



1212-09-471006

Code No. : 8084

FACULTY OF SCIENCE  
B.Sc. III Year Examination, March/April 2012  
BIOCHEMISTRY  
(Paper – IV) Microbiology and Molecular Biology

Time: 3 Hours]

[Max. Marks: 100

SECTION – A

Note : Answer any eight of the following :

(8x5=40 Marks)

1. Minimal media
2. Synchronous culture.
3. Prions
4. Topoisomerase
5. Prokaryotic RNA Polymerase
6. mRNA cap
7. rRNA
8. Codon degeneracy
9. Repressor
10. Nuclease S1
11. RNase H
12. Cosmid.

SECTION – B

Answer all questions:

(4x15=60 Marks)

13. a) Industrial uses of yeast.

OR

b) Industrial uses of *Aspergillus niger*.

14. a) Describe Rolling circle model of DNA replication.

OR

b) Proof for Semiconservative mode of DNA replication.

15. a) Maturation of mRNA in Eukaryotes.

OR

b) Inhibitors of RNA Synthesis.

16. a) Distinguish Maxim-Gilbert from methods of Sanger DNA Sequencing.

OR

b) Distinguish cDNA from genomic cloning.

(This paper contains 1 page)