

**B.VOC. DEGREE EXAMINATION, JANUARY 2019****Second Semester****Core Course—BASIC MICROBIOLOGY****(For B.Voc. Programme in Food Processing Technology)**

Time : Three Hours

Maximum : 80 Marks

**Part A (Very Short Answer questions)***Answer all questions.**Each question carries 1 mark.*

1. What is flagellin ?
2. Expound the capsomere.
3. Give any *two* examples of Protozoa.
4. What is the optimal P<sup>H</sup> for bacterial growth ?
5. What is a culture medium ?
6. Define biomass.
7. Who is introduced by antibiotics ?
8. State any *two* industrially important micro-organisms.
9. Which bacteria cause food poisoning ?
10. Define SCP ?

**(10 × 1 = 10 marks)****Part B (Short Answer Questions)***Answer any **eight** of the following in not more than 50 words each.**Each questions carries 2 marks.*

11. What is microbiology used for ?
12. What is the structure of Protozoa ?
13. What are the characters of algae ?
14. Distinguish between lag phase and log phase.
15. What is the minimum growth temperature.
16. What is the role of agar in culture medium ?

**Turn over**

17. What are the microbial techques ?
18. What are the two micro-organisms involved in fermentation ?
19. What are the four types of vaccines.
20. What is microbial food spoilage ?
21. Comment on botulism.
22. Define food infection ?

(8 × 2 = 16 marks)

### Part C (Short Essays)

*Answer any **six** of the following in not more than 100 words each.*

*Each questions carries 4 marks.*

23. Explain the structure of bacteria.
24. Explain the general characteristics features of algae ?
25. Describe the bacterial growth curve.
26. Discuss the spread plate method of isolation of pure culture.
27. Explain the different types of culture media.
28. Discuss the culture techniques of pour plate.
29. Give an account of the industrial uses of microbial enzymes.
30. Analyze the mechanism of food spoilage.

(6 × 4 = 24 marks)

### Part D (Long Essays)

*Answer any **two** of the following in not more than 400 words each.*

*Each questions carries 15 marks.*

31. Give an account the microbiology help as daily life ?
32. Explain bacterial growth curve.
33. Discuss the chemical composition and uses of PDA medium and nutrient agar medium.
34. Write briefly on the importance of microbial enzymes in industries.
35. Detailed account on the food born disease of bacterial micro-organisms.

(2 × 15 = 30 marks)