

M.Sc. (Microbiology) (NEP Pattern) Semester-I
NEP-72 / 01MSCMB02 - Paper-II : Enzymology and Techniques

P. Pages : 1

Time : Three Hours



GUG/S/25/15126

Max. Marks : 80

1. Give detail account on the classification of enzymes. **16**

OR

a) Discuss about Michaelis-Menten equation and its transformation. **8**

b) What is enzyme inhibition? Discuss the kinetics of enzyme inhibition. **8**

2. Discuss in detail about active site determination and mechanism of ribonuclease. **16**

OR

a) Describe the mechanism of serine protease in detail. **8**

b) Explain acid-base catalysis in detail. **8**

3. Explain about kinetic analysis of an allosteric enzymes in detail. **16**

OR

a) Describe about constitutive and inducible enzymes. **8**

b) Discuss about multienzyme complex with mechanism. **8**

4. Give detail account on various methods of enzyme purification & fractionation. **16**

OR

a) Describe glucose biosensor in detail. **8**

b) Explain immobilized enzymes & its various methods in detail. **8**

5. Write short note on:

a) Evaluation of kinetic parameter. **4**

b) Metal ion cofactor. **4**

c) Feed-back inhibition. **4**

d) Protein engineering. **4**
