

2/16

3009N612

Candidate's Seat No : _____

B.Sc Sem.-6 (Rep) Examination

CC 310

Biochemistry

September-2024

Time : 2-30 Hours]

[Max. Marks : 70

1. a Derive the Michaelis Menton equation 7
b. Write a note on MWC and KNF models for allosteric enzymes 7
OR
a. Explain Competitive and noncompetitive inhibition with its kinetics 10
b. Discuss the Line Weaver Burk plot 4
2. a. Write a note on Spectrophotometric and polarimetric method 9
b Explain Handling of enzymes 5
OR
2 a. Explain specificity of enzymes 5
b Write a note on Manometric and Thumberg method 9
- 3 Why enzymes need to be purified and explain Purification table 14
OR
3 a Explain methods to check the purity of enzyme 8
b Discuss the methods for isolation and extraction of enzyme 8
- 4 a. Explain briefly Biosensors 6
b, Discuss Immobilized enzyme [Methods, properties , kinetics and industrial application] 8

P.T.O

OR

- | | | |
|-------------------------------|---|----|
| 4 | a Describe role of enzymes as analytical reagent | 6 |
| | b Write a note on medical and therapeutic application of enzyme | 8 |
| 5. Write answers of ANY SEVEN | | 14 |
| 1. | Give two kinetics aspects of ATCase as allosteric enzymes | |
| 2. | Draw Hanes plots | |
| 3 | Define Suicide inhibitors and give one example | |
| 4 | Give two importances to study enzyme kinetics | |
| 5. | Define Enzyme assay | |
| 6. | What are units of enzyme? | |
| .7. | How electrophoresis help to check the purity of enzyme | |
| 8. | Give two role of enzyme in clinical | |
| 9. | Give two role of enzyme in food industry | |
| 10. | Name the four methods for immobilization of enzyme | |
| 11. | Define Irreversible enzyme with example | |
| 12 | Define uncompetitive inhibition with example | |

—X—