Code No. : **9570**

FACULTY OF SCIENCE
M.Sc. IV Semester Examination, May/June 2012
MICROBIOLOGY
Paper – I : Molecular Biotechnology

Time : 3 Hours] [Max. Marks : 80

Note : *1) Answer **all** questions.*

*2) Section **A** questions carry **4** marks and Section **B** questions carry **12** marks.*

SECTION – A **(8×4=32 Marks)**

(Short Answer Types)

1. Enhancer elements
2. Promoters
3. Transposable elements
4. Types of plasmids
5. DNA Methylation
6. C-DNA Library
7. RFLP
8. Micro arrays.

SECTION – B **(12×4=48 Marks)**

(Essay Type)

9. a) What is signal transduction ? Explain clearly how it occurs.

OR

b) Briefly explain how gene regulation takes place in prokaryotes.

10. a) Explain how primers are designed with a note on applications of PCR technology.

OR

b) Describe the plasmid transfer mechanism.

11. a) Clearly explain about various enzymes involved in genetic engineering.

OR

b) Describe the principles of hybridoma technology with a note on its application.

12. a) What are plasmids ? Write an account on IPR.

OR

b) Define "Bioinformatics" and explain datamining of sequence data bases.
