Course	Expected outcome
MCBACOR03T (BIOCHEMISTRY)	Introducing with amino acids and proteins. Explaining the marvels of protein structures.
MCBACOR10T (FOOD AND DAIRY MICROBIOLOGY)	Giving a detailed idea of food spoilage Explaining the different ways offood preservation Sharing the information about the microorganisms responsible for food spoilage.
MCBACOR13T (MEDICAL MICROBIOLOGY)	Explaining the ways of sample collection for diagnostic purposes. Explaining the diverse ways how bacteria cause diseases, the preventive measures and prophylaxis and symptoms of the diseases.
MCBADSE 06T (INSTRUMENTATION AND BIOTECHNIQUES)	Explaining the principles of chromatography. Introducing with the different types of chromatography. Introducing with the principles of electrophoresis. Detailing the protocol and principle of SDS-PAGE
MCBACOR 03P (BIOCHEMISTRY)	Teaching the kinetics of enzymes. Explaining the concept of activity and specific activity of enzymes. Demonstrating the effect of pH, temperature on enzyme activity. Showing how heavy metal ions inhibit enzyme activity.
MCBACOR 10P (FOOD AND DAIRY)	Showing the technique of assessing the microbiological quality of milk. Demonstrating the way to check the efficiency of the process of pasteurization.
MCBACOR14P (RECOMBINANT DNA TECHNOLOGY (PRACTICAL)	Showing the miracles of cellular transformation Introducing with the concept of artificially-induced competence of bacteria.
MCBADSE 06P (INSTRUMENTATION AND BIOTECHNIQUES)	Introducing with uses of the method of centrifugation. Demonstrating the method of thin layer chromatography.
MCBSSEC002 (MICROBIOLOGICAL ANALYSIS OF AIR AND WATER)	Introducing with the different measures to control the pathogens.

Course	Expected outcome
MCBACOR06T	Development of insight into the cell cycle. Getting an idea about the regulation of cell cycle.
MCBADSE06T	Introducing with the principles of microscopy Giving an idea about the electron microscopy and confocal

	microscopy. Getting the knowledge of the principles of centrifugation. Getting to know about ultracentrifugation.
MCBACOR04P	Introducing with the method of measuring the BOD of a water sample.
MCBADSE06P	Giving a detailed idea of PAGE. Introducing with the concept of extinction coefficient. Giving an idea of the method to separate proteins.

Course	Expected outcome
MCBACOR03T BIOCHEMISTRY (THEORY)	• Development of insight into the world of enzymes. • Understanding their structures, functions and their importance in biological reactions. • Understanding the difference between a chemical catalyst and biocatalyst and the concept of activation energy. • Getting an idea about the cofactors. • Introduction to the principles of enzyme kinetics. • Acquiring knowledge on enzyme regulation.
MCBACOR14T RECOMBINANT DNA TECHNOLOGY (THEORY)	• Introducing with the principles of recombinant DNA technology. • Giving an idea about the miracles of cloning. • Acquiring basic knowledge on DNA manipulation in prokaryotes and eukaryotes using restriction and modification enzymes. • Getting acquainted with the use of cloning and expression vectors. • Understanding the creation of genomic and c-DNA libraries and their applications.

Course	Expected outcome
MCBACOR04T (ENVIRONMENTAL MICROBIOLOGY)	Explaining the different habitats of the microbes. Explaining the Nitrogen cycle and nitrogen fixation.
MCBACOR 08T (MICROBIAL GENETICS)	Giving a detailed idea of genome organization of bacteria Explaining the mechanisms of DNA mutation and repair Introducing with the plasmids Explaining the means of exchange of genetic material prevalent in the bacterial world. Sharing the information about the transposable elements.
MCBACOR13T (MEDICAL	Explaining the microflora of the human body and the host pathogen interactions

MICROBIOLOGY)	Explaining the diverse mechanisms of the modes of action of the antimicrobial agents and the mechanisms of drug resistance.
MCBADSE 04T (MICROBES IN SUSTAINABLE AGRICULTURE AND DEVELOPMENT)	Explaining the soil profile and showing that soil is a habitat for microorganisms. Explaining how diverse is the microbial activity that is occurring in soil. Introducing with biofertilizers and bioinsecticides.
MCBACOR 03P (BIOCHEMISTRY)	Teaching how to identify biomolecules. Demonstrating the formol titration to estimate amino acid in a solution.
MCBACOR 08P (MICROBIAL GENETICS)	Showing the technique of replica plating and showing that UV light is lethal for bacteria. Demonstrating the way to isolate plasmid DNA. Introducing with the process of conjugation.
MCBACOR14P (RECOMBINANT DNA TECHNOLOGY (PRACTICAL)	Showing the miracles of ligation and the restriction enzymes. Introducing with the concept of cloning. Showing how the restriction enzymes act.
MCBADSE 04P (MICROBES IN SUSTAINABLE AGRICULTURE AND DEVELOPMENT)	Showing the ways of nitrogen fixing and phosphate solubilizing bacteria from soil.

Course	Expected outcome
MCBACOR04T (ENVIRONMENTAL MICROBIOLOGY)	Giving an idea about the interactions that prevail in the microbial world. Getting a glimpse of the animal-microbe interaction.
MCBACOR10T (FOOD AND DAIRY MICROBIOLOGY)	Giving an insight about the variety of fermented foods. Disseminating the knowledge of the benefits of probiotics.
MCBACOR13T (MEDICAL MICROBIOLOGY)	Introducing with the protozoan pathogens and the diseases they cause. Making aware of the modes of transmission of those diseases and their control.
MCBADSE 04T (MICROBES IN SUSTAINABLE AGRICULTURE AND DEVELOPMENT)	Giving an idea of biofertilizers and biopesticides. Generating the interest in Agriculture biotechnology and genetically modified crops.
MCBADSE 04P	Demonstrating the ways of isolating the soil bacteria.

(MICROBES IN SUSTAINABLE AGRICULTURE AND DEVELOPMENT)	Showing the method of assaying soil dehydrogenase enzyme.
MCBSSEC002 (MICROBIOLOGICAL ANALYSIS OF AIR AND WATER)	Introducing with bioaerosols. Introducing with the air samplers. Showing the methods of microbiological analysis of air samples.

Course	Expected outcome
MCBACOR03T (BIOCHEMISTRY)	Development of insight into the principles of thermodynamics. Understanding the concept of free energy changes.
MCBACOR03T (BIOCHEMISTRY)	Familiarity with the structures and functions of carbohydrates.
MCBACOR03T (BIOCHEMISTRY)	Introduction to the lipids as important biomolecules.
MCBADSE06T (INSTRUMENTATION AND BIOTECHNIQUES)	Understanding of the principles of spectrophotometry.

Course	Expected outcome
MCBACOR04T (ENVIRONMENTAL MICROBIOLOGY)	Elucidating the concept of waste management. Elaborating the methods of sewage treatment and degradation of industrial effluents. Explaining the potentials of bacteria in bioremediation and their role in controlling environmental pollution.
MCBACOR 09T (VIROLOGY)	Giving a detailed idea about the nature of viruses. Introducing the interesting subject of phage genetics. Giving clear idea about the pathogenic virus and their detailed structure. Elaborating the modes of viral transmission and replication. Explaining the role of viruses in causing cancer. Generating the insight to fight out the viral diseases.
MCBACOR13T (MEDICAL MICROBIOLOGY)	Explaining the viral diseases.

MCBACOR 14T (RECOMBINANT DNA TECHNOLOGY)	Elucidating the methods of molecular cloning and the ways to introduce DNA into cells. Teaching the techniques of Southern and Northern blotting. Introducing with the basics of PCR and DNA sequencing processes. Giving an idea about the modern day sequencing processes.
MCBACOR 04P (ENVIRONMENTAL MICROBIOLOGY)	Showing the methods of isolating bacteria and other microbes from soil.
MCBACOR 09P (VIROLOGY)	Showing the ways to isolate and enumerate bacteriophages.
MCBADSE13P (MEDICAL MICROBIOLOGY)	Demonstrating the exciting biochemical tests to identify pathogens. Showing the method of determination of MIC of an antimicrobial agent.

Course	Expected outcome
MCBACOR01T (INTRODUCTION TO MICROBIOLOGY AND MICROBIAL DIVERSITY)	Introducing with the subject of Microbiology. Helping to grow a special interest for the subject. Creating an interest for knowing the discoveries of the scientists and the impact of those discoveries on mankind.
MCBACOR02T (BACTERIOLOGY)	Showing the diversity in the bacterial world.
MCBACOR04T (ENVIRONMENTAL MICROBIOLOGY)	Giving an idea of the quality of water samples and the concept of water potability.
MCBACOR06T (CELL BIOLOGY)	Giving an idea about the intricate functions of the cell organelles. Introducing with the modes of transport at the cellular level.
MCBACOR10T (FOOD AND DAIRY MICROBIOLOGY)	Giving an insight of the reasons behind food spoilage. Generating awareness about food sanitation.
MCBADSE03T (INHERITANCE BIOLOGY)	Introducing into the world of genetics. Helping to appreciate the beauty of Mendelian genetics. Giving an idea about human genetics.
MCBACOR13T (MEDICAL MICROBIOLOGY)	Introducing with the fungal pathogens and the diseases they cause. Making aware of the modes of transmission of fungal diseases and their control.
MCBACOR13P (MEDICAL MICROBIOLOGY)	Giving an idea of the antibacterial sensitivity tests.

MCBSSEC002 (MICROBIOLOGICAL ANALYSIS OF AIR AND WATER)	Showing the methods of microbiological analysis of water samples.