

(6 Pages)

Reg. No. :

Code No. : 10628 E Sub. Code : SMZO 62

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2022

Sixth Semester

Zoology — Core

IMMUNOLOGY AND MICROBIOLOGY

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

1. The development of resistance in foetus by the transfer of antibodies from the mother to the foetus naturally is known as
 - (a) Natural active immunity
 - (b) Natural passive immunity
 - (c) Artificial active immunity
 - (d) Artificial passive immunity

2. These secondary lymphoid tissues are encircling the pharynx
 - (a) Spleen
 - (b) Bone marrow
 - (c) Lymph nodes
 - (d) Tonsils
3. The second major immunoglobulin in human serum is
 - (a) IgM
 - (b) IgG
 - (c) IgA
 - (d) IgD
4. The precipitation test that required electroporesis is
 - (a) Nephelometry
 - (b) Rocket immunodiffusion
 - (c) Radial immunoediffusion
 - (d) None of the above
5. The defensive reaction of the immune system of an organism to a pathogen or a foreign substance is called
 - (a) Immunity
 - (b) Immune response
 - (c) Immune complex
 - (d) All of the above
6. Macrophages in the brain are
 - (a) Histocytes
 - (b) Microglia
 - (c) Monocytes
 - (d) Kupffer cells

Page 2 Code No. : 10628 E



7. When the flagella are present all over the cell, the bacterium is called

- (a) Peritrichous (b) Amphitrichus
(c) Lophotrichous (d) Monotrichous

8. Cultivation of bacteria in a liquid medium is called

- (a) Broth culture
(b) Agar plate culture
(c) Continuous culture
(d) Synchronous culture

9. Which one of the following is a food borne disease?

- (a) Gonorrhea (b) Chicken pox
(c) Botulism (d) Rabies

10. Measles is caused by

- (a) Herpes virus (b) Rubella virus

- (c) Rhabdo virus (d) Myxo virus

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) What are the physical and mechanical factors of innate immunity?

Or

(b) Briefly explain the structure of tonsils.

12. (a) Elucidate the biological properties of IgM.

Or

(b) List out the salient features of antigen – antibody reaction.

13. (a) Explain the types of macrophages.

Or

(b) Enlist the functions of T cells.

14. (a) What are the scopes of microbiology?

Or

(b) Write a brief note on selective media.



15. (a) Write a critical account on biochemical changes of food spoilage.

Or

- (b) Enumerate the symptoms and control measures of influenza.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Elaborate the history of immunology.

Or

- (b) Describe the structure and functions of lymph nodes.

17. (a) Explain the structure and biological properties of IgG.

Or

- (b) Write in detail about mechanism and applications of agglutination reaction.

18. (a) Highlight the mechanism of cell mediated immune response.

Or

- (b) Write an essay on immuno diagnosis and immunotherapy of tumour.

Page 5 Code No. : 10628 E

19. (a) Analyse the structure of typical virus with a neat sketch.

Or

- (b) Explain in detail about bacterial growth curve.

20. (a) Give a detailed account on industrial production of penicillin.

Or

- (b) Discuss the causative organisms, symptoms, mode transmission and control measures of rabies.
-

Page 6 Code No. : 10628 E

