

QP Code: 213019

Reg. No.....

**Second Year B.Sc Medical Microbiology Degree Supplementary  
Examinations October 2023**

**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. What is chromatography? Discuss the different types of chromatography and its main applications in diagnosis and industry.
2. Explain the principle of electrophoresis. Which are the factors effecting electrophoretic mobility. Add notes on PAGE.

**Short Essays** **(2x10=20)**

3. Explain the principle and working of electron microscope.
4. Describe atomic absorption spectrophotometer.

**Short Answers** **(6x5=30)**

5. HPLC.
6. Isoelectric focussing.
7. Anaerobic cultivation apparatus.
8. Radio immunoassay.
9. Autoclave.
10. HEPA filters.

**Comment on** **(10x2=20)**

11. pH meter.
12. ELISA.
13. Cold room.
14. Reverse phase chromatography.
15. Laminar flow.
16. Rocket electrophoresis.
17. Partition coefficient.
18. Dark ground microscopy.
19. Incinerators.
20. Ultracentrifugation.

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