



**Biochemistry – I**  
**(Revised Scheme – 2)**

**Q.P. CODE: 9811**

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary.

**Section A and section B are to be written in same Answer Book**

**Section A - Clinical Biochemistry [50 marks]**

**LONG ESSAY**

**1 X 20 = 20 Marks**

1. Give an account of urine collection in a laboratory and its preservation, storage, transport and disposal. Add a note on physical and chemical examination of urine samples.

**SHORT ESSAY (Attempt any six)**

**6 X 5 = 30 Marks**

2. Write a note on BMR and the factors affecting it.
3. Classification of enzymes with examples.
4. Lipid profile and coronary artery diseases
5. Acid base disorders
6. Clinical significance of creatinine. Write the principle of estimation.
7. Explain competitive and non-competitive enzyme inhibition with examples.
8. Note on oral glucose tolerance test
9. Structural organisation

**Section B – Laboratory Principles & Techniques [50 marks]**

**LONG ESSAY**

**1 X 20 = 20 Marks**

10. Write the principle of centrifugation. Discuss in detail on the types and applications of centrifuges. Add a note on cell fractionation.

**SHORT ESSAY (Attempt any six)**

**6 X 5 = 30 Marks**

11. Potentiometry
12. Agarose Gel electrophoresis
13. Use, care and maintenance of analytical weighing balance
14. Principle and applications of affinity chromatography
15. Cleaning of glasswares
16. Quality control in a laboratory
17. Write about general safety laboratory practice.
18. Principle and applications of colorimetry

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