

QP Code: 211019

Reg. No.....

**Second Year B.Sc Medical Microbiology Degree Regular/Supplementary
Examinations May 2022**

Paper VI – General Microbiology

(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 table/diagrams/flow charts wherever necessary*

Long Essays

(2x15=30)

1. Enumerate the methods for transmission of genetic material among bacteria. Write in detail about conjugation. Add a note on antimicrobial resistance
2. Define sterilization. Classify the different methods of sterilization by dry and moist heat. Discuss the principle, working, application and sterilization control of autoclave

Short Essay

(2x10=20)

3. Describe the various methods of antimicrobial susceptibility testing
4. Draw a neat labelled diagram of bacterial cell. Write about ultrastructure and different methods for demonstration of flagella

Short Answers

(6x5=30)

5. Bacterial growth curve
6. Polymerase Chain Reaction (PCR)
7. Role of microorganisms in agriculture
8. Extrachromosomal genetic elements
9. Anaerobic culture methods
10. Systems of classification of bacteria

Comment on

(10x2=20)

11. Contributions of Robert Koch
12. Negative staining
13. Nitrogen cycle
14. Thermophilic bacteria
15. Name two transport media and write its uses
16. Bacterial count
17. Pour plate method
18. Triple Sugar Iron (TSI) medium
19. Spheroplast
20. Write four uses of Fluorescent microscope
