

SYLLABUS OF GENETIC ENGINEERING COURSES ON BIOLOGY STUDY PROGRAM

Description :

DNA Isolation and purification, Vector system, Restriction enzymes and ligation, Genetic engineering techniques : PCR and Electrophoresis, sequencing DNA and hybridization (southern blot, northern blot dan western blot), DNA library, Recombinant DNA : tranformation, selection and recombinant expression, shotgun cloning, PCR cloning, transposon mutagenesis, cDNA cloning, Genetic engineering on plant and animal, Transgenic product : Bioethics and controversy

References :

1. Alberts, B., Bray, D., Lewis, J., Raff, M., Roberts, K., Watson, J.D., 1989, Molecular Biology of The Cell, 2nd ed., Garland Publishing, Inc., New York.
2. Darnell, J., Lodish, H., Baltimore, D., 1990, Molecular Cell Biology, Scientific American Books, New York.
3. Freifelder, D., Malacinski, G.M., 1987, Essentials of Molecular Biology, John and Bartlett Publishers, London.