

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

Fifth Semester

Microbiology – Core

MEDICAL AND DIAGNOSTIC MICROBIOLOGY

(For those who joined in July 2021 – 2022)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer.

1. If a disease jumps from non-human animal to a human, then it is termed as?
 - (a) Infectious disease
 - (b) Congenital disease
 - (c) Iatrogenic disease
 - (d) Zoonotic disease

6. There is no vaccine against HIV, because of _____
 - (a) The virus is so antigenic ally variable
 - (b) Such a vaccine would be too expensive
 - (c) The virus can be controlled by a change in sexual habits
 - (d) Latency can abrogate any vaccine effect
7. What are the primary sites of invasion in Eumycotic mycetoma?
 - (a) Neck and face
 - (b) Legs and hands
 - (c) Hair shafts
 - (d) Chest and back

8. Entamoeba histolytica cysts have _____ nuclei?

(a) 1, 2, 4	(b) 4, 5, 6
(c) 2, 3, 6	(d) 6, 8, 9

2. Which of the following bacteria is present as normal flora in the acidic P^H of the vagina?
 - (a) Clostridium botulinum
 - (b) Lactobacillus acidophilus
 - (c) Neisseria gonorrhoeae
 - (d) Streptococcus mutans
3. What is the most common mode of transmission of leprosy?
 - (a) Droplet infection
 - (b) Direct contact
 - (c) Biting of the insects
 - (d) None of the above
4. Intestinal perforation is the ultimate symptom of the extreme stage of which disorder?

(a) Malaria	(b) Filaria
(c) Typhoid	(d) Pneumonia
5. How long can a person carry HSV-I without showing symptoms?
 - (a) Lifetime
 - (b) A few weeks
 - (c) A few months
 - (d) It varies from person to person

9. Name the sterilization method, which is most frequently used in hospitals and clinical laboratories for the heat-labile liquid substances or antibiotics?
 - (a) Dry heat
 - (b) Radiation
 - (c) Filtration
 - (d) Formaldehyde
10. Which of the following gram positive bacteria have become a threat and that is considered a global pandemic in antibiotic sensitivity?
 - (a) Methicilin resistant *Staphylococcus aureus*
 - (b) *M. tuberculosis*
 - (c) *Pseudomonas aeruginosa*
 - (d) *Candida albicans*

PART B — (5 × 5 = 25 marks)

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

11. (a) Explain about Koch's postulates.

Or

 (b) List out different modes of transmission of microbial infections.

12. (a) Write short note on gas gangrene.

Or

(b) Explain the diagnostic methods used for tuberculosis.

13. (a) Write short note on common cold.

Or

(b) Give an account on cytomegalo virus (CMV).

14. (a) Explain about *Coccidioides immitis*.

Or

(b) Describe Chromoblastomycosis.

15. (a) Write about various chemicals used as disinfectants.

Or

(b) Explain different methods of sample collection to diagnose bacterial diseases.

Page 5 Code No. : 30551 E

19. (a) Give a detailed account on Amoebiasis.

Or

(b) Write in detail about Hospital acquired infection and hospital infection control programme.

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

Or

(b) Give a detailed account on vaccine types and its preparations.

Page 7 Code No. : 30551 E

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Give a detailed account on the normal microbial flora of human body.

Or

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

17. (a) Write about the clinical symptoms, pathogenesis and laboratory diagnosis of Cholera.

Or

(b) Give a detailed account on sexually transmitted bacterial diseases.

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

Or

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

Page 6 Code No. : 30551 E