

M.Sc. APPLIED MICROBIOLOGY

(Year of Establishment- 1996)

Choice Based Credit System (CBCS)

(Effective from the academic year 2013-2014)

ELIGIBILITY FOR ADMISSION:

The Candidate shall be admitted to the course provided he/she has passed a Bachelor's Degree in Science in Microbiology, Zoology, Botany, Chemistry, Biology, Life Science, Bio-Chemistry, Home Science, Nutrition and Dietetics, B.S.M.S [OR] B.A.M.S [OR] B.U.M.S of this University or of any other University recognized by the Syndicate as equivalent thereto.

SEMESTER I

Course Component	Name of the Paper	Subject Code	Inst. Hrs.	Credits	Exam Hrs.	Max. Marks		
						External Marks	Internal Marks	Total
Core paper I	Microbial Taxonomy	MDT1A	5	4	3	75	25	100
Core paper II	General microbiology and laboratory	MDT1B	5	4	3	75	25	100
Core paper III	Immunology	MDT1C	5	4	3	75	25	100
Core paper IV	Practical I (General microbiology, Physiology and Immunology)	MDT11	6	4	3	60	40	100
Elective I	Metabolic Pathways	MDTAA	4	3	3	75	25	100
Elective II	Microbial Diversity	MDTAB	4	3	3	75	25	100
Soft Skill-I	Essentials of Language & Communication Skills	PSSEA	1	2	3	60	40	100

SEMESTER II

Course Component	Name of the Paper	Subject Code	Inst. Hrs.	Credits	Exam Hrs.	Max. Marks		
						External Marks	Internal Marks	Total
Core paper V	Virology	MDT2A	5	4	3	75	25	100
Core paper VI	Systematic Medical Bacteriology	MDT2B	5	4	3	75	25	100
Core paper VII	Mycology and Parasitology	MDT2C	5	4	3	75	25	100
Core paper VIII	Practical II (Systematic Medical Bacteriology, Mycology, Parasitology and Virology)	MDT21	6	4	6	60	40	100
Elective III	Industrial and Pharmaceutical Microbiology	MDTAC	4	3	3	75	25	100
Extra Disciplinary Elective I	Biostatistics and Bioinformatics	MDTBA	4	3	3	75	25	100
Soft Skill-II	Essential of spoken & communication skills	PSSEB	1	2	3	60	40	100

SEMESTER III

Course Component	Name of the Paper	Subject Code	Inst. Hrs.	Credits	Exam Hrs.	Max. Marks		
						External Marks	Internal Marks	Total
Core paper IX	Microbial Genetics	MDT3A	5	4	3	75	25	100
Core paper X	Genetic Engineering	MDT3B	5	4	3	75	25	100
Core paper XI	Molecular Biology	MDT3C	5	4	3	75	25	100
Core paper XII	Practical III(Microbial Genetics, Molecular Biology and Genetic Engineering)	MDT31	6	4	6	60	40	100

Elective IV	Soil and Agricultural Microbiology	MDTAD	4	3	3	75	25	100
Extra Disciplinary Elective II	Environmental Biotechnology	MDTB	4	3	3	75	25	100
Internship				2				
Soft Skill-III	Life & Managerial Skills	PSSEC	1	2	3	60	40	100

** Internship will be carried out during the summer vacation of the first year and marks should be sent to the University by the College and the same will be included in the III Semester Marks Statement.

SEMESTER IV

Course Component	Name of the Paper	Subject Code	Inst. Hrs.	Credits	Exam Hrs.	Max. Marks		
						External Marks	Internal Marks	Total
Core paper XIII	Food, dairy and Environmental Microbiology	MDT4A	5	4	3	75	25	100
Core paper XIV	Practical – IV Soil, Agricultural, Food and Environmental Microbiology	MDT41	6	4	6	60	40	100
Core paper XV	Project	MDT4Q	14	4	3	80	20	100
Elective v	Research Methodology	MDTAE	4	3	3	75	25	100
Soft Skill-IV	Computing Skills	PSSSED	1	2	3	60	40	100