

QP Code: 213020

Reg. No.....

**Second Year B.Sc Medical Biochemistry Degree
Regular/Supplementary Examinations October 2019**

Paper VIII – Enzymology

(2016 Scheme)

Time: 3 hours

Max. Marks: 100

- **Answer all the questions**
- **Draw diagrams wherever necessary**

Long Essays:

(2x15=30)

1. Name the cardiac markers. Describe with a suitable graph their enzyme pattern after myocardial infarction (MI). Add a note on the estimation of CK and LDH.
2. Define enzymes. Classify enzymes according to the IUB system with one example each. Describe the various factors which affect enzyme activity.

Short Essays:

(2x10=20)

3. Define enzyme inhibition. Differentiate competitive and non-competitive inhibition. Mention with suitable examples the role of competitive inhibition in clinical medicine.
4. Isolation and purification of enzymes.

Short Answer:

(6x5=30)

5. Enzyme specificity
6. Therapeutic enzymes with example.
7. Functional and non-functional enzymes
8. Mechanism of enzyme action.
9. Line weaver's Burke plot
10. Significance of K_m

Comment on:

(10x2=20)

11. Suicide inhibition
12. Active site.
13. Co-enzymes with 2 examples.
14. Multi-enzyme complex.
15. Metal activated enzyme
16. Enzyme defect in acute pancreatitis
17. Immobilized enzymes.
18. Enzyme defect in alcoholic cirrhosis
19. Ribozymes
20. Covalent modification of enzymes
