M.Sc. (Part-II) (Botany) Sem-IV

BOT-15.1 - Paper-XV: Molecular Biology & Plant Biotechnology (Special-I)

P. Pages: 1 GUG/S/19/2361 Time: Three Hours Max. Marks: 80 Notes: 1. All questions are compulsory and carry equal marks. Draw diagrams wherever necessary. 2. Describe comparative account of DNA replication in Eukaryote and Prokaryote. 16 1. OR Write notes on. 8 Protein synthesis Initiation process. Factors for DNA damage. 8 b) 2. Describe detail method of gene isolation. 16 OR Write notes on. C-DNA library. 8 a) Hybridization of DNA. 8 b) **3.** Describe PCR technique and its application in molecular biology. 16 OR Write notes on. Ligation. 8 a) Transfection. 8 b) 4. Define genomics and explain mechanism of genome analysis. 16 OR Write notes on. Distance – Matrix Alignment of proteins. 8 b) Application of hydrophobicity in protein stability. 8 5. Write short notes on. Termination of protein synthesis. 4 a) Antibodies as a probe for protein. b) Plasmid and Cosmid. c) Gene Mutation. d)
