

Roll No. :

Total No. of Questions : 16]

[Total No. of Printed Pages : 3

EMIC-123

M.Sc. (Ist Semester) Examination Jan., 2023

MICROBIOLOGY

Paper - FS-MIC-CC-101

(General Microbiology and Bacteriology)

Time : 3 Hours]

[Maximum Marks : 40

The question paper contains three Sections.

Section-A

(Marks : 1 × 10 = 10)

Note :- The candidate is required to answer all the *ten* questions carries 1 mark each. The answer should not exceed **50** words.

Section-B

(Marks : 3 × 5 = 15)

Note :- The candidate is required to answer *five* questions by selecting at least *one* question from each Unit. Each question carries **3** marks. Answer should not exceed **200** words.

Section-C

(Marks : 5 × 3 = 15)

Note :- The candidate is required to answer *three* questions by selecting *one* question from each Unit. Each question carries **5** marks. The answer should not exceed **500** words.

BRI-962

(1)

EMIC-123 P.T.O.

Section–A

1. (i) What is plasmid ?
- (ii) Write the name of *two* bacteria in which episomes are found.
- (iii) How many base pairs are found in DNA of E.Coli ?
- (iv) Write *two* names of Gram Positive Bacteria.
- (v) Autotrophic bacteria utilize which source for energy ?
- (vi) What is Growth Curve ?
- (vii) Give *two* names of beneficial Streptococci.
- (viii) What name is given to dormant stage of phage ?
- (ix) Define Taxonomic ranks.
- (x) Give *one* example of Mycoplasma

Section–B

Unit–I

2. Explain Numerical Taxonomy.
3. Write a short note on cultural bacteria.
4. Explain functions of prokaryotic cells.

Unit–II

5. Write a short note on Microbial Growth.
6. Write a short note on Aerobic cultivation.
7. Explain synchronous growth of bacteria.

Unit-III

8. Write a short note on Staphylococcus.
9. Write general characters of Azotobacter.
10. Write importance of Pseudomonas.

Section-C

Unit-I

11. Write an essay of ultrastructure, chemistry and function of prokaryotic cells.
12. Discuss different stages of bacterial growth curve.

Unit-II

13. Explain Evolution of effectiveness of physical and chemical antimicrobial agents.
14. Write in detail about media preparations, types of media.

Unit-III

15. Write an essay on photosynthetic bacteria.
16. Write an essay on Mycoplasma.