

MCB 412 MICROBIAL GENETICS (3 Units) (L 30: P 45)

Principles of genetic analysis. Plasmids and transposable genetic elements, mutagenesis and DNA repairs, bacteriophage genetics and genetics of Nitrogen fixation. Mechanism and nature of mutation, induction, isolation and characterization of mutants. Genetic recombination in prokaryotes including transformation, transduction, phage conversion and conjugation. Recent techniques in microbial genetics. Chemical coding and expression of genetic information. Fungal genetics. Principles and applications of genetic engineering.