



K24U 3440

Reg. No. :

Name :

**III Semester B.Sc. Degree (C.B.C.S.S. – O.B.E.-Regular/Supplementary/
Improvement) Examination, November 2024**

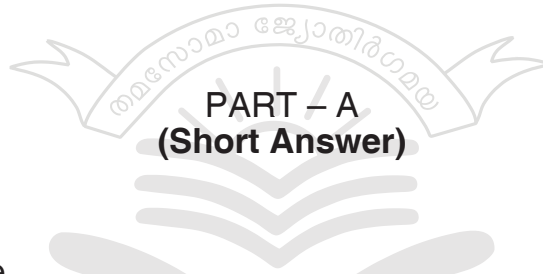
(2019 to 2023 Admissions)

CORE COURSE IN MICROBIOLOGY

3B03MCB : Microbial Physiology and Metabolism

Time : 3 Hours

Max. Marks : 40

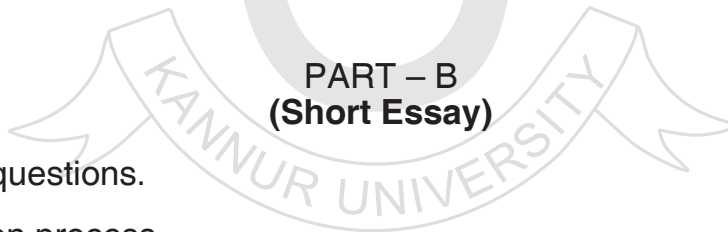


**PART – A
(Short Answer)**

Answer **all** questions.

1. Continuous culture.
2. Log Phase.
3. Mesophiles.
4. Sulfur bacteria.
5. Osmotic pressure.
6. Vitamins.

(6×1=6)



**PART – B
(Short Essay)**

Answer **any 6** questions.

7. Denitrification process.
8. Fermentation.
9. Decarboxylation.
10. Heterolactic fermentation.
11. Lithotrophs.
12. RUBISCO.
13. Iron oxidizing bacteria.
14. Acetogenesis.

(6×2=12)

P.T.O.



**PART – C
(Essay)**

Answer **any 4** questions.

15. TCA cycle.
16. Cyclic photophosphorylation.
17. Nutritional types of microorganisms.
18. Beta oxidation.
19. Explain methanogenesis and microorganisms involved.
20. Photosynthesis in algae.

(4×3=12)

**PART – D
(Long Essay)**

Answer **any 2** questions.

21. EMP Pathway.
22. Explain growth curve with different phases.
23. Brief account on amino acid degradation.
24. Describe light reaction in Photosynthesis.

(2×5=10)

