

Code No. : 7548

Sub. Code : ZMBM 32

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

Third Semester

Microbiology – Core

MEDICAL AND PHARMACEUTICAL
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. A 9-year old child develops glomerulonephritis a week after she was treated for a sore throat. The causal agent is identified by stereotyping of the
 - (a) M proteins
 - (b) Capsule
 - (c) Pili
 - (d) Outer membrane proteins

2. Infection with which of the following agents can result in a false positive nontreponemal (VDRL or RPR) test for syphilis?
 - (a) *Borrelia burgdorferi*
 - (b) Epstein-Barr virus
 - (c) Varicella-zoster virus
 - (d) All of the above
3. Which of the following rickettsial disease is flea-borne?
 - (a) Rocky Mountain Spotted fever
 - (b) Epidemic Typhus
 - (c) Endemic Typhus
 - (d) Scrub Typhus
4. In children, this leads to epidemic ringworm of the scalp
 - (a) *Epidermophyton floccosum*
 - (b) *Candida albicans*
 - (c) *Trichophyton rubrum*
 - (d) *Microsporium audouinii*
5. SARS-CoV-2 Delta variant was first reported and identified in which of the following country?

(a) UK	(b) India
(c) Italy	(d) Pakistan

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6. Moniliasis in Chicken is a _____ disease.

(a) Fungal	(b) Viral
(c) Protozoa	(d) Parasitic
7. The process which involves chlorination beyond break point chlorination is known as

(a) Pre chlorination	(b) Super chlorination
(c) Post chlorination	(d) Dichlorination
8. Extra chromosomal drug resistance
 - (a) Usually mediates resistance to a single antimicrobial
 - (b) Is spread mainly to daughter cells from generation to generation
 - (c) Enables micro-organisms to distribute genetic material more slowly
 - (d) Is potentially more serious than chromosomal resistance when achieved by plasmid exchange
9. Why are rabbits being used in the pyrogen testing?
 - (a) They are cute
 - (b) They have similar physiological response to pyrogen as human
 - (c) They digest pyrogen in a similar way as human
 - (d) They are easier to handle compared to rats

10. Which of following is an essential requirement for Parental preparation?

(a) Isotonic	(b) Hypertonic
(c) Hypotonic	(d) None of the above

PART B — (5 × 5 = 25 marks)

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

11. (a) Explain the Causative agent, symptoms, treatment of Tuberculosis.

Or

(b) Write about *Entamoeba histolytica*.
12. (a) Give a detailed account on Rickettsial Infection.

Or

(b) Write a note on Rabies infection diagnosis and treatment in detail.
13. (a) Define SARS and What are the infections belong to 'SARS'.

Or

(b) Organize the cause, symptoms, laboratory diagnosis, treatment and prevention of Dengue.

14. (a) Sort the procedure of Pyrogen Testing.

Or

(b) Comment on Microbial drugresistance.

15. (a) Describe sterility testing of parental products.

Or

(b) Write a note on sterility testing of hemostats and suture.

PART C — (5 × 8 = 40 marks)

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

16. (a) Explain the Causes, Symptoms. Treatment and Prevention of UTI.

Or

(b) Describe in detail about Upper Respiratory Tract Infection.

17. (a) What are dermatophytes? and Enlist the various dermatophytic infections Along with their etiologic agents. Describe the process of laboratory diagnosis and treatment?

Or

(b) What is the causative agent for Central Nervous system infection? And describe the characteristics, symptoms, treatment and laboratory diagnosis.

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18. (a) Describe in detail the mutant strain of Covid-19.

Or

(b) Write a note on Ziga virus and its pathogenesis in detail.

19. (a) Write the Principle, Purpose, Types and Procedure of Antimicrobial Testing.

Or

(b) What are the factors influencing in the selection of drug?

20. (a) Distinguish BP, EP, IP and USP and highlight their features.

Or

(b) Explain the sterility testing for sterile surgical device, dressing absorbable, and surgical catgut.

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