

QP Code:104103

Reg. No.:.....

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

Paper IV - Clinical Biochemistry & Endocrinology

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. Compare and contrast the concepts of quality control, quality assurance and quality management with context to a clinical laboratory. Discuss proficiency testing in clinical laboratories.

Short essays: (8x10=80)

2. Enumerate the types and causes of jaundice. Discuss biochemical investigations that aid in differential diagnosis of jaundice.
3. Write in detail the synthesis, secretion, mechanism of action, biological functions and laboratory assay of Parathyroid Hormones.
4. Describe biochemical functions, associated disorders and laboratory assessment of adrenal medullary hormones.
5. Describe the composition of CSF. Enumerate its alterations in health and disease
6. Discuss regulation of fluid and electrolyte balance in the body. Add a note on hyponatremia and hypokalemia.
7. Describe laboratory evaluation for metabolic bone disease and gammopathies
8. Describe in detail biomarkers of prediabetes, diabetes mellitus and associated complications. Write briefly on glycated proteins.
9. Neuromodulators - their mechanism of action and physiological significance.
