## Paper I - General Biochemistry & Chemistry of Biomolecules

Time: 3 hrs.

- 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 diagrams wherever necessary

## **Essays:**

- 1. Explain different methods of purification of water.
- 2. What is chromatography. Write in detail about different types of chromatography. (3+7)
- 3. Write about anticoagulants and preservatives used in biochemistry lab.
- 4. Principle and parts of pH meter. (2+8)
- 5. What are radioisotopes. Write in detail about their application in medicine. (2+8)
- 6. Classification of amino acids.
- 7. Write in detail about different transport mechanisms across biological membranes.
- 8. What are biosensors. Write in detail about their use in lab diagnosis. (3+7)
- 9. What are phospholipids. Write in brief about various phospholipase in body system. (3+7)
- 10. Explain Watson and Crick model of DNA structure. Mention how DNA is organized in the nucleus.

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QP Code: 101383



(10x10=100)

Max. marks: 100