

Exam.Code:0002
Sub. Code: 0185

1058

B.A./B.Sc. (General) Second Semester

Industrial Microbiology

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 is an oligosaccharide?
- b) Define sphingolipids.
- c) Define isozymes.
- d) What are the different constituents of glycogen?
- e) Why amino acids have a dipolar character.

(5x1)

UNIT – I

- II. Discuss the thermodynamics of enzyme catalysis. (7)
- III. Discuss the role of covalent modifications on enzyme function. (7)

UNIT – II

- IV. Discuss the mechanism of lipid peroxidation. (7)
- V. Describe the structure, properties, and biochemical role of cellulose. (7)

UNIT – III

- VI. Discuss the reactions in glycolysis. (7)
- VII. Discuss the regulation of Krebs's cycle. (7)

UNIT – IV

- VIII. Discuss the classification criteria of amino acids. (7)
- IX. Describe the degradation of GMP. (7)

x-x-x