

QP Code: 213019

Reg. No.....

**Second Year B.Sc Medical Microbiology Degree Supplementary  
Examinations November 2021**

**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. Enumerate the different types of microscopes. Discuss in detail the principle and applications of electron microscope. Add a note on staining and specimen preparation.
2. Describe in detail the principle of ELISA test. Discuss in detail the different types of ELISA test and their applications.

**Short Essays**

**(2x10=20)**

3. Radioimmunoassay.
4. Principle and uses of gas liquid chromatography

**Short Answers**

**(6x5=30)**

5. Principle of Colorimetry
6. Biological Safety Cabinet.
7. Ultracentrifugation
8. Sterilisation control of autoclave
9. pH meter
10. Principle and applications of SDS- PAGE

**Comment on**

**(10x2=20)**

11. Micrometry
12. Biological oxygen demand
13. Limit of resolution
14. Colony counter
15. Factors affecting electrophoretic mobility
16. Sedimentation coefficient
17. Use of cold room in microbiology lab
18. Rotors
19. Solubilisers
20. Anaerobic culture apparatus

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