C 33183 **(Pages 2)** **Name.....**

Reg. No.....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, AUGUST 2007

Microbiology

MB 2.1. T—MICROBIAL METABOLISM

(2005 Admissions)

Time : Three Hours Maximum : 80 Marks

Part A

Answer any **fifteen** *questions.*

1. What is Isoelectric precipitation ?
2. How pyruvate dehydrogenase complex is regulated ?
3. What are isozymes ? Give *two* examples.
4. What is alpha oxidation ?
5. Comment on carboxylase.
6. Write the energetics of glycolysis.
7. Comment on acyl carrier protein.
8. What are siderophores ? Mention the significance.
9. What is Rancidity ?
10. Write any *two* FAD linked biochemical reactions.
11. Comment on bioluminescence.
12. What is the significance of glyoxylate cycle ?
13. Write the structure of penicillin.
14. What is enzyme immobilisation ?
15. Comment on entropy.
16. Distinguish between deamination and transamination.
17. What is cometabolism ? Mention its significance.
18. Comment on Antioxidants.
19. Define Xenobiotic.
20. Comment on fungal toxins.

(15 x 2 = 30 marks)

Part B

Answer any **four** *questions.*

21. Factors affecting enzyme activity.
22. PHB synthesis.

Turn over

23. Biosynthesis of purines.
24. Electron transport chain.
25. Glycolysis.
26. Enzyme nomenclature.

(4 x 5 = 20 marks)

Part C

Answer any **three** *questions.*

27. Beta oxidation of fatty acids.
28. TCA cycle.
29. Peptidoglycan synthesis.
30. Mechanism of action of antibiotics.
31. Urea cycle.

(3 x 10 = 30 marks)