# (Pages : 3)

## Reg. No. : .....

Name : .....

### First Semester B.Sc. Degree Examination, June 2022

### **Career Related First Degree Programme under CBCSS**

# Group 2 (a) Botany and Biotechnology

# **BB 1171 : MICROBIOLOGY**

### (2019 Admission)

Time : 3 Hours

Max. Marks : 80

N – 4244

#### SECTION – A

Answer **all** the questions in a word or one or two sentences. Each question carries **1** mark.

- 1. Comment on Azospirillum.
- 2. What is meant by Slant culture?
- 3. Define biovars.
- 4. Explain LB medium.
- 5. What is mesophiles?
- 6. What is an autoclave?
- 7. Define bacteriophage.
- 8. What is CFU?
- 9. What is a pure culture?
- 10. What is cold sterilization?

 $(10 \times 1 = 10 \text{ Marks})$ 

**P.T.O.** 

#### SECTION – B

Answer **any eight** questions. Each questions carries **2** marks.(Answer not to exceed one paragraph)

- 11. What is the importance of E-coli?
- 12. Identify the contributions of Louis Pasteur.
- 13. Explain aerobic respiration.
- 14. What is Total aerobic count?
- 15. Explain indicator organisms.
- 16. What is dynein?
- 17. Explain the generation time.
- 18. What is Biofuel?
- 19. What is Bayer's junction?
- 20. Explain turbidimetric growth measurement.
- 21. What is meant by Inoculate?
- 22. Give note on MacConkey Agar.

(8 × 2 = 16 Marks)

#### SECTION – C

Answer **any six** questions. Each questions carries **4** marks. (Answer not to exceed 120 words)

- 23. What is a culture media? Give note on different components.
- 24. Write a short note on Bergey's manual

- 25. Write a short note on bacterial growth curve.
- 26. Give a short note on viral culture.
- 27. Describe the features of extremophiles with examples.
- 28. Give a note on nitrogen cycle.
- 29. Differentiate between sterilization and disinfection..
- 30. Write a note on structure of eukaryotic cell.
- 31. Give short note on the lysogenic life cycles of a bacteriophage.

(6 × 4 = 24 Marks)

### SECTION – D

Answer **any two** questions. Each questions carries **15** marks. (Answer not to exceed **three** pages).

- 32. What are viruses? Give a detailed note on different types and structure of viruses.
- 33. Write an essay on ultra-structure and functions of flagella.
- 34. Describe in detail different types of sterilization techniques.
- 35. Write an essay on different methods used for bacterial enumeration.

 $(2 \times 15 = 30 \text{ Marks})$