

FACULTY OF SCIENCE

M.Sc. III Semester Examination, May/June 2012

MICROBIOLOGY

Paper I

(Molecular Biology & Microbial Genetics)

Time : 3 Hours]

[Max. Marks : 80

Answer **all** questions.

Section A – (Marks: 8 × 4 = 32)

1. Selfish DNA
2. Eukaryotic telomers
3. Concept of Ribozyme
4. wobble hypothesis
5. Introns
6. Exons
7. Hfr Strains
8. Linkage mapping.

Section B - (Marks: 4 × 12 = 48)

9. (a) Describe the Semiconservative and conservative mechanism of DNA replication the E.coli.
Or
(b) Explain briefly the genome organisation in prokaryotes.
 10. (a) Describe how translation occurs in prokaryotes.
Or
(b) Explain briefly t-RNA structure and its biosynuer.
 11. (a) Describe DNA damage and its repair mechanisms.
Or
(b) Clearly explain the site directed mutagenesis.
 12. (a) Describe generalised and specialised transduetion.
Or
(b) Explain how transformation occurs in bacteria.
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