

**INDIRA GANDHI COLLEGE OF ARTS AND SCIENCE**

Kathirkamam, Puducherry.

**INTERNAL QUALITY ASSURANCE CELL****SUBJECT OUTCOMES FOR B.Sc (STATISTICS)**

<b>SEMESTER - I</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
1.	Basic Statistics	To know the basic concept of summary Statistics such as diagrammatic representation, Mean, Median, Mode, etc., and its interpretations
2.	Fundamentals of Probability	To introduce probability theory as a foundation for Statistics.
3.	Practical 1	To demonstrate the basic statistics problems using calculator / MS Excel.

<b>SEMESTER - II</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
4.	Probability Theory	To understand the basic notions about random variables and probability concepts
5.	Distribution Theory	To introduce the different discrete and continuous distributions and their applications
6.	Health and Vital Statistics	To absorb statistical techniques applicable in health and vital statistics
7.	Practical – 2	To demonstrate with an example of probability and various distributions using MS Excel.

<b>SEMESTER - III</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
8.	Sampling Methods	To equip students with Sampling Techniques useful in conducting sample surveys.
9.	Estimation Theory	To equip the students with characteristics of estimators and various methods of estimation
10.	Real Analysis	To know the concept of set theory, series, sequence etc.
11.	Practical 3	To provide the various sampling techniques with examples and various method of estimations

<b>SEMESTER - IV</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
12.	Testing of Hypotheses	To introduce the concepts of hypothesis testing and illustrate with numerical examples.
13.	Statistical Computing with C++	To learn the concepts of “ C++ ” Programming and to get knowledge write simple programs for statistics
14.	Practical 4	To provide the various statistical tools from parametric and non parametric tests.
15.	Official Statistics	To know the statistical data systems and different organizations such as ISO, NSSO, CSO etc.,

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<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
16.	Data Analysis Using SPSS	To orient the students to do the analysis of statistical data using statistical Packages
17.	Design of Experiments	To provide basic principles of experimentation and discuss the analysis of Data relating to agriculture, biological sciences and industry
18.	Statistical Quality Control	To provide an insight into quality assessment techniques.
19.	Applied Statistics	To expose statistics students to the exciting other areas of study where statistics plays significant role
20.	Regression Analysis	To introduce the exciting area of regression models applicable in a wide variety of situations.
21.	Industrial Statistics	To provide the inventory concepts and reliability functions of the system

<b>SEMESTER - VI</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
22.	Statistics using 'R'	To Impart Data Handling and Statistical Programming Skills based on real life example datasets
23.	Operations Research	To equip the students with Optimization techniques and make them solve decision making problems based on deterministic and probabilistic models.
24.	Stochastic Processes	To equip the students with the application of probability concepts and make them to solve decision making problems
25.	Project Work	To conduct a survey / case study or any previous study undertaken with suitable methodology, assumptions, hypotheses and statistical analyses are carried out for understanding of statistical tools.
26.	Total Quality Management	To expose statistics students to the exciting other areas of study where statistics plays significant role

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**INTERNAL QUALITY ASSURANCE CELL****SUBJECT OUTCOMES FOR B.Sc. (MICROBIOLOGY)**

<b>SEMESTER - I</b>		
<b>Sl.No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
1.	Fundamentals of Microbiology	Upon successful completion of the course the candidate will • be familiar with the history and development of Microbiology with the broad perspective of the scope of Microbiology. • understand the principles and applications of the different microscopes and staining methods. • have gained knowledge on the ultrastructure of bacteria. • be acquainted with different methods of sterilization and preservation of cultures. • understand the different types of media used for the cultivation of microbes.
2.	Cell Biology	Upon successful completion of the course the candidate will • be able to understand the history of cell biology and broad classification of cell types. • have gained knowledge on the structure and functions of cell wall, plasma membrane, vesicles and cytoskeleton. • understand the structure and functions of the nucleus and different cell organelles. • understand cell division and the significance of cell cycle and its check points. • have gained insight on types of cell signaling, signal amplification and quorum sensing.
3.	Fundamentals of Biochemistry (Allied -I)	Upon successful completion of the course the candidate will • understand the chemistry of carbohydrates and its classification. • understand the chemistry of amino acids and hierarchy of protein structure – primary, secondary, tertiary and quaternary structure. • able to comprehend the chemistry of lipids and nucleic acids. • able to understand the metabolic pathways which occurs in living organisms

<b>SEMESTER - II</b>		
<b>Sl.No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
4.	Molecular Biology	Upon successful completion of the course the candidate will • comprehend the history behind the development of molecular biology • acquaint oneself with the knowledge on DNA replication in prokaryotes. • understand the steps involved in transcription of prokaryotes. • understand the steps involved in translation of prokaryotes. • understand the basis of spontaneous and induced mutation.
5.	Immunology	Upon successful completion of the course the candidate will • understand the history of immunology and host parasitic relationships. • understand the structure and functions of the

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		cells and organs of immune system. • gain insight on antigens, antibodies and complements. • understand the different antigen-antibody reaction. • gain knowledge on hypersensitivity and cell mediated immune response
6.	Clinical Biochemistry (Allied -II)	Upon successful completion of the course the candidate will • understand the basic concepts in clinical biochemistry. • comprehend disorders related to carbohydrate metabolism. • understand the disorders related to amino acid and lipid metabolism. • understand the importance of liver functions and gastric functions and diagnosis of their disorders. • understand the role of various enzymes in disease diagnosis, prognosis and assessment of response therapy.

<b>SEMESTER - III</b>		
<b>Sl.No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
7.	Bacterial Physiology and Metabolism	Upon successful completion of the course the candidate will • be familiar with the different nutritional classification of bacteria with an in depth knowledge on bacterial growth, growth curve and measurement of microbial growth. • be able to get acquainted with different transport systems. • have an added knowledge on biosynthesis of cell structures and physiology of nitrogen fixation. • have got acquainted with carbon dioxide fixation and mechanism of photosynthesis. • have acquired knowledge on central catabolic pathways.
8.	Recombinant DNA Technology	Upon successful completion of the course the candidate will • get acquainted with the basic tools used in recombinant DNA technology. • understand the different gene cloning vectors. • have learnt the techniques in transformation of recombinant DNA into target host organisms. • understand the construction of gene libraries, blotting techniques and PCR. • understand the various applications of recombinant DNA technology in various fields.
9.	Economic and Medical Entomology (Allied - III)	Upon successful completion of the course the candidate will • understand the classification of insects according to Order, pests of crops, their life cycle and control measures. • be able to gain knowledge on pests of stored products, their life cycle and control measures • be familiar with the beneficial insects, harmful insects of human live stocks. • be able to understand the principles of insect pest management. • have acquired knowledge on vector borne diseases.

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10.	Public Health Microbiology	Upon successful completion of the course the students will • understand the importance of Public Health Microbiology. • have gained understanding on the air borne diseases and methods used in the enumeration of microorganisms in air. • have an understanding on water borne diseases and enumeration of microorganisms in water. • have a basic knowledge on food borne diseases and its types. • have an understanding on hospital acquired infections.
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<b>SEMESTER - IV</b>		
<b>Sl.No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
11.	Virology	Upon successful completion of the course the students will • understand the importance of Public Health Microbiology. • have gained understanding on the air borne diseases and methods used in the enumeration of microorganisms in air. • have an understanding on water borne diseases and enumeration of microorganisms in water. • have a basic knowledge on food borne diseases and its types. • have an understanding on hospital acquired infections.
12.	Medical Bacteriology	Upon successful completion of the course the candidate will • understand the basis of infection and the virulence of bacteria causing infections. • become acquainted with the basic concepts of collection and transport of clinical specimens. • have gained knowledge on variety of bacteria causing infections and their prevention. • understand zoonotic bacterial diseases and their prevention.
13.	Plant Pathology (Allied - IV)	Upon successful completion of the course the candidate will • understand the concept of plant diseases. • have gained understanding on disease triangle and disease pyramid. • have become acquainted with the virulence factors of pathogens and effects of pathogens on host physiological processes. • understand the concept of resistance and avirulence gene. • gain an in-depth knowledge on basic principles of disease management.
14.	Mushroom and Spirulina Cultivation	Upon successful completion of the course the candidate will • gain understanding on the edible mushrooms, its distribution and production in various countries. • gain insight on the cultivation of various mushrooms. • gain knowledge on economics of mushroom cultivation and preparation of various mushroom recipes. • understand the importance of Spirulina and their cultivation methods.

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<b>SEMESTER - V</b>		
<b>Sl.No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
15.	Management of Microbiology Laboratory (Basic credit seminar)	Upon successful completion of the course the candidate will • become familiar with the rules and regulations to be followed in Microbiology laboratory. • become acquainted with management of laboratory. • gain knowledge on laboratory quality control assessment. • have an understanding on maintenance of type strains. • have an idea on laboratory waste disposal system and biosafety. • develop experience in public speaking, that may foster development of oral communication
16.	Medical Mycology and Parasitology	Upon successful completion of the course the candidate will • gain understanding on the general properties of fungi and classification of medically important fungi. • gain insight on collection, transport and processing of clinical specimens for detection of fungal pathogens. • have an understanding on superficial, subcutaneous, systemic and opportunistic mycosis. • have a knowledge on different parasites affecting man and their control.
17.	Pharmaceutical Microbiology	Upon successful completion of the course the candidate will • understand the classification of pharmacological agents. • gain an insight on drug development. • understand the importance of gene therapy and different types of vaccines. • become familiar with immunological products, probiotics and neutraceuticals
18.	Industrial Microbiology	Upon successful completion of the course the candidate will • have got an overview of the versatile role of microbes in industrial microbiology. • have an in-depth knowledge on fermentation equipment and types of fermentation. • have a knowledge on food fermentations and single cell proteins. • have an understanding on the industrial products derived from microbes
19.	Bioinformatics	Upon successful completion of the course the candidate will • develop better understanding on analysis of DNA and protein sequences. • gain knowledge on sequence alignments. • have understanding on evolutionary analysis, fragment assembly and neural network.

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<b>SEMESTER - VI</b>		
<b>Sl.No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
20.	Microbes and their Applications (Advanced credit seminar)	Upon successful completion of the course the candidate will • understand the advanced study topics related to microbiology. • able to document scientific content critically and present the same with better understanding • individually render oral presentation with discussion among peers
21.	Food and Dairy Microbiology	Upon successful completion of the course the candidate will • understand the factors affecting the growth of microorganisms in food. • gain knowledge on the principles of food preservation. • gain understanding on the spoilage of various foods. • have knowledge on fermented foods and fermented dairy products. • understand food borne infections, intoxications, microbiology in food sanitation, sewage and waste treatment, disposal and hazard analysis.
22.	Microbial Ecology and Environmental Microbiology	Upon successful completion of the course the candidate will • understand the environmental ecosystem and microbial interactions. • understand the microbiology of air and assessment of quality of air. • have an in-depth knowledge on microbiology of water and sewage. • be familiar with biodeterioration of different materials, bioremediation and environmental protection laws.
23.	Soil and Agricultural Microbiology	Upon successful completion of the course the candidate will • understand the diverse groups of microorganisms in soil and its role in soil fertility. • gain knowledge on the microbial association and biogeochemical cycles. • understand the role of biofertilizers and biopesticides and their importance
24.	Microbial Genomics	Upon successful completion of the course the candidate will • understand the basics of Microbial Genomics. • gain knowledge on biological sequences as information. • understand the content of microbial genomes. • develop knowledge on functional genomics and metagenomics

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**SUBJECT OUTCOMES FOR B.Sc. (BIO-TECHNOLOGY)**

<b>SEMESTER - I</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
1.	CELL BIOLOGY	This course presents the study of the types and structural information of the fundamental building block that all living things the cell. The student should have gained an understanding of the types and structural information of the fundamental building block that all living things are built of (the cell). The purpose of this lesson is to help students understand the idea of a cell, their functions, and molecular signaling.
2.	MICROBIOLOGY	This course presents the study of Microorganisms. The studentS should have learned the role of microorganisms and its diversity, and their functional properties with daily life.
3.	CHEMISTRY FOR BIOLOGY	This course presents the study The chemical reactions in biological substances. the student should have gained an understanding of Enzymes, protein, and other fundamental biomolecules, as well as their importance for biological molecular stabilization
4.	PUBLIC ADMINISTRATION	This course presents the study of the governance of public sectors and government administrations. The student should have gained an understanding of their contribution to engage in the policy-making process. The skills of analysis, synthesis, critical thinking, problem-solving, and decision-making.

<b>SEMESTER - II</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
5.	ANALYTICAL TECHNIQUES IN BIOLOGY	This course presents the study of techniques used in analyzing the biological substance. The student should have gained an understanding of Electrophoresis, enzyme-linked immunosorbent assay, Western blotting, flow cytometry, fluorescence activated cell sorting, mass spectrometry, nuclear magnetic resonance, and x-ray crystallography are among the analytical methods covered in this study.



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6.	IMMUNOLOGY	This course presents the study of fundamental human and animal defense mechanisms . The student should have gained an understanding of antibodies, antigens, and immunity Immune system cells, their operations,
7.	BIOCHEMISTRY	This course presents the study of bioenergetics and metabolism. The student should have gained an understanding of metabolic pathways for the synthesis and degradation of biomolecules and their energy process
8.	ENVIRONMENTAL STUDIES	This course presents the study of ecological and physical science theories and methodologies used to solve environmental problems. The student should have gained an understanding of how to Recognize the ethical, historical, cross-cultural, and linkages between human and natural systems contexts of environmental challenges.

**SEMESTER - III**

<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
9.	MOLECULAR BIOLOGY	This course presents the study of molecular process of DNA , RNA and protein synthesis at subcellular levels and the control mechanisms of those molecular functions
10.	BIOPROCESS TECHNOLOGY	This course presents the study of the basics of fermentation technology, media components as applied to lab scale, pilot scale and industrial scale upstream and downstream processing. The student should have gained an understanding of requisite skills for the design and development of bioreactors, production optimization, and preparation of sterile base materials for downstream processing. and also learning the concept of screening, optimization and maintenance of cultures.

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11.	GENERAL BIOLOGY	This course presents the study of sections of an animal or plant that enables us and the mechanisms in various functions, including reproduction, metabolism, food gathering, and behavior. The student should have gained an understanding of numerous characteristics of animals and plants.
12.	PARASITOLOGY & ENTOMOLOGY	This course presents the study of the life cycle and interaction of pests and parasites with their hosts. The student should have gained an understanding of

**SEMESTER - IV**

<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
13.	GENETIC ENGINEERING	This course presents the study of gene-manipulation works. The student should have gained an understanding of Gene editing, gene transfer methods, expression systems, and selection procedure
14.	ENZYME TECHNOLOGY	This course presents the study of importance of enzymes and The student should have gained an understanding of function and kinetics of enzymes, tools of enzyme technology and uses in industry, agriculture and medicine..
15.	EVOLUTION AND GENETICS	This course presents the study of evolution and genetics behind the organism and the evolutionary process . The student should have gained an understanding of the transfer of characters and its expression in relation to the changing environment and the evolution of organisms.
16.	DEVELOPMENTAL BIOLOGY	This course presents the study of basics in animal and plant developmental biology. The student should have gained an understanding of molecular, genetic, and cellular mechanisms that regulate growth, differentiation, and morphogenesis, integration of these processes to generate functional plants and animals.

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<b>SEMESTER - V</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
17.	SCIENTIFIC WRITING AND COMMUNICATION/presentation skills	This course presents the study the skills for presentation and scientific writing to journals, The student should have gained an understanding the structure of scientific manuscript, identifying the scientific problem and statement , content of a good abstract, principles for communicating research data
18.	ANIMAL BIOTECHNOLOGY	This course presents the study of animal cell culture, The student should have gained an understanding of techniques for clinical diagnosis, the methodology to establish animal cell culture, and engineered animal cells for the production of therapeutic proteins.
19.	MARINE BIOTECHNOLOGY	This course presents the study of marine biology and application of genetic engineering to the marine system.. The student should have gained an understanding of components of marine ecosystems and the microbial diversity in oceans; manipulation of physiological capability for the betterment of species.
20.	ENVIRONMENTAL BIOTECHNOLOGY	This course presents the study of specific concepts of environment technology. The student should have gained an understanding of properties of microorganisms with potential application to environmental biotechnology processes.
21.	GENOMICS AND PROTEOMICS	This course presents the study of tools for gene and protein analysis. The student should have gained an understanding of genome organization, gene identification, expression and applications of genomics analysis and also about proteomics, analysis and its applications.

<b>SEMESTER - VI</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
22.	INDUSTRIAL VISIT	This course presents the study of the opportunities from industries. The student should have gained an understanding of the opportunities for internships, placements, etc., for students.

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23.	PHARMACEUTICAL BIOTECHNOLOGY	This course presents the study of properties of drugs and their production from various sources. The student should have gained an understanding of the chemistry of drugs with respect to their biological activity, metabolism, adverse effects and therapeutic value of drugs.
24.	BIOINFORMATICS	This course presents the study of basic principles and concepts of computational biology, and database analysis. The student should have gained an understanding of existing software effectively to extract information from large databases and to use this information in computer modeling, an understanding of the intersection of life and information sciences, gene expression, and database queries
25.	PLANT BIOTECHNOLOGY	This course presents the study of plant science and biotechnological application for crop development. The student should have gained an understanding of plant associated microbial ecosystems, conservation of plant resources and manipulation of genes for plant disease management.
26.	ENTREPRENEURIAL DEVELOPMENT, BIOSAFETY AND BIOETHICS	This course presents the study of qualities of entrepreneurship, biosafety and ethical issues related to various laboratories. The student should have gained an understanding of effective project proposal writing, schemes supporting entrepreneurship, marketing strategies, safety and ethical issues in working and establishing biolaboratory and patents processing.

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**SUBJECT OUTCOMES FOR B.C.A (COMPUTER APPLICATIONS)**

<b>SEMESTER - I</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
1.	Introduction to Problem Solving Using C	<ul style="list-style-type: none"> <li>➤ To learn the concepts of “ C ” Programming</li> <li>➤ To develop software programs using “C” language</li> </ul>
2.	Digital Electronics	<ul style="list-style-type: none"> <li>➤ To learn the fundamentals of digital logic.</li> <li>➤ To learn combinational and sequential logic</li> </ul>
3.	Introduction to Public Administration	<ul style="list-style-type: none"> <li>➤ Rural development is a crucial component of public administration</li> </ul>
4.	Programming in C Lab	<ul style="list-style-type: none"> <li>➤ To learn the concepts of “ C ” Programming</li> <li>➤ To develop software programs using “C” language</li> </ul>
5.	Digital Lab	<ul style="list-style-type: none"> <li>➤ To learn the fundamentals of digital logic.</li> <li>➤ To learn combinational and sequential logic</li> </ul>

<b>SEMESTER - II</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
6.	Python Programming	<ul style="list-style-type: none"> <li>➤ To learn basic python concept</li> <li>➤ To develop simple Python programs and code reusing with functions</li> </ul>
7.	Data Structures and Algorithms	<ul style="list-style-type: none"> <li>➤ To acquaint students with data structures used for programming and manipulation of data</li> <li>➤ To make students to understand the basics of algorithms</li> </ul>
8.	Discrete Mathematics	<ul style="list-style-type: none"> <li>➤ Ability model data sets as mathematical functions and solve.</li> <li>➤ Ability to understand and model the discrete structures such as graphs and trees</li> </ul>
	Mathematics For Business	<ul style="list-style-type: none"> <li>➤ To enable students to learn and apply mathematics skills to a business setting</li> </ul>
9.	Python Programming Lab	<ul style="list-style-type: none"> <li>➤ To learn basic python concept</li> <li>➤ To develop simple Python programs and code reusing with functions</li> </ul>
10.	Data Structures & Algorithms Lab	<ul style="list-style-type: none"> <li>➤ To acquaint students with data structures used for programming and manipulation of data</li> <li>➤ To make students to understand the basics of algorithms</li> </ul>
11.	Environmental Studies	<ul style="list-style-type: none"> <li>➤ To establish a standard for a safe, clean and healthy natural ecosystem</li> </ul>

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<b>SEMESTER - III</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
12.	Object Oriented Programming Using Java	<ul style="list-style-type: none"><li>➤ To learn the basic concepts of OOP</li><li>➤ To develop Java programs, Swing and Applets</li></ul>
13.	Computer Networks	<ul style="list-style-type: none"><li>➤ To educate the functions of various OSI layers</li></ul>
14.	Software Engineering	<ul style="list-style-type: none"><li>➤ To gain knowledge about software development life cycle models, software design, implementation, and testing of software.</li><li>➤ To gain overall knowledge of how software is developed</li></ul>
15.	Operating Systems	<ul style="list-style-type: none"><li>➤ To learn OS management functions</li><li>➤ To learn Memory management, Processor management, Device Management and I/O Management</li></ul>
16.	Operations Research	<ul style="list-style-type: none"><li>➤ Ability to analyze the given data set using mathematical models.</li><li>➤ Ability to represent the dataset and solve using techniques such as linear programming, Game theory, PERT and CPM.</li></ul>
17.	Object Oriented Programming Using Java Lab	<ul style="list-style-type: none"><li>➤ To learn the basic concepts of OOP</li><li>➤ To develop Java programs, Swing and Applets</li></ul>
18.	Networks Lab	<ul style="list-style-type: none"><li>➤ To educate the functions of various OSI layers</li></ul>
19.	Office Automation Tools	<ul style="list-style-type: none"><li>➤ To practically learn to use Microsoft word, excel and power point</li></ul>

<b>SEMESTER - IV</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
20.	Programming with Visual Basic	<ul style="list-style-type: none"><li>➤ To introduce students Event Driven Programming.</li><li>➤ To help the students to find solution to real life problems using Visual Basic.NET</li><li>➤ Students will learn about connecting and accessing databases</li></ul>
21.	Database Management Systems	<ul style="list-style-type: none"><li>➤ To learn the fundamental concepts of Database management systems.</li><li>➤ To learn SQL commands to manage data and PL/SQL</li></ul>
22.	Data Communication Technologies	<ul style="list-style-type: none"><li>➤ To know about Data communication model, data transmission concepts, media, encoding techniques</li><li>➤ To understand the concepts Multiplexing and ATM</li></ul>

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23.	IT Project Management	<ul style="list-style-type: none"> <li>➤ To understand the Nature of IT projects</li> <li>➤ To design Project plans and write Project proposals and understand the Project Development Life Cycle</li> </ul>
24.	Principles of Management	<ul style="list-style-type: none"> <li>➤ To understand the importance and functions of management</li> <li>➤ To understand the purpose of planning and leadership</li> </ul>
25.	VB and DBMS Lab	<ul style="list-style-type: none"> <li>➤ To introduce students Event Driven Programming.</li> <li>➤ To help the students to find solution to real life problems using Visual Basic.NET</li> <li>➤ Students will learn about connecting and accessing databases</li> </ul>
26.	Programming With C++	<ul style="list-style-type: none"> <li>➤ To learn the basics of C++ programming languages.</li> <li>➤ To learn concepts of object oriented programming in developing solutions to problems demonstrating usage of data abstraction, encapsulation, and inheritance</li> </ul>

**SEMESTER - V**

<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
27.	Web Technology	<ul style="list-style-type: none"> <li>➤ To gain knowledge in HTML and DHTML</li> <li>➤ To design interactive web pages using Style sheets, Java-script and ASP</li> </ul>
28.	Introduction to Wireless Communication	<ul style="list-style-type: none"> <li>➤ To understand the concepts wireless communication Technology</li> <li>➤ To understand the concepts of wireless, cordless, Wi-Fi, Bluetooth</li> </ul>
29.	Software Testing	<ul style="list-style-type: none"> <li>➤ To understand the Concepts of Software Testing.</li> <li>➤ Introducing about various Testing Tools.</li> </ul>
30.	Introduction to E-Business	<ul style="list-style-type: none"> <li>➤ This course introduces students to various aspects and models fore-business.</li> <li>➤ At the end of the course, students should have an understanding of the impacts which e- business is having on society, markets and commerce</li> </ul>
31.	Web Technology Lab	<ul style="list-style-type: none"> <li>➤ To gain knowledge in HTML and DHTML</li> <li>➤ To design interactive web pages using Style sheets, Java-script and ASP</li> </ul>
32.	Accounting Tools	<ul style="list-style-type: none"> <li>➤ To learn about basics entries in Tally</li> <li>➤ To work with Tally Accounting Software for maintaining accounts</li> </ul>
33.	Online Certification Course	<ul style="list-style-type: none"> <li>➤ To develop or strengthen specific career skills</li> </ul>

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<b>SEMESTER - VI</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
34.	Visual Programming with C#	<ul style="list-style-type: none"><li>➤ Understand the foundations of CLR execution.</li><li>➤ Familiarize the object oriented aspects of C#.</li><li>➤ Design and develop applications on .NET</li></ul>
35.	Information Security	<ul style="list-style-type: none"><li>➤ To provide an understanding of principal concepts, major issues, technologies and basic approaches in information security</li></ul>
36.	Software Quality Management	<ul style="list-style-type: none"><li>➤ To learn how to apply quality assurance tools &amp; techniques</li><li>➤ To learn about standards and certifications</li></ul>
37.	Visual Programming Lab	<ul style="list-style-type: none"><li>➤ Understand the foundations of CLR execution.</li><li>➤ Familiarize the object oriented aspects of C#.</li><li>➤ Design and develop applications on .NET</li></ul>
38.	Project	<ul style="list-style-type: none"><li>➤ The objective of the project is to motivate them to work in emerging/latest technologies, help the students to develop ability, to apply theoretical and practical tools/techniques to solve real life problems related to industry, academic institutions and research laboratories.</li></ul>



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**INTERNAL QUALITY ASSURANCE CELL**

**SUBJECT OUTCOMES FOR B. COM (FOREIGN TRADE)**

<b>SEMESTER - I</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
1.	Financial Accounting	Make the students learn the basic accounting records, statements and to prepare them.
2.	Business Organisation and Management	Acquaint learners with the basics of business concepts and functions and forms of business organisation and functions of management.
3.	Business Economics	Familiarize the students with basic concepts of Business Economics
4.	Introduction to Public Administration:	Help the students to obtain a suitable conceptual perspective on Public Administration.

<b>SEMESTER - II</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
5.	Advanced Accountancy	Train the students in preparing the final accounts of non-profit organizations and accounts of Consignments and Joint ventures.
6.	Business Law	Familiarizes the students with the provisions of various Acts relating to commercial undertakings.
7.	Indian Economy – Performance and Policies	Enable the students to grasp the major economic problems in India and seeks to provide an understanding of modern tools of macro-economic analysis and policy framework.
8.	Environmental Studies	Train learners to cater to the need for ecological citizenship through developing a strong foundation on the critical linkages between ecology-society-economy

<b>SEMESTER - III</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
9.	Principles of Costing	Enable the students to learn the basic concepts of Cost Accounting and enable them to compute the cost of products and services.
10.	Goods and Services Tax	Enable the students to get familiarized with the existing Companies Act 2013.
11.	Fundamentals of International Trade	Acquaint the learners with an overview of International Trade theories and elements of Global Trade Environment.
12.	Foreign Trade Promotion	Provide the learner a detailed view of the export promotional institutional infrastructure in India and Foreign Trade Policy
13.	Business Statistics	Train the students in the collection, processing, analysis and presentation of Statistical Data.
14.	Business Communication	Enable the students to gain proficiency in business related communication

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<b>SEMESTER - IV</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
15.	Management Accounting	Expose students to management principles, management accounting and their applications
16.	Human Resource Management	Acquaint learners with the techniques and principles to manage human resources of an organization.
17.	Company Law	Impart the learners working knowledge of the provisions of the Companies Act, 2013.
18.	EXIM Financing & Insurance	Familiarize the learners with the sources of Export – Import Finance and Principles of Shipping & Marine Insurance.
19.	International Financial Markets & Institutions	Provide the learners an overview of the theoretical framework of the International Monetary System and Institutions.
20.	Arithmetic Skills	Enable students to gain understanding of mathematical applications to business activities.

<b>SEMESTER - V</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
21.	Income Tax Law and Practice – I	Enable the students to learn the various provisions of the Income Tax Act 1961 and to apply them to compute tax under different heads of income
22.	Money and Financial System	Expose the students to the working of banking and financial system prevailing in India
23.	FOREX Management	Expose the learners to the theoretical as well as technical aspects of Foreign Exchange transactions as an integral part of Export Trade.
24.	Global Resources	Provide the learners with an idea on the global availability of resources that act as the fundamental reason for nations engaging in Foreign Trade.
25.	International Marketing	Introduce the learners to the application of Marketing concepts in the global arena
26.	Computer Skills for Business	Provide an exposure to the use of office automation software and accounting package software in making business decisions.

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<b>SEMESTER - VI</b>		
<b>Sl. No.</b>	<b>SUBJECT NAME</b>	<b>SUBJECT OUTCOME</b>
27.	Income Tax Law and Practice – II	Enable the students to learn the provisions of the Income Tax Act 1961 and to apply them to compute tax under different heads of income ascertainment of tax to be paid by individuals, firms and companies.
28.	Fundamentals of Investment	Familiarize the students with different investment alternatives, introduce them to the framework of their analysis and valuation and highlight the role of investor protection.
29.	Foreign Trade Procedure & Documentation	Provide the learners a detailed sketch of Export Import Documentation and Procedures as practiced in India.
30.	Export Logistics & Shipping	Acquaint the learners to theoretical and practical issues related to logistics and shipping as a component of Export Trade.
31.	Intellectual Property Rights	Introduce the learner to the concept and application of Intellectual Property Rights (IPRs) in international trade
32.	Entrepreneurship Development	Expose students to the concepts of Entrepreneurship and to enable them to start a small business enterprise.