

QP Code: 101383

Reg. No.....

**First Year M.Sc. MLT Degree Supplementary Examinations October 2021  
(Biochemistry)**

**Paper I - General Biochemistry & Chemistry of Biomolecules**

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 diagrams wherever necessary*

**Essays:**

**(10x10=100)**

1. Illustrate membrane structure. Describe different types of membrane transport.
2. Discuss the safety measures to be taken for transport of biological specimens. Add a note on the regulations involved.
3. Give an account of different water purification methods needed to produce high quality water for laboratory work.
4. Discuss nucleotides and nucleic acids.
5. Describe briefly techniques of homogenization, cell disruption, ultracentrifugation and their applications.
6. Give the classification of amino acids based on structure. Add a note on sequencing of proteins.
7. Enumerate any two radioactive isotopes useful in clinical chemistry laboratory. Add a note on storage and disposal of radioactive materials.
8. Draw and label structure of an animal cell. List the different functions of each organelle.
9. Discuss spectrophotometry versus chemiluminescence.
10. Discuss different anticoagulants and preservatives used in a clinical chemistry laboratory.

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