

2025

M.Sc. 1st Semester Examination

MEDICAL LABORATORY  
TECHNOLOGY

Paper : MLTC402X0



[Clinical Biochemistry]

Full Marks : 25

Time : One Hour

*The figures in the margin indicate full marks.  
Candidates are required to give their answers  
in their own words as far as practicable.*

**Group - A**Answer any *two* questions :

2×2=4

1. What is DNA motif?

2. Write down any two differences between reducing and non-reducing sugar.

3. What is Km? Write the unit of Km.

1+1

4. Mention any two biological importance of nucleotides.

**Group - B**Answer any *two* questions :

4×2=8

5. Describe the structure of  $\beta$ -pleated sheet.

P.T.O.

6. State a brief note on Ramachandran plot.

7. Classify amino acids according to polarity.

8. Write the differences between saturated and unsaturated fatty acid.

**Group - C**

Answer any *one* question :

8×1=8

9. What is codon bias? Describe the Watson-Crick model of DNA-double helix. 2+6

10. What do you mean by protein denaturation and renaturation? What are competitive and non-competitive inhibition of enzyme? Give example.

$(1\frac{1}{2}+1\frac{1}{2})+(2\frac{1}{2}+2\frac{1}{2})$

**Internal Assessment : 5 marks**

