VSR GOVERNMENT DEGREE AND PG COLLEGE MOVVA DEPARTMENT OF BIOTECHNOLOGY

СО	COURSE OUTCOMES
	I SEMESTER
	Bio-molecules & Analytical Techniques
CO1	To ensure students gain knowledge about the structure, properties and functions of biomolecules
CO2	To ensure students gain knowledge about the characterization of biomolecules using analytical techniques like centrifugation and electrophoresis
CO3	To gain knowledge on spectroscopy techniques
CO4	To acquaint student with the knowledge on Biostatistics
	II SEMESTER
	Microbiology, Cell & Molecular Biology
CO1	This course is aimed to give an understanding of the basics of microbiology, dealing types of microbes, classification and their characterization
CO2	To gain knowledge on structure and function of prokaryotic and eukaryotic cell organelles, cell division
CO3	To gain knowledge on basics of molecular biology including DNA replication, transcription, translation
CO4	To acquaint students with concepts of regulation of gene expression
	III SEMESTER
	Immunology & r-DNA technology
CO1	This course is aimed to give an understanding of the basics of immunology dealing cells and organs of the immune system,
CO2	To acquaint students with concepts of types of immune responses, antigen-antibody interactions, vaccines
CO3	To acquaint students with concepts of tools, techniques and strategies
CO4	To acquaint students with concepts of applications of genetic engineering.
	IV SEMESTER
	Plant and Animal Biotechnology
CO1	The objectives of this course are to introduce students to the principles, practices and application of plant biotechnology, plant tissue culture.
CO2	The objectives of this course are to introduce students to the principles, practices and application of animal biotechnology, and animal genomics
CO3	To acquaint students with concepts of genetic transformation and production of transgenic plants and animals.
CO4	To acquaint students with concepts of intellectual property rights and biosafety issues
	Environmental & Industrial Biotechnology
CO1	This course aims to introduce fundamentals of Environmental Biotechnology.

CO2	The course will also give an insight in introducing major groups of microorganisms and their industrial applications
CO3	To acquaint students with concepts of basic principles of microbial technology
CO4	To acquaint students with concepts of production of commercially important microbial products
	V SEMESTER
	Semester full internship
	VI SEMESTER
	Organic Farming
CO1	To understand the soil profile and nutrients insoil
CO2	To appreciate the importance of organic manure and biofertilizers
CO3	To produce vermi compost, farmyard manure from biowaste
CO4	To acquire skill on isolation and maintenance of Biofertilizers
	Bio fertilizers and Bio pesticides production
CO1	To Understand the importance of bio fertilizers for sustainableagriculture.
CO2	To Appreciate the role of VAM in solubilisation
CO3	To Define bio pesticide and itsnature
CO4	To Produce bio fertilizers and bio pesticides on largescale
CO5	To Able to prepare inoculums for fieldapplication