



1. What is enzyme immobilization? Discuss different methods of enzyme immobilization in details. **16**

**OR**

a) Derive MM equation and give its significance. **8**

b) Discuss different models of enzyme activity. **8**

2. What is enzyme inhibition? Discuss different types of enzyme inhibition in details. **16**

**OR**

a) Discuss the concept of multienzyme complexes with the help of suitable examples. **8**

b) Give a detailed account on enzyme inhibition kinetics. **8**

3. Describe in detail about purification and isolation of enzymes by different methods. **16**

**OR**

a) Write a detail account on different models for enzyme catalysis. **8**

b) Discuss membrane bound enzymes and Isoenzymes in details with the help of suitable examples. **8**

4. What are regulated enzymes? Discuss the process involved in different types of enzyme regulation. **16**

**OR**

a) Give a detail account on allosteric regulation. **8**

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

5. Solve the following.

a) Write a note on effect of pH and temperature on enzyme activity. **4**

b) Write a note on competitive inhibition. **4**

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

d) Give an account on ping-pong mechanism. **4**

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