

M.Sc. (Part—I) Semester—II (CBCS Scheme) Examination
MICROBIOLOGY
(Enzyme Technology)
Paper—VI

Time : Three Hours]

[Maximum Marks : 80

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

1. Elucidate the structure and mechanism of action of Lysozyme. 16

OR

(a) What are the biochemical reactions catalysed by pyridoxal phosphate ? 8

(b) Explain the structure and function of thiamin pyrophosphate. 8

2. Explain the type of multienzyme complexes with suitable diagrams. 16

OR

How is the activity of B-galactosidase regulated as per the availability of lactose ? 16

3. Write about the significance of isoenzymes of LDH and creatine phosphokinase. 16

OR

What is an allosteric enzyme ? How is the activity of ATCase controlled by allosteric regulations ? 16

4. What is compartmentalization ? What are the enzymes compartmented in cytosol ? Also explain the compartmentation of enzymes in mitochondria. 16

OR

Explain with suitable diagrams the various methods used to immobilize enzymes. 16

5. Discuss the applications of immobilized enzymes. 16

OR

What is enzyme engineering ? Explain chemical modification and site directed mutagenesis to study enzyme. 16

