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Reg. No. :

Code No. : 10558 E Sub. Code : CMMI 53

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2024.

Fifth Semester

Microbiology – Core

MEDICAL AND DIAGNOSTIC MICROBIOLOGY

(For those who joined in July 2021-2022 only)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Which of the following micro organism is a predominant flora of the skin?

- (a) *Bacillus anthracis*
- (b) *Clostridium perfringens*
- (c) *Leptospira interrogans*
- (d) *Staphylococcus epidermidis*

2. Perinatal transmission is said to occur when a pathogen is transmitted from

- (a) Non human to human
- (b) Infected to un infected
- (c) Mother to infant
- (d) All of the above

3. Meningitis is a condition, that results in inflammation of the protective membranes surrounding the _____

- (a) Sinus cavity
- (b) Spinal cord and brain
- (c) Intestinal tract
- (d) Heart and Lungs

4. The causative of tuberculosis produces tuberculin it is a/an _____

- (a) Enzyme (b) Hormone
- (c) Endotoxin (d) Exotoxin

5. What is the causative agent of mumps?

- (a) Orthomyxo virus
- (b) Paromyxo virus
- (c) Papova virus
- (d) Rhino virus

6. Which group of people is most at risk of HSV – 1 infection?
- (a) Children
 - (b) Elderly individuals
 - (c) Health workers
 - (d) Women
7. _____ is the vector of Leishmaniasis?
- (a) Tsetse fly
 - (b) Mosquito
 - (c) Sand fly
 - (d) Black fly
8. What is the primary route of infection for most systemic mycosis?
- (a) Direct contact with infected individuals
 - (b) Ingestion of contaminated food
 - (c) Inhalation of fungal spores
 - (d) Skin contact with contaminated soil
9. When an acid comes in contact with your skin, you should immediately wash it with _____?
- (a) Water
 - (b) Oil
 - (c) Soap
 - (d) None of the above

10. Which of the following items could be sterilized by dry heat sterilization?
- (a) Plastic petridish
 - (b) Glass pipette
 - (c) Rubber gloves
 - (d) Intravenous solution

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).
Each answer should not exceed 250 words.

11. (a) Write short notes on normal microbial flora.
- Or
- (b) Explain different sources of infections.
12. (a) Write a note on bacterial meningitis.
- Or
- (b) Write about sexually transmitted bacterial diseases.
13. (a) Write about the clinical conditions of mumps.
- Or
- (b) Give an account on AIDS.

14. (a) Explain about Eumycotic mycetoma.
Or

(b) With neat diagram explain L.D. bodies.

15. (a) Discuss about drug resistance.

Or

(b) Explain about immunization schedule.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b)
Each answer should not exceed 600 words.

16. (a) Write in detail about different mode of transmission of microbial infections with example.

Or

(b) Give a detailed account on virulence factors of bacteria.

17. (a) Discuss about the clinical symptoms, pathogenesis and laboratory diagnosis of Streptococcal infections.

Or

(b) Elaborate the clinical symptoms, pathogenesis and laboratory diagnosis of Tuberculosis.

18. (a) Describe the morphology, pathogenesis and clinical symptoms of influenza virus.

Or

(b) Explain the pathogenesis, clinical symptoms and laboratory diagnosis of Herpes simplex virus.

19. (a) Give a detailed account on *Histoplasma capsulatum*.

Or

(b) Write in detail about pathogenesis and laboratory diagnosis of visceral Leishmaniasis.

20. (a) Write in detail about general safety measures to be followed in microbiology laboratory.

Or

(b) Classify different types of sterilization. Write in detail about moist heat sterilization.