



K24U 2756

Reg. No. : .....

Name : .....

**V Semester B.Sc. Degree (C.B.C.S.S. – O.B.E. – Regular/Supplementary/  
Improvement) Examination, November 2024  
(2019 to 2022 Admissions)  
CORE COURSE IN MICROBIOLOGY  
5B08 MCB : Bacterial Diseases**

Time : 3 Hours

Max. Marks : 40

**Instruction : Draw diagrams wherever necessary.**

**SECTION – A**

Answer **all** questions in **one** or **two** sentences. **Each** question carries **1** mark.

1. Define nosocomial infection.
2. What is an endemic disease ?
3. Define MLD in the context of bacterial infections.
4. What is bacteremia ?
5. Name the causative agent of diphtheria.
6. What is the primary mode of transmission for cholera ?

**(6×1=6)**

**SECTION – B**

Write briefly on **any six** of the following. **Each** question carries **2** marks.

7. Differentiate between primary and secondary infections.
8. Explain the concept of biological vectors with an example.
9. Describe two virulence factors of *Staphylococcus aureus*.
10. What are the key biochemical characteristics of *Streptococcus pneumoniae* ?
11. Outline the clinical features of tetanus.
12. Describe the morphology of *Vibrio cholerae*.
13. What are the main diagnostic methods for syphilis ?
14. Explain the importance of antibiotic resistance in *Neisseria gonorrhoeae*.

**(6×2=12)**

P.T.O.



SECTION – C

Write short essay on **any four** of the following. **Each** question carries **3** marks.

15. Discuss the epidemiology and prevention of anthrax.
16. Explain the pathogenesis and clinical features of pertussis.
17. Describe the diagnosis and treatment of typhoid fever.
18. Outline the public health measures for controlling plague.
19. Discuss the challenges in culturing *Mycobacterium leprae*.
20. Explain the life cycle and transmission of *Borrelia burgdorferi*. **(4×3=12)**

SECTION – D

Write essay on **any two** of the following. **Each** question carries **5** marks.

21. Describe in detail the virulence factors, pathogenesis, and clinical manifestations of *Escherichia coli* infections.
22. Discuss the epidemiology, diagnosis, treatment, and prevention of tuberculosis.
23. Explain the morphology, culture characteristics of *Trypanema pallidum*. Describe the pathogenesis and clinical features of the infection caused by *T. pallidum*.
24. Describe the various types of infections based on their spread and source, with relevant examples. **(2×5=10)**

