

**Final Year B.Sc MLT Degree Regular/Supplementary Examinations
March 2025**

Biochemistry - IV

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 table/diagrams/flow charts wherever necessary*

Essay

(2x10=20)

1. What is the normal pH of blood. How is the pH regulated by kidneys. Add a note on metabolic acidosis
2. How are hormones assayed in clinical lab. Discuss the techniques in steroid hormone determination and its clinical significance

Short notes

(10x5=50)

3. Levy Jennings chart.
4. Ion selective electrodes
5. Discrete analyzers
6. Cloning
7. Serum creatinine estimation
8. Fecal fat estimation
9. Translation
10. Acute liver disease: lab investigations
11. Gastric juice analysis
12. Urinary calcium estimation and significance

Answer briefly

(10x3=30)

13. Uses of restriction enzymes
14. Point of care testing
15. Pancreatic enzymes
16. Functions of iron
17. Placental function tests
18. ABG analyzer
19. 17 ketosteroids in urine
20. RT-PCR
21. Quality control serum
22. Hyperthyroidism
