UNIT 1: Recombinant DNA and Genetic Analysis
  Isolation, Purification and Estimation of Nucleic acids (Agarose gel electrophoresis)
  Manipulation of Nucleic acids-Basic tools and techniques (Vectors and Enzymes)
  Basic steps of Gene cloning

UNIT 2: Molecular Analysis of DNA
  Blotting techniques-Southern blotting
  Restriction mapping
  DNA sequencing- Sanger sequencing, Maxam & Gilbert sequencing

UNIT 3: Polymerase chain reaction and its applications
  Basic concepts and stages of the PCR
  Variations of PCR
  Applications of PCR
  PCR vs. Gene cloning

UNIT 4: Immunochemical techniques and its applications
  Immunoprecipitation, SRID, DRID
  Immunoassays - ELISA, RIA
  Immunoelectrophoresis- Rocket Immunoelectrophoresis
  Hybridoma technique