

QP Code: 213019

Reg. No.....

**Second Year B.Sc Medical Microbiology Degree Regular/Supplementary
Examinations April 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. Discuss in detail about the principle, working and applications of different types of electron microscope.
2. Discuss in detail about the principle, methodology and applications of PAGE.

Short Essays

(2x10=20)

3. Atomic absorption spectrophotometer.
4. Biological safety cabinets.

Short Answers

(6x5=30)

5. Anaerobic cultivation apparatus
6. Isopycnic centrifugation
7. Different types of rotors
8. HPLC
9. Principle and application of colorimetry
10. Gas liquid chromatography

Comment on

(10x2=20)

11. Sterilization control in an autoclave
12. HEPA filters
13. Resolving power in a microscope
14. Shadow casting
15. Hot air oven
16. Flame photometer
17. Electromagnetic spectrum
18. ELISA
19. Sub-cellular fractionation
20. Stereomicroscope
