

B.Sc. (CBCS Pattern) Sem-VI
USMBT-13 - Microbiology Paper-I : Recombinant DNA Technology

P. Pages : 1

Time : Three Hours



GUG/W/22/13333

Max. Marks : 50

-
1. Write about different DNA modifying enzyme. **10**
OR
- a) Write about types of restriction enzymes **2½**
 - b) Describe the features of cloning vectors. **2½**
 - c) Write about expression vector. **2½**
 - d) Explain PUC 18 vector. **2½**
2. Describe the Method of r – DNA transfer into host. **10**
OR
- a) Explain plasmid DNA isolation Method. **2½**
 - b) Write about homopolymer tailing. **2½**
 - c) Explain Blue – White selection **2½**
 - d) Explain insertional inactivation Method **2½**
3. Write in detail about principle, procedure and application of PCR. **10**
OR
- a) Explain Genomic library **2½**
 - b) What is proteomics? Explain its type. **2½**
 - c) Write about DNA Micro array. **2½**
 - d) Explain sanger’s method of DNA sequencing **2½**
4. What is monoclonal antibody? Describe hybridoma technology method. **10**
OR
- a) Write about gene therapy. **2½**
 - b) Describe the productions of hepatitis B vaccine. **2½**
 - c) Write about Molecular farming. **2½**
 - d) Explain the production of Bt – cotton. **2½**
5. Answer **any ten** (each carry one mark) **10**
- a) What is Shuttle Vector?
 - b) What is the role of polynucleotide kinase?
 - c) What is the source of Ti plasmid?
 - d) What is electroporation?
 - e) What is linker?
 - f) Which radioactive compound used for DNA labelling?
 - g) What is deoxynucleotide?
 - h) What is Metagenomics?
 - i) What is DNA chip?
 - j) What is GM food?
 - k) What is Somatic cell gene therapy?
 - l) What is DNA vaccine?
