

3rd semester M.Sc Degree examination, December 2009/January 2010
Biotechnology
BTP-303 : Genetic Engineering

Time: 3hours Max.Marks:80

SECTION A (5*3)

Write brief notes on any five of the following

1. MCS.
2. Ori.
3. Tra genes.
4. Poly A mRNA .
5. Phagemids .
6. Protein labelling.
7. Autofluorography .

SECTION B (4*5)

Answer any four of the following

8. Write the important characteristics of a vector used in rDNA technology.
9. Describe the pBR 322 vector.
10. Explain the screening of recombinant clones.
11. Outline the steps involved in the purification of plasmids.
12. Explain the DNA sequencing by Sangeres method.
13. Write a note on DNA microarray.

SECTION C (3*15)

Answer any three of the following

14. Explain in detail the construction of genomic DNA library.
15. Out line the steps involved in Random primer labelling and add a note on its advantages and disadvantages over non radio active labelling.
16. Discuss the gene gun method of transformation.
17. Describe the principle, protocol and applicants of western blotting technique.
18. What are shuttle vectors? Discuss yeast artificial chromosomal vectors.