

QP Code: 102383

Reg. No.....

**First Year M.Sc. MLT Degree Supplementary Examinations December 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. What is the normal serum urea level. Describe the urea cycle.
2. Explain glycogenolysis. Add a note on a glycogen storage disorder.
3. Describe the catabolism of purines. Add a note on its disorder.
4. Classify lipoproteins. Explain their biological significance.
5. What is the normal fasting blood glucose level. How is it regulated.
6. Explain the significance of Hexose monophosphate pathway.
7. Describe the formation of bile pigments in the body. Add a note on the significance of their presence in blood and urine.
8. Define transamination and explain its metabolic significance. Add a note on the diagnostic use of transaminase estimation.
9. Describe the synthesis and utilization of ketone bodies. Add a note on a clinical condition with increased production of ketone bodies.
10. Explain the factors affecting the enzyme activity.
