

D 13240

(Pages : 2)

Name

Reg. No......

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2016

(CUCSS)

Microbiology

MB 1C 02—MICROBIAL METABOLISM

Time : Three Hours

Maximum : 36 Weightage

Section A

*Answer any **fourteen** questions in 2 **or** 3 sentences.
Each question carries 1 weightage.*

1. Define entropy and enthalpy.
2. De-amination.
3. Michaelis-Menton equation.
4. Solvent extraction.
5. Siderophores.
6. Co-metabolism.
7. Structure of **Pencillin**.
8. **Gluconeogenesis**.
9. Non competitive enzyme inhibition.
10. Second law of thermodynamics and its implication in living cell.
11. **Ochratoxins**.
12. **Bioluminesence**.
13. Action of **Aminoglycosides**.
14. **Glyoxilate cycle**.

(14 x 1 = 14 weightage)

Section B

*Write notes on any **seven** of the following.
Each question carries 2 weightage.*

15. Factors affecting enzyme activity.
16. Enzyme immobilization methods.
17. Components of electron transport chain.
18. Synthesis of unsaturated fatty acids.

Turn over

19. Structure and function of different types of siderophores.
20. Biochemistry of methanogenesis.
21. Biosynthesis of Purine.
22. Synthesis of PHB in bacterial cells.
23. Anaerobic Glycolysis and its significance.
24. Regulation of glycolysis.

(7 x 2 = 14 weightage)

Section C

*Write an essay on any **two** of the following.
Each question carries 4 weightage.*

25. Different enzyme purification techniques.
26. Peptidoglycan biosynthesis.
27. Microbial metabolism of Xenobiotics.
28. Describe synthesis and degradation of any one of amino acid.

(2 x 4 = 8 weightage)