

C 62601

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Reg,

**SECOND SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2019**

(CUCBCSS—UG)

Microbiology

MBG 2B 02—MICROBIAL PHYSIOLOGY AND TAXONOMY

(2018 Admissions)

Time : Three Hours

Maximum : 80 Marks

**Part A**

*Answer **all** questions.  
Each question carries  $\frac{1}{2}$  marks.*

1. Organism growing under extreme pressure condition is called \_\_\_\_\_
2. Name any two micro elements required for microbial growth.
3. Concentration of agar in nutrient agar medium is \_\_\_\_\_
4. Give an example for transport medium.
5. Dipicolinic acid is found in \_\_\_\_\_
6. Preservation of microbes by using very low temperature is called - \_\_\_\_\_
7. Who introduced five kingdom classification system ?
8. Which is the most commonly used method for cultivating anaerobes ?
9. Write any example for selective medium
10. Second part of name in binomial system of nomenclature is -----.
11. Agar is obtained from \_\_\_\_\_
12. Temperature optimum for psychrophiles is \_\_\_\_\_

(12 x  $\frac{1}{2}$  = 6 marks)

**Part B**

*Answer **all** questions in one **or** two sentences.  
Each question carries 2 marks.*

13. What is chemoautotrophy ?
14. Define Symport,
15. What is generation time of bacteria ?
16. Define a strain.

Turn over

17. What is phenetic classification ?
18. What is MR test ?
19. What is lawn culture of bacteria ?
20. Define plaque.
21. What is candle jar method ?
22. Differentiate between enriched and enrichment medium.

(10 x 2 = 20 marks)

### Part C

*Write Short notes on any six of the following.  
Each question carries 5 marks.*

23. Write briefly on active transport.
24. Write on Lyophilisation.
25. Measurement of bacterial growth.
26. Lysogenic phage.
27. IMPViC reactions.
28. RNA sequencing.
29. Sporogenesis.
30. Streak plate method..

(6 x 5 = 30 marks)

### Part D

*Answer any two questions.  
Each question carries 12 marks.*

31. Write on nutritional requirements of bacteria mention briefly on different nutritional types of bacteria.
32. Write on different methods of viral cultivation
33. Various criteria used for identification and classification of bacteria.

(2 x 12 = 24 marks)