

QP Code: 101103

Reg. No.:.....

**PG Degree Supplementary Examinations in Biochemistry (MD)
April 2026**

Paper I – General Biochemistry, Enzymes & Biostatistics

Time: 3 hrs

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*

Essay: (20)

1. Define electrophoresis; What is the principle of electrophoresis. Describe the parts of electrophoresis. Describe normal bands of serum electrophoresis and change in various disease

Short essays: (8x10=80)

2. Describe the factors regulating enzyme activity. Explain the steps of determination of the Primary structure of a protein
3. What are glycosaminoglycans, describe its chemistry and functions
4. Describe the biochemical defect in sickle cell anemia and its evaluation.
5. Define reference intervals. Describe the steps involved in establishing health associated reference intervals for a new analyte, including selection of reference population, treatment of outliers and use of confidence intervals.
6. Write a brief note on a) ROC curve b) Paired t test
7. Ion exchange chromatography
8. Describe the structure function relationship of proteins with suitable examples.
9. Classify phospholipids and discuss any 3 with their composition and importance
