

QP Code: 211019

Reg. No.....

**Second Year B.Sc Medical Microbiology Degree Supplementary  
Examinations September 2025  
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. Explain the mechanism of action of antibiotics on bacteria. Write in detail about the development of antibiotic resistance in bacteria.
2. Classify Sterilization and Disinfection. Write in detail about Autoclave and its application. Add a note on Modern Autoclaves. Give brief account on CSSD.

**Short Essay**

**(2x10=20)**

3. Describe in detail about bacterial cell wall, focusing on the differences between Gram positive and Gram-negative bacterial cell wall.
4. Describe the various bacterial culture methods.

**Short Answers**

**(6x5=30)**

5. Kreb's cycle.
6. ETO sterilisation.
7. Electron microscope.
8. Differential media.
9. Bacterial flagella.
10. Kirby Bauer disc diffusion test.

**Comment on**

**(10x2=20)**

11. Cold sterilisation.
12. Mesosomes.
13. Oxidase test.
14. Advantages of dark ground microscope.
15. Phenol coefficient test.
16. Biofilm.
17. Epsilometer test.
18. Enumerate the arrangement of flagella with examples.
19. Negative staining.
20. Enriched media.

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