

Q.P. CODE: 115019

Reg. No:

**First Year B.Sc Medical Microbiology & Medical Biochemistry Degree
Regular/Supplementary Examinations December 2023**

Paper IV – General Methodology

(2016 Scheme)

(Common for both specialty)

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 table/diagrams/flow charts wherever necessary*

Essays:

(2x15=30)

1. Describe the composition, properties and varieties of glass used in glassware in the labs. What are their advantages and disadvantages compared to plastic wares
2. Describe the principles of optical microscopy. List the parts of a compound microscope. What is digital microscopy

Short Essays:

(2x10=20)

3. Discuss the methods of sterilization of needles, syringes and other glassware
4. Discuss the layout and design of a modern clinical laboratory

Short notes

(6x5=30)

5. Molal solutions
6. Vortex mixer
7. Errors in handling specimens
8. General principles of staining
9. Preservatives for urine and body fluids
10. Principles of quality control in different labs

Answer briefly:

(10x2=20)

11. Cleaning of lab equipments
12. Storage of hazardous chemical in the lab
13. Classify microorganisms
14. Polarising microscopy
15. Blood collection from lab animals
16. First aid kit in lab
17. Types of coverslips used in lab
18. Flootation bath
19. Use of embedding station
20. Specimens processed in a cytology lab
