

Exam. Code : 107402

Subject Code : 2278

B.Sc. (Biotechnology) 2nd Semester

GENERAL MICROBIOLOGY-B

Paper-BT-8

Time Allowed—3 Hours]

[Maximum Marks—40

Note : – Attempt as per directed.

SECTION-A

(All questions are compulsory)

1×8=8

1. Define and explain the following :

- (i) Diauxic growth
- (ii) Sporulation
- (iii) Name two plant viruses
- (iv) Name two animal viruses
- (v) Pathogenicity
- (vi) Toxigenicity
- (vii) Fermentation
- (viii) Bioprocess.

SECTION-B

(Attempt any five questions)

5×4=20

2. Design an experiment to achieve diauxic growth.

- 3. Diagrammatically explain the sporulation of bacteria.
- 4. Classify the viruses based on transcription.
- 5. Discuss and explain the replication processes of herpes simplex.
- 6. Discuss and explain the natural resistance mechanism against microorganisms.
- 7. Discuss and explain non specific defence mechanisms.
- 8. Discuss the TCA cycle.
- 9. Discuss the ETC.

SECTION-C

(Attempt any two questions)

6×2=12

- 10. Discuss and explain the regeneration process of bacteria.
- 11. Discuss and explain the Herpes simplex virus replication processes.
- 12. Discuss the microbial pathogenicity in adhesion and invasiveness
- 13. Discuss and explain how a heterologous protein can be produced by a bacteria.