



K22U 1568

Reg. No. : .....

Name : .....

IV Semester B.Sc. Degree CBCSS (OBE) Regular/Supplementary/  
Improvement Examination, April 2022  
(2019 Admission Onwards)

GENERAL AWARENESS COURSE IN MICROBIOLOGY  
4A13MCB : Molecular Biology

Time : 3 Hours

Max. Marks : 40

PART – A

Answer **all** questions. **Each** question carries 1 mark.

(1×6=6)

1. Nucleotide
2. Origin of replication
3. RNA as primer for DNA replication
4. Reverse transcriptase
5. Polysomes
6. Beta galactosidase.

PART – B

Answer **any 6** questions. **Each** question carries 2 marks.

(2×6=12)

7. Nucleosome
8. Structure of DNA
9. Semi-conservative mode of DNA replication
10. Site specific recombination
11. RNA processing

P.T.O.

K22U 1568



12. Wobble hypothesis
13. Attenuation in tryptophan operon
14. Gene regulation by recombination.

PART – C

Answer **any 4** questions. **Each** question carries **3** marks.

(3×4=12)

15. Enzymes and accessory proteins involved in DNA replication.
16. Holiday Junction model for DNA recombination.
17. Rolling circle mode of replication and theta mode of replication.
18. Different types of RNA.
19. Post translational modifications.
20. Features of Genetic Code.

PART – D

Answer **any 2** questions. **Each** question carries **5** marks.

(5×2=10)

21. Experimental evidence for DNA as the genetic material.
  22. Transcription in prokaryotes and eukaryotes.
  23. Translation in prokaryotes and eukaryotes.
  24. Explain operon concept and regulation of gene expressions in prokaryotes.
-