

C 48355

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Name.....

Reg. No.....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, AUGUST 2008

Microbiology

MB 2—I.T. MICROBIAL METABOLISM

(2005 admissions)

Time : Three Hours

Maximum : 80 Marks

Part A

*Answer any **fifteen** questions.*

Each question carries 2 marks.

1. What are **isozymes** ? Give *two* examples.
2. What is co-metabolism ? Mention its significance.
3. What is bioluminescence ?
4. Distinguish between **ligases** and **lyases**.
5. What is **racidity** ?
6. Differentiate between **deamination** and **transamination**.
7. Define **methanogenesis**.
8. Write the toxicity of **aflatoxin**.
9. Which are the irreversible reactions in **glycolysis** ?
10. Comment on enzyme immobilization.
11. What is the importance of **volutin** granules in bacteria ?
12. What is substrate level **phosphorylation** ?
13. Write the energetics of **glycolysis**.
14. Comment on antioxidants.
15. Define **Xenobiotics**. Give *two* examples.
16. Write the structure of **purines**.
17. What are unsaturated fatty acids ? Give *two* examples.
18. Write the structure of **Penicillin**.
19. Comment on electron donors.
20. How **glycine** is synthesised ?

(15 x 2 = 30 marks)

Turn over

Part B

*Answer any **four** questions.
Each question carries 5 marks.*

21. Gluconeogenesis.
22. Chromatography.
23. Classification of enzymes.
24. Hexose monophosphate shunt.
25. Urea cycle.
26. Beta lactum antibiotics.

(4 x 5 = 20 marks)

Part C

*Answer any **three** questions.
Each question carries 10 marks.*

27. Biosynthesis of pyrimidines.
28. Microbial degradation of xenobiotics.
29. Beta oxidation of fatty acids.
30. Bacterial exotoxins.
31. TCA cycle.

(3 x 10 = 30 marks)