

2016 Scheme

QP Code: 412020

Reg. No.....

Fourth Year B.Sc. Medical Biochemistry Degree Regular/Supplementary Examinations February 2026

Paper XIII - Diagnostic Biochemistry and Laboratory Management

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*

Essays

(2x15=30)

1. Discuss the importance of quality control in clinical biochemistry and explain how it ensures reliability of test results
2. Describe automation in diagnostic laboratories. Explain discrete, continuous flow and batch analyzers with their advantages and limitations

Brief Essays

(2x10=20)

3. Describe the essential steps involved in specimen collection, transport, and storage in clinical biochemistry, with emphasis on good scientific practice
4. Explain thyroid function tests and their clinical significance

Short answers

(6x5=30)

5. Requirements of a microbiology laboratory
6. Fully automated analyzers
7. Diagnostic relevance of sweat chloride estimation
8. Steps in receiving and indexing specimens
9. External proficiency testing
10. Gastric function tests

Comment on

(10x2=20)

11. β -hCG
12. Seminal fluid analysis
13. Standard deviation
14. Control Serum
15. AST/ALT ratio
16. VMA
17. NT-pro-BNP
18. Fecal elastase test
19. Significance of standard deviation in quality control
20. Ultracentrifuge
