

**Second Year B.Sc MLT Degree Regular/Supplementary Examinations
January 2025**

Biochemistry - II

Time: 3 Hours

Total 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.*

Essay**(2x10=20)**

1. Discuss the sources, requirement, biochemical effects and estimation of Vitamin D3.
(1+2+3+4)
2. Discuss in detail the biosynthesis of triglycerides. Add a note on the sampling and estimation of serum triglycerides.
(5+2+3)

Short notes**(10x5=50)**

3. Metabolic derangements in Diabetes Mellitus
4. Lipotropic factors
5. Biochemical functions of Thiamine
6. Nutritional indices
7. Glycogen Storage Disorders
8. Chylomicrons
9. Chemiosmotic theory
10. Homocystinurias
11. Transdeamination
12. Role of Carnitine in beta oxidation of fatty acids

Answer briefly**(10x3=30)**

13. Cori's cycle
14. Polyunsaturated fatty acids
15. Important compounds formed from Glycine
16. Enzymatic methods of Creatinine estimation
17. Advantages of HbA1c estimation
18. Kwashiorkor
19. Substrate level phosphorylation
20. Wald's visual cycle
21. Lesch Nyhan syndrome
22. FIGLU excretion test