

M.Sc (H.S.) 1st Year in MICROBIOLOGY FIRST SEMESTER

MMIC C-1: ADVANCES IN MICROBIAL ECOLOGY

The designed syllabus make students aware of the microbial interactions with environment including their natural habitat and adaptations, the fundamental processes of extreme thermophiles along with their stress resistance mechanism. Also, the course make student aware of the application of various molecular techniques to study microbial ecology and effect of various biotechnological processes on microbes.

MMIC C-2: PATHOGENESIS OF INFECTIOUS DISEASES

The course contents make students understand the disease process associated with various group of microorganisms collectively based on signs and symptomatology.

MMIC C-3: NEWER APPROACHES IN DIAGNOSTIC MICROBIOLOGY

The course apprises the students about various new approaches being used in the diagnosis of various diseases.

MMIC C-4: COMBINED PRACTICAL-1

This course makes the students to perform the practicals pertaining to the courses MMIC C-1, MMIC C-2 and MMIC C-3.

M.Sc (H.S.) 1st Year in MICROBIOLOGY SECOND SEMESTER

MMIC C-5: FERMENTATION TECHNOLOGY

This course provides student the fundamentals of fermentation technology and microbial process development for the production and recovery of various value-added products including the industrial chemicals, whole cells, bio-fuels, metabolites for use in food and medical industry.

MMIC C-6: ADVANCES IN MOLECULAR BIOLOGY & BIOTECHNOLOGY

The course apprises the students with advanced techniques and applications of Molecular Biology and recombinant DNA Technology. It helps students in further design research in this area.

MMIC C-7: ADVACNES IN IMMUNOPROPHYLAXIS AND IMMUNOTHERAPY OF INFECTIONS

The course gives insight into therapeutic and prophylactic measures of various human and animal diseases.

MMIC C-8: COMBINED PRACTICAL-2

The course makes the students to perform the practicals pertaining to the courses MMIC C-5, MMIC C-6 and MMIC C-7.

M.Sc (H.S.) 2nd Year in MICROBIOLOGY THIRD SEMESTER

MMIC C-9: INTELLECTUAL PROPERTY RIGHTS, BIOSAFETY, BIOINFORMATICS AND BIOSTATISTICS

The course makes students learn about the legal, safety and public policy issues raised due to the rapid progress in Biotechnology and development of new products. They are also made aware with various tools of Bioinformatics and Biostatistics and their applications in biotechnology.

MMIC C-10: ADAVANCED TOPICS IN MICROBIOLOGY-I (SEMINAR)

The students assigned with various advanced topics in Microbiology and deliver seminars on these which enhances the overall presentation skills of the students.

MMIC C-11: ADAVANCED TOPICS IN MICROBIOLOGY-II (PAPER)

The students examined through a written test covering various advanced topics on which the students delivered seminars as part of MMI 5302, make student confident of their learning.

MMIC C-12: SUMMER TRAINING, PROJECT TRAINING REPORT & PRESENTATION

The students sent on 4-6 weeks summer training in various research institutes/ industries for on the spot training, and the submitted project report on the training gives student as exposure of professional aspect of the subject.

MMIC C-13: Research Work (Review)

The research work for thesis started from third semester and continued till the fourth semester. Gives students an exposure to the standards of the quality research and how to get published in peer reviewed journals.

M.Sc (H.S.) 2nd Year in MICROBIOLOGY FOURTH SEMESTER

MMIC C-14: JOURNAL CLUB

The student presented and discussed the recent papers published in the journals of repute made students develop the research and presentation ethics.

MMIC C-15: THESIS

The students submitted a thesis after undertaking a research in laboratory with Mentor makes student confident and non-hesitant to perform any experiment and deal with the instruments.

MMIC C-16: VIVA VOCE

The students gets the exposure to defend the thesis in front of the external examiner.