

QP Code: 213019

Reg. No.....

**Second Year B.Sc Medical Microbiology Degree Regular/Supplementary
Examinations March 2025**

Paper VIII – Methodology and Instrumentation

(2016 Scheme)

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 Diagrams wherever necessary*

Long Essays

(2x15=30)

1. Discuss in detail Beer- Lamberts law, components and performance parameters of spectrophotometer.
2. What is the theory behind electrophoresis. Describe in detail about clinical electrophoresis and pulse field electrophoresis.

Short Essays

(2x10=20)

3. Gas chromatography
4. Immunochemical techniques

Short Answers

(6x5=30)

5. Western blotting
6. RIA
7. Advantages of ELISA
8. Dark field microscope
9. Gas Pak
10. Principle of centrifugation

Comment on

(10x2=20)

11. Freeze etching technique
12. Resolution
13. Nephelometry
14. Isoelectric focusing
15. Cold room
16. RCF
17. Competitive ELISA
18. Electromagnetic spectrum
19. Hot air oven
20. Steam sterilization
