

QP Code: 213020

Reg. No.....

**Second Year B.Sc Medical Biochemistry Degree Regular/Supplementary
Examinations December 2024**

Paper VIII – Enzymology

(2016 Scheme)

Time: 3 hours

Max. Marks: 100

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts 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. Explain the factors affecting enzyme activity.

Short Essays:

(2x10=20)

3. What are Isoenzymes. Discuss the diagnostic importance of isoenzymes of creatine kinase and Lactate dehydrogenase.
4. Define enzyme inhibition. Differentiate competitive and non-competitive inhibition. Mention with suitable examples the role of competitive inhibition in clinical medicine.

Short Answer:

(6x5=30)

5. Mechanism of action of Enzymes.
6. Michaelis Menton graph and its importance.
7. Enzyme specificity.
8. Co-factors and their importance.
9. Therapeutic enzymes and Enzymes used as reagents.
10. Ceruloplasmin.

Comment on:

(10x2=20)

11. Zymogen and its importance.
12. Catalytic site.
13. Multienzyme complex.
14. Km value and its importance.
15. Koshland's theory of enzyme activity.
16. Ribozyme.
17. Enzyme unit.
18. Enzyme increased in obstructive Liver disease.
19. Prosthetic group.
20. Lysozyme.
