of sustainability.

Physics

S.No	Course	Semester	Couse Title	Course Outcomes
1	B.Sc (Physics)	I-Semester	Mechanics and properties of Maths	Understand Newton's laws of motion and motion of variable mass system and its application to rocket motion and the concepts of impact parameter, scattering cross section
				Apply the rotational kinematic relations, the principle and working of gyroscope and its application and the processional motion of a freely rotating symmetric top.
				Comprehend and general characteristics of central force and the application of Kepler's lows to describe the motion of planets and satellite in circular orbit through the study of low of Gravitation.
				Understand postulates of Special theory of relativity and its consequences such as length contraction, time dilation, relativistic mass and mass-energy equivalence
2	B.Sc (Physics)	II-Semester	Waves and Oscillations	Examine phenomena of simple harmonic motion and the distinction between UN-damped, damped and forced oscillations and the concepts of resonance and quality factors with reference to damped harmonic oscillator.
				Appreciate the formulation of the problem of coupled oscillations and solve them to obtain normal modes of oscillation and their frequencies in simple mechanical systems.
				Figure out the formation of harmonic and overtones in a stretched string and acquire the knowledge on Ultrasonicwaves, their production and their applications in different fields.
3	B.Sc (Physics)	III-Semester	Optics and laser Physics	Understand the phenomenon of interference of light and its formation in (i) Lloyd's single mirror due to division of wave front and (ii) Thin films, Newton's rings and Michelson interferometer due to division of amplitude.
				Distinguish between Fresnel's diffraction and Fraunhofer diffraction and observe the diffraction patterns in the case of single silt and the diffraction grating.
				Describe the construction and working of Zone plate and make the comp0arison of zone plate with convex lens.
				Explain the various methods of production of plane, circularly and polarized light and their detection and the concept of optical activity.
				Comprehend the basic principle of laser, the working of He-Ne laser and Ruby lasers and their application in different fields.
				Explain about the different aberrations in lenses and discuss the methods of minimizing them.
				Understand the basic principles of fibre optic communication and explore the field of Holography and Nonlinear optics and their application.

S.No	Course	Semester	Course Title	Course Outcomes
4	B.Sc (Physics)	IV-Sem	Thermodynamics and Radiation Physics	Understand the basic aspects of kinetic theory of gases, Maxwell-Boltzman distribution law, equipartition of energies, mean free path of molecular collisions and the transport phenomenon in ideal gases.
				Gain knowledge on the basic concepts of thermodynamics, the first and the second law of thermodynamics, the basic principles of refrigeration, the concept of entropy, the thermodynamic potentials and their physical interpretations.
				Understand the working of Carnot's ideal heat engine, Carnot cycle and its efficiency.
				Develop critical understanding of concept of Thermodynamic potentials, the formulation of Maxwell's equations and its applications.
				Differentiate between principles and methods to produce low temperature and liquefy air and also understand the practical applications of substances at low temperatures.
				Examine the nature of black body radiation and the basic theories.
5	B.Sc (Physics)	V-Sem	Electricity, Magnetism and Electronics	Understand the Gauss law and its application to obtain electric field in different cases and formulate the relationship between electric displacement vector, electric polarization, Susceptibility, Permittivity and Dielectric constant.
				Distinguish between the magnetic effect of electric current and electromagnetic induction and apply the related laws in appropriate circumstances.
				Understand Biot and Savart's law and Ampere's circuital law to describe and explain the generation of magnetic fields by electrical currents.
				Develop an understanding on the unification of electric and magnetic fields and Maxwell's equations governing electromagnetic waves.
				Phenomenon of resonance in LCR AC-circuits, sharpness of resonance, Q-factors, Power factor and the comparative study of series and parallel resonant circuits.
				Describe the operation of p-n junction diodes, zener diodes, light emitting diodes and transistors.
6	B.Sc (Physics)	V-Sem	Modern Physics	Understand the operation of basic logic gates and universal gates and their truth tables.
				Develop an understanding on the concepts of Atomic and Modern Physics, basic elementary quantum mechanics and nuclear physics.
				Develop critical understanding of concept of Matter waves and Uncertainty principle.
				Get familiarized with the principles of quantum mechanics and the formulation of Schrodinger wave equation and its applications.
				Examine the basic properties of nuclei, characteristics of Nuclear forces, salient features of nuclear models and different nuclear radiation detectors.
				Classify Elementary particles based on their mass, charge, spin, half-life and interaction.
7	B.Sc (Physics)	VI-Sem	Materials Science	Get familiarized with the Nano materials, their unique properties and applications.
				Increase the awareness and appreciation of superconductors and their practical applications.
				Material Science involves investigation the relationship that exists between the structures and the properties of the materials.
7	B.Sc (Physics)	VI-Sem	Materials Science	It plays a vital role in the modern age of Science and Technology.
				The study of Material Science is important from the point of view that sometimes we need the right material selection from the many thousands that are available.

B.COM [General]

S.No	Course	Semester	Couse Title	Course Outcomes
1	B.Com [General]	First SEM	Fundamentals Of Accounting—I	To enable and to equip the students with the basic functions and tools of accountancy and financial management.
				To develop knowledge and understanding of manufacturing concern.
2	B.Com [General]	First SEM	Business Organisation And Management	To familiarize the students with basic concepts of business.
				To develop knowledge and understanding of business.
				To make students aware of current trends in business.
				Use the marketing information management concepts, systems, and tools needed to obtain, evaluate, and disseminate information for use in making marketing decisions.
3	B.Com [General]	First SEM	Business Economics—I	To facilitate the students with the basic concepts of microeconomics and its application to business situations.
				To guide the students in understanding the real-world market situations and business application
4	B.Com [General]	Second SEM	Fundamentals Of Accounting-II	To familiarize the students with accounting from incomplete records.
				To understand the concept and its application of Consignment & Branch account.
				To understand the concept, Computation of loss and, claim settlement of fire insurance.
				To familiar about consignment and joint venture business.
5	B.Com [General]	Second SEM	Business Environmenta l Policy	Students will be able to evaluate the legal, social and economic environments of business.
				Students will be able to describe the global environment of business.
				Students will demonstrate sensitivity towards ethical and moral issues and have ability to address them in the course of business.
				Students will be able to apply decision-support tools to business decision making. Students will be able to apply knowledge of business concepts and functions in an integrated manner.

S.No	Course	Semester	Couse Title	Course Outcomes
6	B.Com [General]	Second SEM	Business Economics -II	To understand the Market Structure in perfect competition and monopoly.
				To make aware to student about pricing and output decision under imperfect Competition.
				To understand the concept of Pricing Practices and Evaluating Capital projects.
7	B.Com [General]	Third SEM	Advanced Corporate Accounting	To familiar with company final accounts according to revised format companies act 2013.
				To know the formation of company issue of shares
				To know the issue and redemption of debentures
				To know the valuation of goodwill according to simple average method, weighted average method, super profits method and capitalization method.
				To know the valuation of shares at yield method, fair value method, and dual method
8	B.Com [General]	Third SEM	Business Statistics	To Understand the concept of Functions, Derivatives and their Application.
				To understand the Various statistical technique.
				To understand the concept and application of Elementary Probability Distribution
9	B.Com [General]	Third SEM	Banking Theory And Practice	To acquire knowledge of working of Indian Banking system
				The impact of government policy and regulations on the banking industry
				Financial statements and performance of banks
				Banking lending policies and procedures.
10	B.Com [General]	Fourth SEM	Accounting For Service Organizations	To familiar with non-trading concerns and their final accounts
				To familiar with double accounting system and preparation of final accounts of Electricity company accounts
				To familiar with banking company account and preparation of profit and loss account and balance sheet according to revised format and its schedules
				To familiar with calculation of rebate on bills discount by the banks
				To familiar with preparation of revenue account of insurance company accounts along with balance sheet

S.No	Course	Semester	Couse Title	Course Outcomes
11	B.Com [General]	Fourth SEM	Business Laws	To provide a conceptual study about the framework of Indian Business Laws.
				To orient students about the legal aspects of business
				To familiarize the students with case law studies related to Business Laws.
12	B.Com [General]	Fourth SEM	Taxation	To familiarize basic terminology of direct tax.
				To understand computation of net taxable total income of the individual
				To understand the salaried income, house property
				To understand the agricultural income and business income and casual incomes
13	B.Com [General]	Fifth SEM	Corporate Accounting	To know the preparation of liquidator statement of account
				To know the internal reconstruction process of a companies
				They are the familiar with the importance and need of Indian Accounting standards
				To know the amalgamation and mergers of companies
				To know the process and preparation of consolidated balance sheet of holding company
14	B.Com [General]	Fifth SEM	Cost Accounting	To familiarize basic terminology of cost accounting.
				To ascertain the profitability of each of the products and advice management as to how the profit can be maximize.
				To reveal sources of economy by installing and implementing a system of cost control for material, labour and overheads.
15	B.Com [General]	Fifth SEM	Project Management	To acquire knowledge of working of Indian Banking system
				The impact of government policy and regulations on the banking industry
				Financial statements and performance of banks
				Banking lending policies and procedures.

S.No	Course	Semester	Couse Title	Course Outcomes
16	B.Com [General]	Fifth SEM	Goods And Services Tax	To understand the basic concepts related to GST.
				To acquaint with the latest amendments made in connection with indirect taxation
				To update the procedural part of GST
17	B.Com [General]	Fifth SEM	Central Banking	To know the effects of the main policy tools and understand how central banks affect the financial system and the economy more generally and the role they have played in the recent financial crisis.
18	B.Com [General]	Fifth SEM	Rural Farm Credit	The Programme has been framed to provide an understanding and experience of different aspects of Rural Development.
				It is to provide a holistic perspective of schemes/programmes of central govt. in general and state govt. in particular.
				It is to develop expertise in planning and management of rural development programmes with focus on participatory development.
19	B.Com [General]	Sixth SEM	Management Accounting	To familiar with calculation of different profitability ratios and liquidity ratios
				To familiar with financial statement analysis
				To familiar with budgeting,
				To familiar with cash flow and funds flow statement
				To familiar with features and advantages of management account
20	B.Com [General]	Sixth SEM	Advanced Cost Accounting	To familiar with process costing
				To familiar with operating costing
				To familiar with reconciliation of cost accounting with financial accounting
				To familiar with material variance analysis
				To familiar with budget costing
21	B.Com [General]	Sixth SEM	Project Work	Learner will have adequate knowledge about sources of data collection and the ability to collect relevant data.
				Learners will develop an understanding of application of statistical techniques on the raw data collected. Learners will demonstrate an understanding and importance of research report.

S.No	Course	Semester	Couse Title	Course Outcomes
22	B.Com [General]	Sixth SEM	Financial Markets	Make an informed judgement about whether or to what extent a financial market satisfies the conditions of an efficient market
				Identify the main factors that could detract from that efficiency.
23	B.Com [General]	Sixth SEM	Marketing For Financial Services	To Understand how marketing theory underpins the marketing of financial services
				Appreciate how recent thinking in marketing and services marketing applies to financial services
				Be able to identify key issues for marketers of financial services
24	B.Com	Sixth	Auditing	To familiar with auditing process

	[General]	SEM		To familiar with internal ,external audit, cost audit, balance sheet audit, tax audit etc.
				To familiar with internal audit and internal check
				To familiar with audit program, audit panning
				To familiar with vouching.

B.COM (COMPUTER APPLICATIONS)

25	B.Com (Computer Applications)	Third Sem	Programming in C	The concept of Algorithm and Flowchart to plan/design a program
				Different programming languages
				The structure programming language
				Introduction to C and the structure of a C program and the compilation process
				The basic concepts of C programming language like Data Types, Variables, Keywords, Operators, Constants, I/O Statements, and Type Casting etc.
				The way how to writing conditional and looping programs by using control structures concept.
				Different types of functions, different types of arguments, pass parameters to a function, recursive function etc.
				The concept of Arrays, different types of Arrays, advantages and disadvantages
				The way of representing string in C, and what are the string handling functions
				The concept of pointers, how to declare, how to pass pointers as arguments etc
				The user defined data types like Structure, Union, and Enumerated
				Files in C, file handling functions, and command line

S.No	Course	Semester	Couse Title	Course Outcomes
26	B.Com (Computer Applications)	Third Sem	Lab Work	Demonstrating how to write a simple program in C and how to compile and execute
				Demonstrating the concept of data types, variables
				Demonstrating the concept of operators available in C
				Demonstrating the concept of Input and Output statements in C
				Demonstrating the concept of Decision statements (if statement)
				Demonstrating the concept of Decision statements (switch case)
				Demonstrating the concept of loop statements (for, while, do..while)
				Demonstrating the concept of one dimension arrays
				Demonstrating the concept of two dimension array
				Demonstrating the concept of functions
				Demonstrating the concept of calling a function
				Demonstrating the concept of recursive function
				Demonstrating the concept of string handling functions

				Demonstrating the concept of pointers
				Demonstrating the concept of arithmetic operations on pointers
				Demonstrating the concept of structures
				Demonstrating the concept of unions
				Demonstrating the concept of enumerated data type
				Demonstrating the concept of file creation in C
				Demonstrating the concept of file handling functions in C
27	B.Com (Computer Applications)	Fourth Sem	Object Oriented Programming with C++	Different programming languages generations
				The Object Oriented Paradigm
				Concepts of Object Oriented Programming Language
				The benefits and applications of Object Oriented Programming Language
				Basic concepts of C++ programming language like Data Types, Variables, Keywords, Operators, Constants, I/O Statements etc.
				The use of conditional and looping statements
				Different types of functions, different types of arguments, pass parameters to a function, recursive function etc.
				Inline functions, friend function and function overloading
				The concept of Arrays, different types of Arrays, advantages and disadvantages
				The concept of Classes and Objects
				Different types of Constructors and destructors
				The concept of overloading (function and operator overloading)
				Inheritance, its types and advantages
				Virtual functions
				Files in C++, file handling functions, and command line arguments
				Error handling in C++

S.No	Course	Semester	Couse Title	Course Outcomes
28	B.Com (Computer Applications)	Fourth SEM	Lab Work	Demonstrating how to write a simple program in C++ and how to compile and execute
				Demonstrating the concept of Input and Output objects in C++
				Programs using Inline functions
				Programs using Friend function
				Programs using Class
				Programs using Objects
				Programs using Constructors
				Programs using Destructors
				Programs using Function Overloading
				Programs using Operator Overloading
				Programs using Inheritance
				Demonstrating the concept of file handling functions in C++

				Demonstrating the concept of error handling in C++
29	B.Com (Computer Applications)	Fifth SEM	Web Technology	The role of programming languages like HTML, XML in web designing
				World wide web and different terminologies used in internet
				Different types of topologies used to connect network
				The basic document structure of HTML
				Different types of tags available in HTML
				The concept of Lists, Tables, formatting tags, heading tags, images, hyperlinks, colors etc
				Creating a form using different form elements, form properties, form attributes etc
				The concept of frames and its uses
				Cascading style sheets, different types
				CSS properties
				Introduction of JavaScript and the basic programming concepts like data types, variables, operators, statements, arrays, functions etc
				Built-in functions available in JavaScript like mathematical functions, string manipulation functions, date functions etc
				Creating objects in JavaScript and what are the built-in objects available
				Exception handling in JavaScript
				The concept of DHTML for creating dynamic web pages

S.No	Course	Semester	Course Title	Course Outcomes
30	B.Com (Computer Applications)	Fifth SEM	Lab Work	Understanding the basic concept of web
				Developing basic web pages using different tags in HTML
				Use different styles to the webpage elements
				Create, modify and format the web page content using CSS
				Create dynamic interactive web pages using JavaScript
				Demonstrating the concept of built-in functions in JavaScript
				Program using creating objects in JavaScript
				Demonstrating the concept of Exception handling
				Creating a simple web page with own ideas
31	B.Com (Computer Applications)	VI Sem	E-Commerce Applications	The characteristics of E-Commerce and advantages and limitations
				Difference between Traditional and E-Commerce
				Anatomy of E-Commerce applications
				Framework of E-Commerce
				Different applications of E-Commerce
				Different types of E-Commerce
				The concept of information super highway (I-Way)
				The components of I-Way
				The Global information distributed networks to distribute the data
				The way internet works as network infrastructure

				Network security by using different firewalls and different encrypted methods
				Different types of payment methods
				Electronic data interchange
				Different types of document management methods like E-Catalogs, Digital Libraries & Supply chain management
32	B.Com (Computer Applications)	VI Sem	Lab Work	Demonstrating the requirements for designing a E-Commerce website
				Demonstrating the present day trends in E-Commerce
				Demonstrating the concept of Global information distributed networks
				Demonstrating the concept of internet as a network infrastructure
				Demonstrating the concept of Access control mechanism
				Demonstrating the concept of Client-Server network security
				Demonstrating the concept of different online payment systems
				Demonstrating the concept of Electronic data interchange
				Business models of paypal.com
				Demonstrating the concept of E-Supply chain management

SANSKRIT

SNO	COURSE	SEMESTER	COURSE TITLE	COURSE OUTCOME
1	I BSC / B.COM / B.A	1 SEM	POETRY,PROSE &GRAMMER	Sanskrit is the mother of all languages. It is the base for the Indian culture and traditions. Whatever we have learned about our country; its traditions, ethics, beliefs has come from the primary language of India. The name comes from the word – <i>sam-skar</i> which means “to put together”. This is the only language used to perform all the ritual rites in major ceremonies like prayers, weddings and other spiritual activities. <i>Shlokas</i> , <i>Mantras</i> and Hymns apart from vedas, <i>Ithihasas</i> , <i>puranas</i> , <i>panchathantrams</i> are recited in Sanskrit as it is said to be the most sacred and pure language. The under graduate students who opt Sanskrit for their studies can obviously get good culture. As Upanishads contain immortal truths when the students learn them they get human values, family system, immortal truth, virtue, and can lead the life with great principles which protect the character. By acquiring the universal facts through the inspirational speeches contained in various epics in Sanskrit the students get humanity, value of charity, control over the five elements of nature, and will become the best citizens of society and to serve the society with their spiritual as well as societal knowledge with great extent. The students can learn social values, moral values. Sanskrit language is a torch bearer of students values and it paves the way to the growth of students in all aspects.
2	I BSC / B.COM / B.A	II	POETRY,PROSE &GRAMMER	For the second semester of Degree students the syllabus of Sanskrit is designed with moral values in great extent. In this semester the students can get knowledge on the great epics and the importance of such epics. They are also being taught <i>Raghu Vasmsam</i> authored by Mahakavi Kalidas which explains the administration, life style of great leaders eventually the students get inspired by such stories and can easily mould his life by renunciation of all his hidden evil activities. Sanskrit teaches the students regarding the Life history of Bhagiradha and his efforts to protect his dynasty through the incarnation of Ganga. It gives the students immense pleasure and inspiration to fight for their existence in life with comfortable life. When the students acquiring the spiritual messages of great spiritual personalities like Malayala Swamy the students easily get <i>Sanathana Dhramas</i> , the attributes of wisdom, the <i>Panchaseelas</i> , the glory of truth, the superiority of Guru and can transform their lives towards the righteous path. The students can become a good scholars in Sanskrit language, and will get fluency in the grammar of Sanskrit by learning the great novelists of Sanskrit.

SNO	COURSE	SEMESTER	COURSE TITLE	COURSE OUTCOME
3	I BSC / B.COM / B.A	III SEM	Drama,upanishth, alaInkaras & History of sanskrit literature	Culture begins in the place where on who learns Sanskrit. In the curriculum of 3 rd semester Degree course the students are able to learn the ancient dramas, theoretical features and uniqueness of all sorts of talent and realize and improve their lives towards the scholarly life in all aspects. Through the message of the Upanishads, every student will be able to get self attainment by eradicating the ignorance.. In the same way the students can become a great scholars by learning the ancient Sanskrit epics, and the literature of Sanskrit. One can absolutely believe that Sanskrit knowledge is a fictional tree of all human beings.

TELUGU

S. No	COURSE	SEMESTER	COURSE TITLE	COURSE OUTCOMES
1	I B.SC	I	Old & Modern poetry, Stories, Grammar	To enlighten the students about Vaidika household Dharma and the purpose of marital life, re-birth philosophy, honesty and Dharma.
				To know about the value of loyalty and faithfulness in human life.
				To enlighten students about the value of freedom of the country. Patriotic feelings are the main theme of the lesson
				Students acquire knowledge about the historical events of various countries and enhancing their personality development.
				To enlighten student's responsibility towards their parents and the society.
				Students are known about the utter poverty, hunger and its consequences.
				Students should organise their life carefully.
				To enlighten students about alphabets, division of words, phrases, formation of sentences and the structure of the language
2	I B.SC	II	Old & Modern poetry, Stories & Novel	Students know about spirituality the importance of Srikalahasti temple in literature.
				Students are aware of ancient culture and heritage regarding traditional marriages.
				The concept of liberty and equality of hard workers and down trodden is highlighted
				Students are aware of the significance of tree and its importance in our lives.
				Students know more about the food scarcity, Deforestation, hunger problem and other struggles faced by poor people.
				Students are aware of the transformation of the society and the psychology of human nature.
				Students are aware of the struggles of artists to win their daily bread and how they face so many hurdles in the day to day life.
3	II BSC	III	Old & Modern poetry, Naatika, Grammar	Students are aware of loyalty, honesty and righteousness in their lives.
				Self-less life style of people, welfare of the society are the ultimate goals.
				Students are aware of the concept penance; Divinity, Truth and Tolerance are the four pillars of Dharma.
				Students learn to safeguard to rich heritage and cultural treasure of Andhra.
				Students are aware of the moral and human values indulged in poetry.
				Students are aware of the sensuous beauty added by Alankaaraas.
				Students are aware of the fact that man should get rid of cruelty and ghosted nature. This drama explores and questions the ongoing atrocities of the society.

SPECIAL TELUGU

S. No	COURSE	SEMESTER	COURSE TITLE	COURSE OUTCOMES
1	I BSC	I	Old Poetry & Drama	Can develop achievement / fighting spirit to succeed in their aims
				Human existence, development transforming method, existence of living creatures with supreme energy (eternal power) greatness of Telugu literature and traditions can be known and adopted by students
				Penance, the power of Penance – by knowing these students can make a strong foundation in this age to achieve their aims
2	I BSC	II	Modern poetry	Develops clear awareness about various sociological issues.
				Students can understand self-observation inculcated the habit of truth, faith, self-confidence and helping others.
				The teachings and sayings of Samartha Ramadaasa to Sivaji, helps students to reach their goals in their real life.
				Students can understand the describing of beauty of nature and attitude of cuckoo bird by Rayaprolu Subbarao by these they can analyse the hidden nature's vitality.
				Students will come to know that all are equal there is no caste, creed, gender differences.
3	II BSC	III	History of Telugu literature	To make the pupils know the development of Telugu literature and language from beginning of the Christian Era to the times of Nannaya and to realize that reading of the Maha Bharatam will provide solutions for the problems faced in the day to day life.
				To improve reverence for the Indian traditions and culture; spiritual awareness and charity; personality development and to make the students comprehend the importance of study of <i>Dvipada</i> poetic metric in Telugu.
				To make the students understand the chronological developments of literature and also to know the difference between materialistic and spiritual pursuits of life.
				Nine Devotional Means – paths to reach God, etymology of ballad, to make the pupils courageous enough to face to vicissitudes of life through the path of devotion
				To make the pupils assimilate the developments, and modifications which occur in the course of time in our culture, tradition and literature and to make them competent enough to face various competitive examinations

S. No	COURSE	SEMESTER	COURSE TITLE	COURSE OUTCOMES
4	IIBSC	IV	History of Telugu literature	Clearly students can understand how the kings of Tanjore, Chenji, Madhuri encouraged literature and fine arts during that period, how the vemana sathaka, sumathi sathaka helps the students to become as complete individual
				Helps the students to know themselves to reform and to adopt to their own efforts
				Students can understand concurrent sociological status through novel literature and develops attitude of writings in students.
				Clearly understand how the Mahabharata, Ramayana influenced the life strategies and living style, which performed among people. Also, it developed consciousness among people. Helps to enhance the interest towards fine arts among students.
				Develops literary composition among students, how it reflects real life in the stories, through which sociological facts can be understood easily
5	IIBSC	V	Grammar, Prosody & Poetics	To make the pupils recognize the significance of grammar in language, to make them free of spelling errors, to develop their word-stock and to make them comprehend the alphabet in Sanskrit and Prakrit languages.
				To make the learners appreciate the aesthetic values, the beauty and how they appeal to the finer senses of the readers.
				To make the students understand how pitch of the voice, intonation and melody are added to versification.
				To enable the pupils, master the knack of applying <i>Yathis</i> and make them write various competitive exams and get better employment opportunities.
				To render a comprehensive understanding and command over the usage of language and thus make learners achieve their goals in life.
6	IIBSC	VI	Literary Criticism	Students will understand about the ancient poets and choose Telugu subject for civil services and competitive exams like Group I and secure the good marks
				Students can understand the different types of Rasas.
				They can implement the Rasa theory to the real life. Students can know to control emotions, students will appreciate the beauty of Rasas
				Students will get the knowledge of the internal meaning of Dhvani; they can experts the proper knowledge of language.
				Fine arts will help in developing the mental and physical development in humans. It helps to know the tradition and culture of human life.
				Students can understand the different types of Indian dramas. They can have knowledge about Folk Arts (Like Street place)

S. No	COURSE	SEMESTER	COURSE TITLE	COURSE OUTCOMES
7	IIIBSC	A	Journalism	Students will get the knowledge about communication and recognise the difference between several types of communication.
				Students will aware about different types of Reporting and Editing in Newspapers. They will understand about the duties of Reporter and Sub- Editor
				Students will get the knowledge about News Features and understand the purpose of Features.
				Students will aware the knowledge of Telugu News Papers evolution and development.
				Students will understand different types of communication tools. They will come to know the difference between rural and traditional communication tools.
8	IIIBSC	B	Modern Telugu Language Structure	Students will get the knowledge of Sandhi, Samasa, Linga, Vachana, Vibhakti in modern Telugu language.
				Students will aware about the structure of the Verb and Basis. They will understand the types Verb and basis.
				Students will know about the structure of Sentence. They will learn to identify the different types of sentences.
				Students will aware the knowledge of Textual language and Colloquial language and know the need of the implementation of Colloquial language.
				Students will aware the need and uses of Modernization of Telugu language and uses of authentication of Telugu language.
9	IIIBSC	C	Telugu Translation	Students will know about different languages, Students will recognise the greatness of our language and literature.
				Students will get the knowledge about different types of translations. They will understand the different language styles.
				Students will aware of different linguistic, cultural and geographical specialties in translation. they will learn how to overcome the problems.
				Students will aware the duties and rights of official language committee; they know about the need of the implementation of Telugu as official language
				By reading different language translated books, students or readers will aware different customs and life styles.

HISTORY

SNO	COURSE	SEM	COURSE TITLE	COURSE OUTCOME
1	I BA	I	Ancient Indian history & culture (from earliest times to 600A. D)	Students will label to:
				Identify Approaches towards the sources and the study of ancient Indian history.
				Evolution of social and political institutions in the Vedic society, Religious dissent and the rise of Jainism and Buddhism
				Understand Asoka's Dhammaandhis in script onse. Mauryan administration, Artand Architecture
				To Know Art and Culture under Kanishka
				Explain Changes in political organisation of empire during the Gupta rule
		II	Early medieval Indian history & culture (from earliest times to 600 A.D to1526A.D)	Students will able to:
				Explain Sources of Medieval Indian History
				Understand Arab invasion of Sind, Campaigns of Mahmud of Ghazni and Ghorī
				Describing Establishment and Territorial consolidation of the Delhi Sultanate
				Know the Socio- economic and religious life in Delhi Sultanate
				Discrimination Vijayanagar Empire and Bahmani Sultans Administration under the Sultanate- civil, judicial, revenue, fiscal and military.
				Generalising Sufi Movement , Bhakti Cult, Sikh Movement System of Education, Fine Arts and Literary Developments, Indo-Persian and Indo-Turkish architecture

SNO	COURSE	SEM	COURSE TITLE	COURSE OUTCOME
2	II BA	III	late medieval & colonial history of India (1526 to1857A.D)	Students will able to:
				Describe Foundation of the Mughal empire by Babur Conquest and the Afghande spoism of SherShah
				Know Economic prosperity and cultural splendored Mughals.
				Play Significance of role of the British and the French in the Carnatic Wars Establishment of the British control in Bengal after the battles of Plassey and Buxar
				Discrimination Anglo- Mysore Wars and Consolidation of the British power in the South

				Understand Anglo- Maratha Wars and the British control in the North and the West ,Mutiny of 1857 and Queen Victoria's Proclamation of 1858
3	II BA	IV	Social reform movement & freedom struggle (1820 to 1947 A.D)	Students will be able to:
				To understand about Brahmo Samaj, Arya Samaj, Ramakrishna Mission, Theosophical Society, Aligarh Movement
				Describing Constitutional Developments from 1858 to 1909. Government of India Act of 1919, Act of 1935
				Explain Constitutional Developments and Ministries from 1937 to 1947
				Know Establishment of the Indian National Congress Prominent leaders of early stage.
				Discriminating Partition of Bengal, Swadeshi Movement, Surat Split of 1907, Home Rule Movement, Non- cooperation Movement, Khilafat Movement

SNO	COURSE	SEMESTER	COURSE TITLE	COURSE OUTCOME
4	III BA	V: PAPER-5	History of modern Europe (from 14 th Century to 18 th century)	Students will be able to:
				Understand political and economic structure of Feudal society in 15 th century and its crisis in 18 th century.
				Gather knowledge about the nature of Feudal Society, regional variation, crisis in Feudalism and transition debate.
				They will acquire knowledge how to rise renaissance in Europe after downfall of feudal Society in Europe and also be learn how the European Society transformed from Feudalism to Capitalism.
				Describe French Revolution, Era of Napoleon
				Understanding East India Company's Authority over Andhra – Three Carnatic Wars – Occupation of Northern Circars and Ceded Districts – Early Uprisings – Peasants and Tribal Revolts.
				Know the Impact of Company Rule on Andhra – Administration – Land Revenue Settlements – Society – Education – Religion – Impact of Industrial Revolution on Economy – Peasantry & Famines – Contribution of Sir Thomas Munroe, C.P. Brown & Sir Arthur Cotton Impact of 1857 Revolt in Andhra

5	IIIB A	VI	History of modern Europe (from 19th century to 1945 A.D)	Students will be able to:
				Describe Unification of Italy ,Unification of Germany
				Predict Industrial Revolution, Stages of Industrial Revolution in Europe
				Understand First World War ,Treaty of Versailles, Russian Revolution League of Nations, Impact of League of Nations
				Classify Rise of Communism, Rise of Nazism, Rise of Fascism Second World War
				Understand the Establishment of UNO

ECONOMICS

SNO	COURSE	SEM	COURSE TITLE	COURSE OUTCOME
1	IBSC	I	Micro Economics – Consumer behaviour	1. Standards able to understand about the economics.
				2. They evaluate the consequence of economic activities.
				3. Students able to understand the different methodologies by studying the economics.
				4. Able to understand about the consumer behaviour in the economic activities.
				5. Students understand and analyse the utility analysis and demand and apply the same his life.
2	IBSC	II	Macro Economics – Production and price theory	1. Students able to acquire the knowledge about the production and revenue.
				2. Make the students to have complete knowledge regarding market structure and its features.
				3. To understand the how the price was determined in the different types of markets.
				4. To make the students to acquire knowledge about the wages of labours, interests and profit.
3	IIBSC	III	Macro Economics – National Income, Employment and money	1. Students able to know about the Macro Economics
				2. Able to understand the national income and its importance in the economy
				3. Students acquire the knowledge about the various theories of employment
				4. By knowing about the evaluation of money students understand the role of money in economy of the different countries
4	IIBSC	IV	Banking and international Trade	1. Students able to understand the different phases of trade cycle and acquire the knowledge of various Macro Economic concepts like inflation, deflation and its impact on economy
				2. Students acquire the knowledge of about banking sector
				3. Students know about the Non – Banking financial institutions and how they useful to the economy
				1. Students able to understand the importance of international trade and how it helps to the various countries to acquire the goods at a cheap of cost
				2. Students acquire the knowledge of about banking sector
				3. Students know about the Non – Banking financial institutions and how they useful to the economy

SNO	COURSE	SEM	COURSE TITLE	COURSE OUTCOME
5	IIIBSC	VPAPER-5	Economic development and Indian Economy	1. To develop the ideas of economic growth and economic development. Students engage in critical thoughts about the various growth models
				2. Students were understand the importance of the “sustainable development” to the future generation
				3. Students able to understand basic structure of the Indian Economy
				4. Students grasp the impact of the sociological problems like population growth, income inequalities, poverty and unemployment
				5. Analyse the new Economic policies i.e. LPG and the impact on Indian Economy
6	IIIBSC	PAPER-6	Indian and Andhra Pradesh	1. Students acquire the knowledge about agriculture sector and its role in Indian Economy
				2. Students able to understand the role and contribution industrial sector in Indian Economic development
				3. Students will be able to understand the gaining
7	IIIBSC	VI	Entrepreneurship and Small Business Development	1. Understood the evaluation and role of entrepreneur in economic development
				2. Students able to know the start-up project of a small enterprise
				3. Students learn the launch formalities of a small enterprise
				4. Students learn the ways for entrepreneurial development through various funding agencies
				5. Students learn the preparation of a project and project report and analyzation of project
8	IIIBSC	CLUSTER-A	Industrial Economics	1. Students know the role of industrial sector
				2. Explain the size and structure of firms – separation of ownership
				3. Able to understand its impact on Indian industry
				4. Describe the Indian industrial development process in India
				5. Students get an idea about the different industrial policies

SNO	COURSE	SEM		COURSE TITLE	COURSE OUTCOME
9	IIIBSC		CLUSTER-B	Labour Economics	1. Students Able to understand the role of labour as a unique feature of production
					2. Identify the conditions of the labour in organized and unorganized sectors
					3. Students get an idea about the labour wages by studying this topics
					4. Students analyse the role of technology Vs labour in economic development
					5. Students get – knowledge about the different social security measures taken by the state for the welfare of the labour
10	IIIBSC		CLUSTER-C	Industrial Management	1. Acquire the knowledge about the functions and skills of the management
					2. Students get an idea about the different forms of organization
					3. Students get an overview about the strategic management
					4. Able to acquire the knowledge about the role of failure in project management
					5. Analyse the quality management

Political Science

S.NO	COURSE	SEM	COURSE	COURSE OUTCOME
1	IBSC	1	Basic Concepts of Political Science	❖ The student can draw boundaries of the Political science and other Social Sciences.
				❖ The Student identifies the significance of Political Science.
				❖ The student can classify Classical and Modern Approaches of the Political Science.
				❖ Student can recognize the State Characteristics and Spot the evolution of the State.
				❖ Student could differentiate
2	IBSC	II	Political Institutions (Concepts, Theories and Institutions)	The importance of all the theories like Individualism, Socialism and Welfare state.
				❖ Student could compare the nation and nationality and nationalism
				❖ Traced out the factors the role of the nationality, nation and nationalism in origin of the modern state
				The student can identify how the Rights brought drastic changes in lifestyle of the human being, without which the development is not taken place as it is today.
				❖ The student can spot as Citizenship is being evolved. It is different kinds and identifies how it is related to the state.
				❖ The student can distinguish the Freedom, Equality and Justice, identifies freedom and equality are both important and they are two sides of the same coin.
				❖ Justice different based on needs and deserts Student could differentiate the differences between the two.
				❖ The students appreciated the role of the Constitution in bringing changes in human life and protect the rights of the people.
				❖ The student can differentiate the characteristics of the different forms of the government.
				❖ Students could compare the world countries on the basis of territorial division of authority.
				❖ Students identify the features of democracy and appreciate the greatness of democracy among all forms of governments.

S.N O	Course	Sem	Course	COURSE OUTCOME
3	II BSC	III	Indian Constitution	❖ Students can compare among all the government organ has supremacy and known the reasons for ascending the supremacy of the Executive over the Legislature and Judiciary.

				<ul style="list-style-type: none"> ❖ Students identify the role of the Judiciary in everyday life. ❖ Students be familiar with Judicial review and Judicial Activism, ❖ Appreciated how it prevents the tyranny of the executive and protecting the rights of the people. ❖ The students find out the origin and evolution of the Indian Constitution. ❖ The student can identify the legacy of the freedom movement and its impact on the making of the Indian Constitution. ❖ The students appreciated the Preamble and its importance. ❖ The students recognized the Salient features which are incorporated in Indian Constitution. ❖ The students knew the fundamental rights how these are playing a great role in development and defending the rights of the Indians in day to day life and also the limitations while we enjoying them. ❖ The student can differentiate the Unitary and Federal features in the Indian constitution and why they incorporate both of them in our Constitution
4	II BSC	IV	Indian Political Process	<ul style="list-style-type: none"> ❖ The student can segregate the Union list, state list, concurrent list and residual powers and also the dominance of the Union government in Union-State relations. ❖ The student can compare the relations between fundamental rights and Directive principles of state policy. ❖ The student recognizes the greatness of the Indian judiciary and appreciates the role of Indian judiciary. ❖ The Student trace out the Origin and Evolution of the Political parties in India. ❖ The student can differentiate the national and Regional political Parties. ❖ The Student can point out Indian Political system has been transformed from one party system to multi party coalition system. ❖ The student identify the determinants of voting behavior in India like Caste, Religion, Region etc are strong determinants.

S.NO	COURSE	SEM	COURSE	COURSE OUTCOME
5	IIBSC	IV	Indian Political Process	<ul style="list-style-type: none"> ❖ The student acquainted with composition, powers and functions and evolution of the commission from one man commission to multi-member commission. ❖ The student clearly understood the role of the election commission from Independence to today. ❖ The student points out the challenges to the Indian democracy like Religious fundamentalism, Regionalism, Casteism etc.

6	IIIBSC	V:PAPER-5	Indian Political Thought	❖ The student understood the adverse effects of the defections in Indian politics and the Role of the Anti-defection law.
				❖ The student understood defection in Indian electoral system. They can suggest electoral reforms which are needed.
				❖ They knew the low representation of women in Indian politics, and understood the importance of women representation in Indian politics.
				❖ The student understood that Indian political is on par with the Ancient Greek Political Thought.
				❖ The Student understood the efforts of Kautilya, Manu Views and compare with the modern political thinkers.
				❖ The student understood Raja Rammohan Roy was one of the earliest modern Indian nationalist and his political views and efforts in bringing many reforms like abolition of Sati system.
				❖ The student understood the first feminist in India was the Pandit Ramabai and her efforts to women empowerment.
				❖ The Student understood as the British government exploitation policies and Dadabhai efforts to bring consciousness among the public.
				❖ The student understood the M.G.Ranade was the great economist, social reformer, great nationalist, jurist.
				❖ The student can give reasons to raise fanatic religious nationalism and give reasons to divide and rule policies of British colonial rule in India.
				❖ The student can compare the policies of moderators, extremists and Gandhian era of nationalism.
				❖ The student give reasons to the casteism in India. The student trace out the efforts of Ambedkar to annihilation of Caste system.

S.NO	Course	Sem	Course	Course Outcome
7	III BSC	V- PAPER-6	Western Political Thought	❖ The student can identify the role of the MN.Roy in Indian National Movement.
				❖ The student can identify the systematic effort of the Modern Greek political thinkers like Plato, Aristotle etc.
				❖ The students can different notions of justice, society classification and importance of education.
				❖ The students can understand the basis for classification of governments, Aristotle's justification on slavery and theory of revolutions.
				❖ The Student can differentiate the Augustine religious political views and Machiavelli secular political views.
				❖ Machiavelli suggestions for rulers and separation of religion from politics.

				<ul style="list-style-type: none"> ❖ Students can understand the Hobbes views on human character, State of Nature and importance of sovereignty. ❖ Students can understand the Locke views on human character, State of Nature and importance of Natural rights and limited government. ❖ Students can understand the Rousseau views on human character, State of Nature and significance of General will and Popular Sovereignty.
8	III BSC	VI	Principles of Public Administration	<ul style="list-style-type: none"> ❖ Students can understand Bentham quantitative Utilitarianism, importance of Law and reforms especially jail reforms. ❖ Students can understand Mill qualitative Utilitarianism, Liberty, need for women emancipation and representative government. ❖ Students can understand Hegel's absolute idealism, importance of Dialectical method and war and rejection of international organizations. ❖ Students can understand Marx understanding of history. ❖ Importance of Dialectical Materialism for understanding human history. Importance of Labor in the creation of value to the product. Marx made Class Struggle the central fact of social evolution. ❖ The student can differentiate between political science and public administration. ❖ The student can compare and differentiate between public and private administration. ❖ The student knew the Classical theory of Henry Fayol as it is the first theory in management, and Elton Mayo's Human relations theory as it is also the first kind in management, Herbert Simon got the Nobel Prize for his Rational decision making theory. ❖ The student can identify the hierarchy, Span of control, Unity of command in real life.

ENGLISH

S.No	Course	Semester	Couse Title	Course Outcomes
1	B.Sc /B.Com / B.A (English)	First Sem	Prose,Poetry;Short Storyone Act Play &Language Activity	The learners will be able to analyse, comprehend and understand the literary pieces
				Students try to learn problems India facing-corruption, illiteracy ,over population, political eagles etc
				The importance of native language in learning other languages-Colonialism and its effects on ancient heritages and cultures
				Importance of learning English as global language
				The learners will improve the skills to identify and synthesis the literary knowledge
				The students will be able to use suitable words and structures required for the situation
				The students can be able to draw inference and understand the meaning of unfamiliar lexical terms from the context
				The students will be able to master the four skills of the language i.e., LSRW Skills
2	B.Sc /B.Com / B.A (English)	Second Sem	Prose, Poetry; Short Storyand Drama	The learners will be able to understand ideas in sensible and sequential manner
				The students will be able to argue advantages and disadvantages or pros and cons of scientific knowledge while speaking and writing about themes related to science
				The learners will be able to realise differences among story /drama /poem- regarding culture, settings, language etc.
				To learn about the feelings of women and to listen to strong voice of women in society
				The students will be able to acquaint themselves with the description of seasons with the help of literary terms
				The students will experience hard core realities of the life and develop strength to overcome the materialistic burdens
				To equip students to control their emotions according to the situations and to tackle the problem effectively
3	B.Sc /B.Com / B.A (English)	SEM II: CSS	Soft -Skills	The students will develop the capabilities of reading ,writing and learning so as to pursue their personal, academic and career goals
				The learners will be taught vital skills that improve their overall performance
				The learners will learn new and diverse vocabulary that will help their reading and self expression skills
				The students get confidence in framing grammatically correct sentences and improve their overall conversational skills

				The learners are encouraged to read newspapers and journals everyday to know about latest current affairs and to compete with the global competitive world
				The students will develop various types of listening and reading skills for using them in appropriate situations

S.No	Course	Semester	Couse Title	Course Outcomes
4	B.Sc /B.Com / B.A (English)	SEM III :CSS	Communication Skills – II	The students know about pronunciation of the sounds of Consonants , Vowels and Diphthongs
				The learners can identify the Syllabic division , Word Stress , Accent, Rhythm and Intonation to use them in connected speech
				The students will understand the different functions of the language like – greeting, introducing, asking for/ giving Permissions and directions
				The learners will become confident in participating in seminars ,Jam , Role –play , Pair work etc.,
				The students will face the interviews with greater confidence usingthe interview skills
				The learners will develop their writing skills by using different punctuation marks and become perfect both in written and spoken forms of expression
				The students will interpret the content from verbal to non-verbal and non-verbal to verbal according to the context
5	B.Sc /B.Com / B.A (English)	SEM III :CSS	Soft –Skills III Communication Skills –CSS III	The students will gain knowledge in different soft skills – positiveAttitude , Body language , SWOT Analysis , emotional intelligence and Netiquette
				The learners will learn to tackle with different problems both in academic and professional career
				The students will develop necessary skills for their personal growth as well as in their employment
				The learners will improve writing skills helpful in creating project and research work
				The students will know the dynamics of paragraph writing ,paraphrasing and summarizing for their effective contribution in their literary performance
				The students will realise about Formal and Informalletters to meet their needs according to the situation

Communication Skills [ENGLISH]

COURSE OUTCOMES GENERAL ENGLISH
To make students acquire the four skills of the language i.e., LSRW skills taking into consideration their rural background
To present the ideas coherently in a logical and convincing manner
The enhance life skills and language skills to students and enable them to become confident, skilled and employable citizens.
To develop English proficiency level of the undergraduate students.
To enhance students' the required level of linguistic knowledge and skills to enable him to communicate effectively in English.
To improve their grammatical knowledge and to make them acquainted with use of different forms and formats of written correspondence.
To inculcate important skills those are necessary for students' success and bring about drastic improvement in their overall performance.
To develop comprehensive ability to prepare paragraphs, Short notes, objective types of Questions and Answers

Course outcomes Communication Skills (SEMISTER II, III, IV)
To make students learn vital skills about LSRW and to promote in them the art of creativity.
To enrich communication skills; language skills and soft skills to meet requirements of the students
To make students to learn rich vocabulary for effective expression in English
To gain competence in choosing appropriate words and constructing error free sentences
To make students learn about essential knowledge on the importance of LSRW skills in effective communication.
To impart the knowledge of phonetics, Accent, Syllable division, Stress marking & in Intonation for their perfect pronunciation
To develop their conversation skills for their everyday use & speaking skills with reference to Seminar Debates, Role- plays Presentation Skills, Group Discussions & Interviews.
To analyse and interpret the content from verbal to non-verbal & nonverbal to verbal according to the situation
To enhance higher order skills such as - Analytical, Problem solving, reviewing and Critical thinking

ZOOLOGY

S.NO	COURSE	SEM	COURSE TITLE	COURSE OUTCOMES
1	IBSC	I	Invertebrates (non-Chordates)	Describe general taxonomic rules on animal classification
				Classify Protozoa to Coelenterata with taxonomic keys
				Classify Phylum Platyhelminthes to Annelida phylum using examples from parasitic adaptation and vermin composting
				Describe Phylum Arthropoda to Mollusca using examples and importance of insects and Molluscs
				Describe Echinodermata to Hemichordata with suitable examples and larval stages in relation to the phylogeny
				To understand the importance of preservation of museum specimens
				To identify animals based on special identifying characters
				To understand different organ systems through demo or virtual dissections
				To maintain a neat, labeled record of identified museum specimens
2	IBSC	II	Vertebrates (Chordates)	Describe general taxonomic rules on animal classification of chordates
				Classify Protochordata to Mammalia with taxonomic keys
				Understand Mammals with specific structural adaptations
				Understand the significance of dentition and evolutionary significance
				Understand the origin and evolutionary relationship of different phyla from Protochordata to Mammalia
				To understand the taxidermic and other methods of preservation of chordates
				To identify chordates based on special identifying characters
				To understand internal anatomy of animals through demo or virtual dissections, thus directing the student for "empathy towards the fellow living beings"

				To maintain a neat, labelled record of identified museum specimens
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S.NO	COURSE	SEM	COURSE TITLE	COURSE OUTCOMES
3	IIB.SC	III	Cytology	To understand the basic unit of the living organisms and to differentiate the organisms by their cell structure
				Describe fine structure and function of plasma membrane and different cell organelles of eukaryotic cell
				To understand the history of origin of branch of genetics, gain knowledge on heredity, interaction of genes, various types of inheritance patterns existing in animals
				Acquiring in-depth knowledge on various aspects of genetics involved in sex determination, human karyotyping and mutations of chromosomes resulting in various disorders
				Understand the central dogma of molecular biology and flow of genetic information from DNA to proteins
				Understand the principles and forces of evolution of life on earth, the process of evolution of new species and apply the same to develop new and advanced varieties of animals for the benefit of the society
				Acquainting and skill enhancement in the usage of laboratory microscope Hands-on experience of different phases of cell division by experimentation
				Develop skills on human karyotyping and identification of chromosomal disorders
				To apply the basic concept of inheritance for applied research
				To get familiar with phylogeny and geological history of origin & evolution of animals
4	IIB.SC	IV	Embryology	Understand the functions of important animal physiological systems including digestion, cardio-respiratory and renal systems
				Understand the muscular system and the neuro-endocrine regulation of animal growth, development and metabolism with a special knowledge of hormonal control of human reproduction
				Describe the structure, classification and chemistry of biomolecules and enzymes responsible for sustenance of life in living organisms
				Develop broad understanding the basic metabolic activities pertaining to the catabolism and anabolism of various biomolecules
				Describe the key events in early embryonic development starting from the formation of gametes upto gastrulation and formation of primary germ layers

S.NO	COURSE	SEM	COURSE TITLE	COURSE OUTCOMES
5	IIIB.SC	V	Animal Biotechnology	Understand the applications of Biotechnology in the fields of industry and agriculture including animal cell/tissue culture, stem cell technology and genetic engineering
				Get familiar with the tools and techniques of animal biotechnology
				To get knowledge of the organs of Immune system, types of immunity, cells and organs of immunity
				To describe immunological response as to how it is triggered (antigens) and regulated (antibodies)
6	IIIB.SC	VI	Immunology VII a,b,c Papers (Cluster Subjects)	Basics of animal biology and fish taxonomy
				Types of food and feeding strategies in finfishes and shellfishes
				Types of fins in fishes and their role in swimming
				Ecological concepts like productivity, carrying capacity, food chain and food web
				Ecological cycles of Nitrogen, Phosphorous and Carbon
				Pond fertilization and biological food production
				Deep sea fishery and policy adopted by Govt of India
				Population dynamics in fishery science
				Conservation and regulatory measures in fisheries, internationally and nationally
				Economically important species for aquaculture, current status and future prospects
				Knowledge on new techniques for seed production like carp, crustaceans and molluscs
				Quarantine and disease management in fish hatcheries
				Types of feed in hatchery operation and their production


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