

**D.N.R College (A): Bhimavaram, W.G. Dist. A.P**  
**(A College with Potential for Excellence)**  
**P.G. DEPARTMENT OF MICROBIOLOGY**  
**M.Sc. Course Objectives**

Semester I	Paper Code	Paper Name	Course Objective
	MB-101	General Microbiology	This course presents the study of Micro organisms. To make the student to understand Micro organisms and their participation in day to day activities. On successful completion of the subject the student should have understood the Role of microorganisms in the diversity.
	MB-102	Bacteriology and Virology	To inculcate knowledge about bacteria & virus, their role in causing disease.
	MB-103	Biomolecules	This course presents the chemical reactions or metabolic functions in the living system and their regulations. To make the student to understand the concept of biochemical regulations Objectives, On successful completion of the subject the student should have understood Basic Structure and metabolism of Biomolecules.
	MB-104	Analytical Techniques	Enable the student to

			get sufficient knowledge in principles and applications of bio instruments.
Semester II	MB-201	Microbial Physiology & Metabolism	Enable the student with concepts of Microbial Physiology & Metabolisms takes place in microbes
	MB-202	Cell Biology & Enzymology	Enable the student to study enzymology for diagnostic and research tools in the specificity that they exhibit relative to the reactions they catalyze and understood the concept of cell and their activities
	MB-203	Molecular & Microbial Genetics	On Successful Completion of this subject the students should have a sound knowledge about the genetics of microbes
	MB-204	Immunology	This course presents the basic defense mechanism of animals. To make the student to understood the concept immunology. On successful completion of the subject the student should have understood: Immunity, Antigen, Antibody, Cells of immune system and their function and regulations
Semester III	MB-301	Molecular Microbiology	Enable the students to know about

			microorganism at molecular level.
	MB-302	Genetic Engineering	Enable the student to know microbes involved in recombinant DNA Technology
	MB-303	Bioinformatics, Microbial Genomics & Proteomics	Enable the student involving sequence data management and drug design occurred at a speedy rate due to development of bioinformatics and study of microbes based genomics & proteomics
	MB-304	Medical Microbiology	To inculcate knowledge in relationship between human disease and micro organisms, pathogenicity, laboratory diagnosis and treatment methods.
Semester IV	MB-401	Fermentation Technology & Industrial Microbiology	Enable the student to know the harvesting of microbial cells & production of microbial metabolites.
	MB-402	Environmental Microbiology	To inculcate knowledge in role of micro organisms in eco system
	MB-403	Food & Agricultural Microbiology	Enable the student to get sufficient knowledge in relationship between food and microbes, techniques used in food processing and impact created by microbes in agricultural development.

	MB-404	Biostatistics & Research Methodology	Biostatistics is the application of statistics to a wide range of topics in biology To discuss what a “researchable problem” is and to describe how a research problem
--	--------	--------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------