

(6 pages)

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M.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2018.

Third Semester

Microbiology

MEDICAL AND PHARMACEUTICAL
MICROBIOLOGY

(For those who joined in July 2012 – 2015)

Time : Three hours

Maximum : 75 marks

PART A— (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer.

1. The association of endotoxin in Gram-negative bacteria is a result of the presence of:
(a) Peptidoglycan
(b) Lipopolysaccharides
(c) Polypeptide
(d) Steroids

2. Gram-negative bacteria, responsible for food poisoning, is/are:
(a) *Salmonella* (b) *Pseudomonas*
(c) *Clostridia* (d) None of these
3. Streptolysin O is
(a) antigenic (b) oxygen-labile
(c) heat-labile (d) all of these
4. The cocci which forms a bunch and irregular pattern are
(a) *Staphylococci* (b) *Diplococci*
(c) *Tetrads* (d) *Streptococci*
5. Viruses require _____ for growth.
(a) bacteria (b) plants
(c) animals (d) living cells
6. Reverse transcriptase is a useful enzyme to have when
(a) an RNA virus converts its RNA to DNA
(b) there are no host cells present
(c) nutrients are scarce
(d) spikes are forming in the new virus

7. The first step in infection of a host bacterial cells by a phage is
- (a) adsorption (b) absorption
(c) penetration (d) replication
8. Which is not a major defense mechanism in the stomach?
- (a) Proteolytic enzymes
(b) Low pH
(c) Dense normal flora
(d) All of these
9. All infections do not cause fever and all fevers are not due to infections which of the is an example of non-infections cause of fever?
- (a) Typhoid
(b) Chicken pox
(c) Rheumatic disease
(d) Malaria
10. Which of the following is least likely to have a rigid cell wall?
- (a) Bacterium (b) Archaean
(c) Fungus (d) Protozoan

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

Each answer should not exceed 250 words.

11. (a) What are the common mode of transmission of viral diseases?
- Or
- (b) Write about Diphtheria.
12. (a) Discuss about meningitis.
- Or
- (b) Write about leprosy.
13. (a) Write briefly about Rabies.
- Or
- (b) Discuss about one of the emerging bacterial infections.
14. (a) Short note on pyrogen testing.
- Or
- (b) How to detect MIC-in detail?

15. (a) Write about sterility testing of surgical devices.

Or

(b) Write details about pharmaceutical products sterility testing.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Discuss about chemotherapy.

Or

(b) Write about any one of upper respiratory tract infections in details.

17. (a) Details about tetanus.

Or

(b) Discuss about vector borne infections.

18. (a) Discuss about poliomyelitis.

Or

(b) Write about H1N1 influenza.

19. (a) Discuss in detail about different types of disinfectants.

Or

(b) Discuss about factors influencing the selection of drugs.

20. (a) Discuss briefly different sterilization methods followed for medical devices.

Or

(b) Discuss about sterility testing methods.