

QP Code: 102383

Reg. No.....

**First Year M.Sc. MLT Degree Regular/Supplementary Examinations
July 2025
(Biochemistry)**

Paper II - Enzymology, Metabolism and Inborn Errors of Metabolism

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*

Essays:

(10x10=100)

1. Describe heme synthesis. Add a note on its regulation
2. Define isoenzymes. Explain its diagnostic importance
3. Explain the steps involved in glycolysis. Add a note on its regulation and energetics
4. Describe tricarboxylic acid cycle and its regulation
5. Explain beta oxidation of fatty acids. Add a note on the disorders associated with it
6. Explain the important substances derived from the glycine metabolism
7. Explain the inborn errors of metabolism associated with degradation pathways of purine and pyrimidine metabolism
8. Define fatty liver and enumerate its causes. Add a note on the importance of lipotropic factors
9. Define phospholipids and give examples. Add a note on the tests for fetal lung maturity
10. Describe the synthesis and significance of neurotransmitters of amino acid origin
