COURSE OUTCOMES

I B. Sc. MICROBIOLOGY

FUNDAMENTALS OF MICROBIOLOGY **SUBJECT CODE: U1MBC11**

In this course, the students will

CO1:	Gain knowledge on the introduction to the history and scope of Microbiology.
CO2:	Understand the classifications of microorganisms.
CO3:	The structure and functions of cell and cellular components of bacteria.
CO4:	Acquire knowledge about the salient features of *Archae* bacteria, virus and protozoa.
CO5:	Salient features of algae and fungi will be well known.

LAB: MAJOR PRACTICAL I **SUBJECT CODE: U1MBC1P**

In this course, the students will

CO1:	Understand the working principle of different type of microscopy.
CO2:	Perform the basic techniques of media preparation, pure culture technique, hemocytometry, hanging drop technique and staining methods.

GENERAL CHEMISTRY-I **SUBJECT CODE: U3CHA1Y**

In this course the students will

CO1:	Studying the fundamental ideas about organic chemistry.
CO2:	Learning the basic of hydrogen, hydrides and oxides.
CO3:	Knowing the basics of colloids.
CO4:	Acquiring knowledge about petrochemical products and fertilizers.
CO5:	Idea about the polymer and its application.

BASIC TECHNIQUES IN MICROBIOLOGY **SUBJECT CODE: U3MBS1**

In this course, the students will

CO1:	Make the students aware of the basic rules of microbiological laboratory.
CO2:	Enable the students to acquire basic knowledge in microbiological techniques.
CO3:	Kill the potential for harmful microorganisms.
CO4:	Use and care of lab instruments.
CO5:	Microscopes has opened up a whole new dimension in science, by using microscopes scientists were able to discover the existence of the microorganisms.

MICROBIAL PHYSIOLOGY **SUBJECT CODE: U2MBC2**

In this course, the students will

CO1:	Gain knowledge on common nutrients, growth factors and types of media.
CO2:	Learns about the nutrient uptake by cells.
CO3:	Learn about the growth curve, generation time, measurement and factors affecting microbial growth.
CO4:	Compass the respiratory metabolism in microbes and photosynthetic accessory pigments.
CO5:	Gain the knowledge on bacterial photosynthesis, bioluminescence, sporulation in bacteria and fungi.

LAB: MAJOR PRACTICAL II **SUBJECT CODE: U3MBC2P**

In this course, the students will

CO1:	Learn the protocol for differential media and selective media preparation.
CO2:	Perform the various biochemical tests for the identification of bacterial & fungal culture.
CO3:	Gain the basic knowledge about the growth of bacteria by the measurement of growth curve analysis.

GENERAL CHEMISTRY –II **SUBJECT CODE: U3CHA2Y**

In this course the students will

CO1:	Studying the separation of chemical by chromatography techniques.
CO2:	Knowing the structure of protein and function of hormones.
CO3:	Learning the basics of chemical calculation.
CO4:	Basic idea about alloys and its function.
CO5:	Gaining adequate knowledge about dyes.

LAB: VOLUMETRIC ANALYSIS **SUBJECT CODE: U2CHA2YP**

In this course the students will

CO1:	Studying the applications of volumetric analysis.

PRINCIPLE OF BIOCHEMICAL TECHNIQUES **SUBJECT CODE: U3MBS2**

In this course, the students will

CO1:	Acquire knowledge about the most widely used analytical instruments.
CO2:	Learn specific techniques employed for life science studies.
CO3:	Select the instrument for a particular analysis with an idea of its merits demerits.
CO4:	deliver a higher resolution than agarose gel electrophoresis
CO5:	Learn the electron microscopy is the ability to produce powerful magnification.

II B. Sc. MICROBIOLOGY

IMMUNOLOGY **SUBJECT CODE: U1MBC31**

In this course, the students will

CO1:	Understand the types of immunity and human immune response.
CO2:	Gain knowledge on the structure and characteristics of antigen and antibody.
CO3:	Describe the general organization of MHC and antigen processing.
CO4:	Study about the autoimmune diseases and transplantation.
CO5:	Interpret the outcome on the basic immunological techniques.

LAB: MAJOR PRACTICAL III **SUBJECT CODE: U1MBC3P**

In this course, the students will

CO1:	To make the students knowledgeable with respect to the subject and its practicable applicability
CO2:	To give exposure to the students to different techniques used in clinical laboratory to detect the diseases.
CO3:	To develop the ability to apply the knowledge of microbiology in day to day life.

GENERAL CHEMISTRY-III **SUBJECT CODE: U2CHA3Y**

In this course the students will

CO1:	Gaining the basic knowledge of photochemistry.
CO2:	Basic principle about bomb and application of radioactive isotopes.
CO3:	Understanding the concept data analysis.
CO4:	Acquiring basic knowledge in water quality parameters.
CO5:	Studying the versatility of insecticides.

PLANT SCIENCE **SUBJECT CODE: U2MBA3**

In this course, the students will

CO1:	Know about the classification of Angiosperm.
CO2:	Study about the general characters and classification of Algae and Fungi.
CO3:	Study about the general characters of Bryophytes and Pteridophytes.
CO4:	Know about the general characters of Angiosperm and Gymnosperm.
CO5:	Develop basic knowledge of medicinal plants.

MICROBIAL BIOCHEMISTRY **SUBJECT CODE: U2MBC4**

In this course, the students will

CO1:	Deal with the basics of pH, buffer and bioenergitics.
CO2:	Understand the classification, structure, importance and metabolism of carbohydrates.
CO3:	Describe the structure and classification of proteins and enzymes.
CO4:	Explain the classification, properties and biological role of lipids.
CO5:	Discuss about the structural basics of nucleic acids.

LAB: MAJOR PRACTICAL IV **SUBJECT CODE: U2MBC4P**

CO1:	Estimate the biomolecules and preparation of buffers.

GENERAL CHEMISTRY-IV **SUBJECT CODE: U2CHA4Y**

In this course the students will

CO1:	Studying the mode of action of drugs.
CO2:	Learning some chemicals in day- to- day life utility.
CO3:	Acquire basic idea about the alkaloids and Terpenoids.
CO4:	Gaining knowledge about the soil chemistry.
CO5:	Studying the role of catalyst in chemical reactions.

LAB: ORGANIC QUALITATIVE ANALYSIS **SUBJECT CODE: U2CHA4YP**

In this course the students will

CO1:	Gaining the fundamental knowledge about organic analysis.

ANIMAL PHYSIOLOGY **SUBJECT CODE: U2MBA4**

In this course, the students will

CO1:	Develop basic knowledge about the Invertebrates.
CO2:	Develop basic knowledge about the Chordates and also know about the various systems in cockroach and frog.
CO3:	Learn about the various systems in pigeon.
CO4:	Create awareness about the various systems in our body & their significance.
CO5:	Enlighten the students about the human Hormones & reproduction.

LAB: BIOLOGY **SUBJECT CODE: U2MBA4P**

In this course, the students will

CO1:	Develop the basic skills of plant section and dissection of flower.
CO2:	Understand the functional morphology and comparative anatomy of animals.
CO3:	Develop the basic knowledge of blood components.

III B. Sc. MICROBIOLOGY

MICROBIAL GENETICS & MOLECULAR BIOLOGY **SUBJECT CODE: U2MBC51**

In this course, the students will

CO1:	Give the basic information about the structure, function and types of nucleic acid.
CO2:	Explain the various types of mutation and repair mechanism.
CO3:	Elaborate the mechanism and enzymes involved in DNA replication in prokaryotes.
CO4:	Describe the mechanism of bacterial translation and transcription process.
CO5:	Give the basic concepts on the gene expression and regulation in prokaryotes.

ENVIRONMENTAL & AGRICULTURAL MICROBIOLOGY **SUBJECT CODE: U2MBC52**

In this course, the students will

CO1:	Understand the distribution and interactions of microbial population in soil fertility.
CO2:	Enlighten on the beneficial role of biogeochemical cycle.
CO3:	Evaluate the microbial utilization in waste water management.
CO4:	Understand the beneficial microbies & its applications in increasing soil fertility and as biocontrol agents.
CO5:	Give a clear idea about plant pathogens in agricultural field.

MEDICAL MICROBIOLOGY **SUBJECT CODE: U2MBC53**

In this course, the students will

CO1:	Understand the characteristics of infectious diseases.
CO2:	Explain the mechanism of pathogenesis.
CO3:	Acquire knowledge about the bacterial diseases.
CO4:	Study the cause, symptoms and prevention of viral and fungal infections.
CO5:	Describe about protozoan infections, antimicrobial agents and resistance mechanism of bacteria to those agents.

LAB: ENVIRONMENTAL, AGRICULTURAL AND MEDICAL MICROBIOLOGY

SUBJECT CODE: U2MBC5P

In this course, the students will

CO1:	To develop skills required in various industries, research labs and in the field of human health.

CO2:	To focus on detection, selection and validation of drugs against human pathogens.
CO3:	To learn the basic technique to evaluate the role of microorganisms in agriculture field.

CELL BIOLOGY **SUBJECT CODE: U2MBA51**

In this course, the students will

CO1:	Develop the knowledge of cells and membrane.
CO2:	Learn about the structure and functions of various organelles and photosynthesis.
CO3:	Enlighten the students about the functions of organelles.
CO4:	Develop basic knowledge about the Cell cycle and cell division.
CO5:	Learn various techniques of staining and centrifugation.

MUSHROOM TECHNOLOGY **SUBJECT CODE: U2MBS51**

In this course, the students will

CO1:	Focuses the types and characteristics of mushrooms.
CO2:	Explains the various types of mushrooms and the influence of various environmental parameters on mushroom growth.
CO3:	Focuses on the various parameters on mushroom cultivation like tissue culture, spawn production, compost preparation and fruit body generation.
CO4:	Deals with the nutritional values and some value added products preparation from specific mushrooms.
CO5:	Deals with the medicinal and economical importance of mushrooms in Tamil Nadu.

INTRODUCTION TO MICROBIOLOGY **SUBJECT CODE: U3MBN51**

In this course, the students will

CO1:	Introduces concepts, theories and important inventions of microbiology.
CO2:	Explains the ultra structure and the importance of bacteria.
CO3:	Gives the explanations about the general features and economic importance of algae.

CO4:	Explains the general characteristics and economic importance of fungi.
CO5:	Studies on the general characteristics, structure and importance of protozoa and virus.

FOOD QUALITY ANALYSIS **SUBJECT CODE: U1MBSL1**

In this course, the students will

CO1:	Acquire knowledge in Fundamentals of Food Microbiology and Spoilage of food.
CO2:	Study the beneficial role of Microorganisms and Food borne diseases.
CO3:	Analyze the techniques to diagnose Food borne microorganisms.
CO4:	Study the Contamination, Preservation, Spoilage of Milk and its UNIT Quality testing.
CO5:	Study the contamination and preservation of meat and fish products.

RECOMBINANT DNA TECHNOLOGY **SUBJECT CODE: U2MBC61**

In this course, the students will

CO1:	Understand the basic enzymatic tools used in recombinant DNA production.
CO2:	Understand the structure of various vectors.
CO3:	Provide basic knowledge on extraction, purification and sequencing of nucleic acids.
CO4:	Give the idea about various techniques involved in the construction of recombinants.
CO5:	Deal with the applications of recombinant products and its frame work on patenting.

FOOD AND INDUSTRIAL MICROBIOLOGY **SUBJECT CODE: U2MBC62**

In this course, the students will

CO1:	Describe the role of microorganisms in food and food borne diseases.
CO2:	Explain the various methods of food preservation.
CO3:	Give the knowledge on the basic design of fermentor and its types.

CO4:	Describe industrially important and application of microorganism in the production of fermented foods.
CO5:	Gain awareness on the food adulteration and detection of adulterants.

BIOINFORMATICS **SUBJECT CODE: U2MBC63**

In this course, the students will

CO1:	Give the basic idea about bioinformatics and types of database.
CO2:	Elaborate the nucleotide sequence and genomic database. (TIGR)
CO3:	Explain the various database of protein such as PDB SWISS PORT etc.
CO4:	Give the basic idea about the sequence alignment methods using BLAST aid FASTA and metabolic database such as KEGG etc.
CO5:	Describe the methods, application of multiple sequence alignment and phylogentic analysis.

LAB: RECOMBINANT DNA TECHNOLOGY, FOOD AND INDUSTRIAL MICROBIOLOGY **SUBJECT CODE: U2MBC6P**

In this course, the students will

CO1:	To expose the students to various emerging areas of Microbiology.
CO2:	To expose the students to different processes used in food industries and in research field.
CO3:	Learning the industrial aspects and techniques such as DNA isolation, screening of microbial pathogens in food and microbial fermented foods.

APPLIED ECOLOGY **SUBJECT CODE: U2MBA61**

In this course, the students will

CO1:	Develop the knowledge of ecosystem and their components.
CO2:	Help the students to identify and solve the problem of environmental crisis.
CO3:	Create the awareness about the environmental problems and their causes.
CO4:	Enlighten the students about the population ecology.
CO5:	Know about environmental problems with examples.

LAB IN BIOLOGY **SUBJECT CODE: U2MBA6P**

In this course, the students will

CO1:	Identify cell inclusions for different plant part.
CO2:	Develop the basic skills of plant section and dissection of flower.
CO3:	Estimate oxygen, salinity and alkalinity of the various water sample.
CO4:	Develop the basic skills of mitosis and meiosis.

MICROBIAL NANOTECHNOLOGY **SUBJECT CODE: U2MBS61**

In this course, the students will

CO1:	Know the basics knowledge of nanotechnology and various disciplines.
CO2:	Develop the knowledge of nanotechnology in bacteria and fungi and also learn the techniques of various analytical instruments.
CO3:	Enlighten the students about the biosensors.
CO4:	Understand the application of Nano-biotechnology in medicine.
CO5:	Learn about the application of nanotechnology in food industry.

PHARMACEUTICAL MICROBIOLOGY **SUBJECT CODE: U2MBS62**

In this course, the students will

CO1:	Understand the drug actions on microorganisms.
CO2:	Understand the concept of regulatory affairs of microorganisms in pharmacology.
CO3:	Gain student knowledge in the aspect of mechanisms of pharmacological agents on infectious microorganisms.
CO4:	Know the microbial spoilage of pharmaceutical products.
CO5:	Introduce to patents on drugs and quality evaluation.

APPLIED MICROBIOLOGY **SUBJECT CODE: U3MBN61**

In this course, the students will

CO1:	Deals with the importance of microbes in the agriculture.
CO2:	Introduces concepts, theories and important inventions of agricultural microbiology.
CO3:	Gives the information about the food production, preservation and storage of various food products such as milk products.
CO4:	Gives the information about the milk product production.
CO5:	Makes a clear knowledge about the normal and disease causing microorganisms in human body.

I M. Sc. MICROBIOLOGY

GENERAL MICROBIOLOGY AND MICROBIAL DIVERSITY SUBJECT CODE: P3MBC11

In this course, the students will

CO1:	Gain knowledge on the history, classification and structure of microorganisms.
CO2:	Explain the basic principle and applications of microscope.
CO3:	Understand the microbial taxonomy.
CO4:	Gain information about virus, algal, fungal and algal classification.

BIOCHEMISTRY SUBJECT CODE: P3MBC12

In this course, the students will

CO1:	To describe the various energy concepts their kinetic properties.
CO2:	Gain a wide knowledge about the structure and metabolism of carbohydrates.
CO3:	Make awareness on protein structure, classification, synthesis and breakdown into amino acids.
CO4:	Acquire knowledge in the classification, properties and metabolism of lipids.
CO5:	To explain the structure and functions of nucleic acids and describe the dietary source, daily requirements, & deficiency of vitamins.

MICROBIAL PHYSIOLOGY SUBJECT CODE: P3MBC13

In this course, the students will

CO1:	Focus the types of nutrients and its transport to the microorganisms.
CO2:	Explain the various methods of microbial culture and the influence of various environmental parameters on microbial growth.

CO3:	Explain photosynthetic mechanisms, the pigment system and adaptation of microorganisms to the unfavorable environment.
CO4:	Deal with the microbial metabolism, ionic utilization, cell wall formation and their reproductive methods.
CO5:	Deal with the microbial metabolism, ionic utilization, cell wall formation and their reproductive methods.

LAB: GENERAL MICROBIOLOGY & MICROBIAL DIVERSITY SUBJECT CODE: P3MBP11

In this course, the students will

CO1:	Understand pure culture techniques, microbial observation and biochemical test to identify the organisms.
CO2:	Acquire knowledge in isolation of thermophiles, cyanobacteria, halophiles and actinomycetes.
CO3:	Interpret the knowledge on identifying the new entities.

LAB: MICROBIAL BIOCHEMISTRY & MICROBIAL PHYSIOLOGY

SUBJECT CODE: P3MBP12

In this course, the students will

CO1:	Enable the students to estimate the biomolecules and measurement of bacterial growth and its effect on pH, temperature and osmotic pressure.

FOOD MICROBIOLOGY, FOOD SAFETY AND QUALITY MANAGEMENT

SUBJECT CODE: P3MBE1

In this course, the students will

CO1:	Provide the broad knowledge of industrial productions.
CO2:	Maintain the food safety at the national, regional and international levels.
CO3:	Understand the principles and framework of food safety through the HACCP.
CO4:	Understand the concept of good manufacturing practice.
CO5:	Maintained case study on HACCP and record keeping procedure.

IMMUNOLOGY **SUBJECT CODE: P3MBC21**

In this course, the students will

CO1:	Give an overview on the importance of cells and lymphoid organs on generation of the immune response.
CO2:	Understand the structure and biological activities of different classes of immunoglobulins.
CO3:	Interpret the outcome of experiments that involve the use of various laboratory techniques in immunology.
CO4:	Understand the concept of immune based diseases as either a deficiency of components or excess activity as hypersensitivity.
CO5:	Define the current approaches and future strategies to immunoprophylaxis and immunotherapy of immune mediated and nonimmune mediated disease.

MEDICAL MICROBIOLOGY **SUBJECT CODE: P3MBC22**

In this course, the students will

CO1:	Introduce the normal and pathogenic microbiota in the human system with its sources

CO2:	Deal with the general characteristics
CO3:	Describe general characteristics
CO4:	Explain the general characteristics
CO5:	Focus on the various sources of sample collection

MOLECULAR BIOLOGY AND MICROBIAL GENETICS **SUBJECT CODE: P3MBC23**

In this course, the students will

CO1:	Give the brief knowledge on nucleic acid and DNA replication process.
CO2:	Understand the theory and mechanism of recombination and gains knowledge on transposable elements.
CO3:	Delineate the process of DNA translation and transcription.
CO4:	Describe the types and origin of gene mutation.
CO5:	Understand the basic principle of gene transfer mechanism for produce transformed cells.

LAB: MEDICAL MICROBIOLOGY AND IMMUNOLOGY **SUBJECT CODE: P3MBP21**

In this course, the students will

CO1:	Provide the opportunity to diagnose the human diseases and the application of drugs in optimal level against the human pathogens.
CO2:	Give the broad knowledge to detect the blood antigens, disease causing agents and immunological reactions in the serum of human body.

LAB: MOLECULAR BIOLOGY AND MICROBIAL GENETICS SUBJECT CODE: P3MBP22

In this course, the students will

CO1:	Understand the principle of replica plating, gradient plate and other isolation procedures.
CO2:	Give training on the production of transformation and UV mutant organism.

PERSONAL HEALTH AND HYGIENE SUBJECT CODE: P3MBN2

In this course, the students will

CO1:	Make the students understand the epidemiology and community health.
CO2:	Acquire knowledge about the onset of disease and its interactions.
CO3:	Have an idea about the types of diseases and its prevention.
CO4:	Gain knowledge about immune responses to the diseases.
CO5:	Discuss about the mechanism of antimicrobial agents against the diseases.

II M. Sc. MICROBIOLOGY

ENVIRONMENTAL & AGRICULTURAL MICROBIOLOGY SUBJECT CODE: P2MBC31

In this course, the students will

CO1:	Provide knowledge on soil microflora and microbial interactions.
CO2:	Acquire knowledge about biogeochemical cycle, nitrogen fixation and microbes in waste water treatment.
CO3:	Give the basic knowledge about pollution types and its effects.
CO4:	Describe the role of microbes for sustainable agriculture.
CO5:	Elaborate the study on plant pathogens.

GENETIC ENGINEERING **SUBJECT CODE: P2MBC32**

In this course, the students will

CO1:	Describe the general principle and role of enzymes in molecular biology.
CO2:	Gain the knowledge on various vector systems involved in gene cloning.
CO3:	Describe the various gene transfer technique in animal cell.
CO4:	Analyse the plant gene transfer techniques.
CO5:	Explain the application of recombinant DNA technology.

FERMENTATION TECHNOLOGY **SUBJECT CODE: P2MBC33**

In this course, the students will

CO1:	Understand the basic principles of fermentation process, industrially important microorganism, screening, cultivation and their maintenance.
CO2:	Describe various types of fermentor and fermentation process.
CO3:	Learn about the fermentation kinetics and fermentation protocols.
CO4:	Describe downstream processing.
CO5:	Under the applications of fermentation technology.

LAB:ENVIRONMENTAL, AGRICULTURAL MICROBIOLOGY AND FERMENTATION TECHNOLOGY **SUBJECT CODE: P2MBC3P1**

In this course, the students will

CO1:	Focuses the increasing demand for training manpower in the area of Environmental and Agricultural Microbiology.
CO2:	Understand the manufacturing processes of fermented foods.
CO3:	Provide knowledge about the quality analysis of food and water.
CO4:	Give knowledge about the plant growth promoting microorganisms.

LAB: GENETIC ENGINEERING **SUBJECT CODE: P2MBC3P2**

In this course, the students will

CO1:	Get hands on training in the isolation, separation and transformation of bacterial DNA.
CO2:	Develop skill on operating PCR instrument for getting future opportunities.

BIOINFORMATICS **SUBJECT CODE: P2MBE3**

In this course, the students will

CO1:	Understand the basics of Computer and Internet search engines.
CO2:	Gain knowledge about major Biological Databases.
CO3:	Study about the Bioinformatic tools on Biomolecules.
CO4:	Understand the Gene sequencing methods.
CO5:	Acquire knowledge in Phylogenetic analysis and Construction of Phylogenetic tree.

MICROBIOLOGY OF WATER **SUBJECT CODE: P1MBSL1**

In this course, the students will

CO1:	Acquire knowledge about the safety and quality of drinking water.
CO2:	Study about the source of water contamination and waterborne diseases.
CO3:	Analyze the Pathogenesis and Treatment of waterborne infections.
CO4:	Study the methods to prevent water contamination.
CO5:	Study the techniques to diagnose waterborne pathogens.

RESEARCH METHODOLOGY **SUBJECT CODE: P2MBC4**

In this course, the students will

CO1:	Understand the concept of research and interpret the results in Thesis writing.
CO2:	Gain knowledge on principle and applications of separation techniques.

CO3:	Learn the applications of advanced molecular based techniques.
CO4:	Gain the knowledge on the methods of Biostatistics.
CO5:	Create awareness on the concept of biosafety and Intellectual property rights.

MICROBIAL NANOTECHNOLOGY **SUBJECT CODE: P2MBE4**

In this course, the students will

CO1:	Understand the fundamentals, synthesis and characterization techniques involved in nanotechnology.
CO2:	Give general introduction of different classes of nanomaterials and their role in medicine.
CO3:	Give the potential uses of biosensors in today world.
CO4:	Understand the importance of nanofabricated materials in drug delivery.
CO5:	Make the learner familiarize with nanotechnology potentialities day today life.

Project & Viva-voce **SUBJECT CODE: P1MB4PV**

In this course, the students will

CO1:	Enable the students to get the knowledge on pursuing research through experimental Biostatisticial methods and computational areas of the subject.

M. Phil. MICROBIOLOGY

RESEARCH METHODOLOGY (Paper-I) **SUBJECT CODE: M1MBC11**

In this course, the students will

CO1:	Make the students to disseminate new knowledge and technologies concern with biological instruments
CO2:	Develop the concepts and skills required to understand and critically evaluate research data
CO3:	To understand research data and articles that address the biostatistics
CO4:	To apply the research design, writing and biostatistics concept to interpret the data
CO5:	Discuss the Principles, data representation and measures of central tendency and dispersion

MICROBIAL BIOTECHNOLOGY & BIOINFORMATICS **SUBJECT CODE: M2MBC12**

In this course, the students will

CO1:	To provide information on role of microorganisms in industrial fermentation processes
CO2:	To empower the students with various designs of fermentor
CO3:	Industrial fermentation process enable the students to manipulate microbes for improvement
CO4:	To perform the bioinformatics laboratory procedures and to have a familiarity with recent advances in research in genomics
CO5:	To perform the sequence analysis, crustal analysis and phylogenetic analysis

RECOMBINANT DNA TECHNOLOGY & NANOTECHNOLOGY SUBJECT CODE: M2MBE11

In this course, the students will

CO1:	To gain information on tools involved in genetic manipulation and genetic engineering of micro organisms.
CO2:	To improve the knowledge on recombinant DNA technology

CO3:	To know the applications in advanced molecular genomics research. .
CO4:	To perform the DNA Sequencing procedures and to have a familiarity with recent advances in research in Human Genome Project.
CO5:	To develop an awareness of the importance of nanotechnology and applications of nano-materials in biological research

DISSERTATION & VIVA VOCE **SUBJECT CODE: M1MB2PV**

In this course, the students will

CO1:	Comparative case study research provides useful methods for identifying the factors facilitating and impeding improvement
CO2:	Read magazines, journals and books related to your subject to pick up the jargon, trends, leads and ideas
CO3:	Valuable in their own right, such methods also offer the opportunity to enrich more traditional approaches to assessing interventions.
CO4:	Double-checking with an authority is the safest and quickest way to get information, and it will save work later
CO5:	Study every relevant website you can find. You may have some intense reading to do the night before a big interview