

M.Sc.(Biotechnology) Second Semester Old  
**BT2-T005 - Enzymology Paper - I**

P. Pages : 1

Time : Three Hours



**GUG/W/18/2206**

Max. Marks : 80

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1. What is immobilization? Discuss various methods of enzyme immobilization. **16**

**OR**

a) Derive Michaelis-Menten equation. **8**

b) Discuss Lock and Key model and Induced fit model for enzyme activity. **8**

2. Discuss Reversible and irreversible inhibitors with competitive, non-competitive and uncompetitive inhibition. **16**

**OR**

a) Give an account on enzyme inhibition kinetics. **8**

b) Discuss the concept of multienzyme complexes. **8**

3. Discuss in detail about various models of enzyme catalysis. **16**

**OR**

a) Discuss purification and isolation of enzymes. **8**

b) Give an account on membrane bound enzymes and Iso enzymes. **8**

4. Discuss in detail about various types of Allosteric regulation. **16**

**OR**

a) Write a note on Ping-Pong mechanism. **8**

b) Discuss about chemical modification and calmodulin mediated regulation. **8**

5. Solve the following.

a) Discuss about enzyme classification. **4**

b) Discuss various types of inhibitors. **4**

c) Give the process of enzyme assay. **4**

d) Discuss the mechanism of proteolytic activation of an enzyme. **4**

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