

Seat No. : \_\_\_\_\_

**JD-110**

**July-2021**

**B.Sc., Sem.-VI**

**309 : Microbiology  
(Medical Microbiology)**

**Time : 2 Hours]**

**[Max. Marks : 50**

- Instructions :**
- (1) Answer any **three (3)** questions out of **eight (8)** questions.
  - (2) Question No. **9** is **compulsory**.
  - (3) Illustrate your answers with neat diagrams wherever **necessary**.

Attempt any **THREE** of the following questions :

1. (i) Discuss the role of normal microbiota of the human body. 7  
(ii) Describe Invasiveness. 7
2. (i) Explain factors affecting the process of infection. 7  
(ii) Describe toxigenicity and its role in pathogenicity. 7
3. (i) Describe types of vaccines. 7  
(ii) Write a note on : Infectious disease cycle. 7
4. (i) Write a note on : Concepts of epidemiology. 7  
(ii) Describe sources transmission and control of nosocomial infections. 7
5. (i) Explain how various types of specimens can be collected. Explain their storage and transportation in detail. 7  
(ii) Describe significance of microscopy in clinical microbiology. 7
6. (i) Explain how growth and biochemical characteristic of pathogens help in disease diagnosis. 7  
(ii) Explain how computer and biosensors are used in pathogen identification and disease diagnosis. 7



7. (i) Explain etiological agent, symptoms, transmission, diagnosis and control of tuberculosis. 7  
(ii) Explain etiological agent, symptoms, transmission, diagnosis and control of AIDS. 7
8. (i) Describe transmission and symptoms of dengue. 7  
(ii) Write a note on : Waterborne diseases. 7
9. Give short and specific answers in 1-2 lines only (any eight). 8
- (A) Define Gnotobiosis.
  - (B) Give two names of organisms in the normal flora of skin.
  - (C) Give two factors which affect on host-parasite relationship.
  - (D) What is virulence factor ?
  - (E) Give two hazards of vaccination.
  - (F) Define epidemiological markers.
  - (G) Name two body fluids used for disease diagnosis.
  - (H) Give the full name of DTP.
  - (I) Give the difference between serum and plasma.
  - (J) Give the role of phase contrast microscopy in disease diagnosis.
  - (K) Mention confirmative biochemical reactions of *pseudomonas aeruginosa*.
  - (L) Define clinical immunology.
  - (M) Give causative agent of syphilis.
  - (N) What is shape of rabies virus ?
  - (O) What is contagious diseases ? Give an example.
  - (P) Name a Zoonoses.
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