

QP Code: 101383

Reg. No.....

**First Year M.Sc. MLT Degree Regular/Supplementary Examinations  
October 2023  
(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. Classification, chemistry and importance of polysaccharides. (5+5)
2. Write in detail about anticoagulants and preservatives used in routine laboratory practice. (5+5)
3. High performance liquid chromatography.
4. What are transport mechanisms across biomembranes. Write in detail about active transport mechanism. (4+6)
5. What are radioisotopes. Mention about its application in clinical biochemistry and research. (2+8)
6. The structure and functions of mitochondria. (5+5)
7. Discuss the various techniques of water purification.
8. Write in detail about properties of purines and pyrimidines nucleotides.
9. What are phospholipids. Discuss the actions of phospholipases.
10. What are buffers. Mention the composition of buffer and mention the factors affecting the pH of a buffer. (3+7)

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