

K23U 3440

Reg. No. :

Name :

III Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/
Improvement) Examination, November 2023
(2019 to 2022 Admissions)

CORE COURSE IN MICROBIOLOGY
3B03MCB : Microbial Physiology and Metabolism

Time : 3 Hours

Max. Marks : 40

PART – A

Short Answer. Answer **all** questions.

(6×1=6)

1. Growth factors
2. Fed-batch culture
3. Phototropic bacteria
4. Lag phase
5. Psychrophile
6. Iron oxidising bacteria.

PART – B

Short Essay. Answer **any 6** questions.

(6×2=12)

7. Anaerobic fermentation
8. Chemolithotrophs
9. Sulfur bacteria
10. Examples of methanogenic bacteria
11. Binary fission

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12. Acidophiles
13. TCA cycle
14. Transamination

PART – C

Essay. Answer **any 4** questions.

(4×3=12)

15. EMB pathway
16. Kinetics of microbial growth
17. Microbial photosynthesis
18. Homolactic fermentation
19. ATP production by chemolithotrophs
20. Bacterial reproduction.

PART – D

Long Essay. Answer **any 2** questions.

(2×5=10)

21. Nutritional types of bacteria
 22. Entner- Doudoroff pathway
 23. Anaerobic respiration
 24. Describe growth curve with a diagram.
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