

2053

B.A./B.Sc. (General) Second Semester
Industrial Microbiology (Elective)
IMB-202: Fundamentals of Microbial Biochemistry

Time allowed: 3 Hours

Max. Marks: 33

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting one question from each Unit.

x-x-x

I. Attempt the following:-

- (a) What are Transferases? Give examples.
- (b) What is Omega oxidation?
- (c) List names of some Microbial lipids?
- (d) What are Essential amino acids? Give examples.
- (e) What are Glycolipids?

(5x1)

UNIT - I

- II. a) Discuss energy profile of enzyme catalysed reaction.
- b) What are Isozymes? Explain giving example.

(2x3½)

III. Deliberate on different modes of catalysis.

(7)

UNIT - II

IV. Discuss structure and properties of Glycogen in brief.

(7)

V. Discuss steps involved in oxidative degradation of lipids.

(7)

UNIT - III

VI. Discuss steps and enzymes involved in Gluconeogenesis.

(7)

VII. State the metabolic pathway and biochemical steps in Krebs's cycles.

(7)

UNIT - IV

VIII. Deliberate on mechanism of degradation of nucleic acids.

(7)

IX. Discuss steps in Synthesis of peptides.

(7)

x-x-x