

(6 pages)

Reg. No. : .....

Code No. : 20439 E Sub. Code : AMMI 62

B.Sc. (CBCS) DEGREE EXAMINATION,  
APRIL 2023.

Sixth Semester

Microbiology – Core

MEDICAL AND DIAGNOSTIC MICROBIOLOGY

(For those who joined in July 2020 onwards)

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*

6. HIV parasitizes \_\_\_\_\_.
  - (a) Y-helper cells
  - (b) T-helper cells
  - (c) K-helper cells
  - (d) None of the above
7. Which of the following is the usual route of infection for histoplasmosis?
  - (a) Nose
  - (b) Skin wound
  - (c) Both of the above
  - (d) None of the above
8. Which of the following is vector for Leishmaniasis?
  - (a) Kissing bug
  - (b) Mosquito
  - (c) Sand fly
  - (d) Tsetse fly
9. Sub unit vaccine is all, except?
  - (a) A whole purified virus
  - (b) A purified part of pieces of antigen
  - (c) An expensive type of vaccine
  - (d) Hepatitis B -vaccine

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2. The transmission of pathogen during pregnancy from mother to child is called?
  - (a) Direct transmission
  - (b) Horizontal transmission
  - (c) Vertical transmission
  - (d) Indirect transmission
3. All of the following are the symptoms of pulmonary tuberculosis EXCEPT?
  - (a) Weakness and fatigue
  - (b) Decreased body temperature
  - (c) Weight loss
  - (d) Severe prolonged cough with sputum or blood
4. This stage of syphilis is found to be the most infective stage of all?
  - (a) Secondary syphilis stage
  - (b) Tertiary syphilis stage
  - (c) Primary syphilis stage
  - (d) All of these
5. The influenza virus has complicated genetics mainly characterized by which of the following?
  - (a) Genetic reassortment amongst eight genes
  - (b) High levels of recombination
  - (c) Rapid adsorption and fusion from without via a hydrophobic peptide
  - (d) High fidelity RNA replicase enzyme

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10. The first scientifically approved vaccine was
  - (a) Oral polio vaccine
  - (b) Small pox vaccine
  - (c) MMR vaccine
  - (d) Tetanus vaccine

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Write briefly about the normal microbial flora of human.

Or

(b) Note on nonspecific resistant factors.
12. (a) Write about leprosy.

Or

(b) Note on Syphilis and VDRL test.
13. (a) Write about the following (i) Herpes febrilis (ii) Eczema herpeticum (iii) Herpes labialis.

Or

(b) Write about the features of common cold.

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[P.T.O.]

14. (a) Explain the causative agents of malaria and different clinical conditions produced by them.

Or

(b) Note on Amoebic dysentery.

15. (a) Write about mechanisms of drug resistance in bacteria.

Or

(b) Explain the current immunization schedule followed in India.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Elaborate different modes of transmission of microbial infections.

Or

(b) Write briefly about different virulence factors of microbes.

17. (a) Write about the clinical signs, pathogenesis and lab diagnosis of disorders caused by *Vibrio cholerae*.

Or

(b) Explain in detail about anaerobic wound infections.

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18. (a) Through light on epidemiology, pathogenesis and laboratory diagnosis of AIDS.

Or

(b) Briefly write about the clinical conditions of measles and rubella and control measures.

19. (a) Elaborate the clinical conditions and laboratory diagnosis of chromoblastomycosis.

Or

(b) Write about the clinical condition, pathogenesis and lab diagnosis of Leishmaniasis.

20. (a) Explain the collection of various specimens for microbiological diagnosis.

Or

(b) Write about biomedical waste management in a medical microbiology laboratory.

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