

M.Sc. Part—I Semester—I (C.B.C.S. Scheme) Examination
BIOCHEMISTRY
(Advanced Enzymology)
Paper—III

Time : Three Hours]

[Maximum Marks : 80

Note :— (1) All questions are compulsory and carry equal marks.

(2) Draw diagrams wherever necessary.

1. Explain the concept of Steady State and Rapid State Equilibrium kinetics. 16

OR

Derive Michaelis-Menton equations and write its limitations. 16

2. Describe the various types of enzymes inhibitors with example. 16

OR

Describe role of various Coenzymes in metabolism. 16

3. (a) Describe one mechanism of enzyme action. 6

(b) Explain Orientation effect. 5

(c) Explain acid-base catalysis. 5

OR

(d) Explain Proximity effect. 5

(e) Describe structure and function of chymotrypsin. 5

(f) Explain covalent catalysis with example. 6

4. (a) Explain Multienzyme Complexes and their significance in metabolic Control. 6

(b) Explain Shuttle Systems. 5

(c) Describe structure of PDH. 5

OR

(d) Explain Compartmentalization of enzymes. 6

(e) Explain significance of LDH. 5

(f) Describe isoenzymes. 5

5. (a) Describe mode of hormonal action on enzymes. 6

(b) Describe Product Inhibition. 5

(c) Describe Enzyme induction and repression. 5

OR

(d) Explain allosterism with example. 6

(e) Explain feedback control. 5

(f) Describe nature of allosteric enzymes. 5

