

Code No. : 20255 E Sub. Code : SMZO 62

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

Sixth Semester

Zoology — Core

IMMUNOLOGY AND MICROBIOLOGY

(For those who joined in July 2017–2019)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. _____ is the ability to recognize germs and prevent the body from illness.
 - (a) Immunity
 - (b) Pathogen
 - (c) Antigen
 - (d) Antibody

6. Different types of tumor are _____.
 - (a) benign (b) premalignant
 - (c) malignant (d) all the above

7. Proliferation of bacterium into two daughter cells, is called _____.
 - (a) binary fission (b) mitosis
 - (c) division (d) all the above

8. Batch culture is a _____ system that contains limited amounts of nutrients.
 - (a) open culture
 - (b) closed culture
 - (c) semi closed culture
 - (d) all the above

9. Amoxicillin is a newer version of _____ that control more types of bacteria.
 - (a) fungus (b) penicillin
 - (c) bacterial (d) all the above

2. T-lymphocytes are the part of immune system which develops from bone marrow is _____.
 - (a) T-lymphocytes (b) Stem cells
 - (c) Red blood cell (d) All the above

3. High levels of IgG indicate _____ in the body.
 - (a) an infection
 - (b) un infection
 - (c) an antibody reaction
 - (d) all the above

4. Cytolysis is often used as a tool of _____ by various cells.
 - (a) autolysis (b) cytolysis
 - (c) survival (d) killing cell

5. _____ are a type of lymphocyte that are responsible for the humoral immunity.
 - (a) B-cell (b) Stem cells
 - (c) T-cell (d) Rbc cell

10. Gonorrhoea is an infection caused by a sexually transmitted bacterium that infects _____.
 - (a) males
 - (b) females
 - (c) both male and female
 - (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) What are the two types of innate immunity?
Or
(b) Describe the structure and function of spleen.

12. (a) Describe the different stages of antigen-antibody reaction.
Or
(b) What are the biological properties of immunoglobulins?

13. (a) Explain the role of T cells in immune system.
Or
(b) What is the difference between a humoral and cell mediated immune response?

14. (a) Describe the structures of bacteria.

Or

(b) What are the four phases of bacterial growth curve?

15. (a) How can we prevent and control tuberculosis?

Or

(b) Describe the causes symptoms and prevention of AIDS.

PART C— (5 × 8 = 40 marks)

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

16. (a) What are primary lymphoid organs explain their structure and function?

Or

(b) Explain the importance and scope of immunology.

Page 5 Code No. : 20255 E

17. (a) List out the common types of antigen - antibody.

Or

(b) What is agglutination and explain the types of agglutination reactions?

18. (a) Write about the difference between macrophages and B cells.

Or

(b) Describe the process of humoral immunity.

19. (a) What is selective medium? Explain with suitable examples.

Or

(b) What are the general structure and characteristics of viruses?

20. (a) Describe the biological nitrogen fixation describe roles of microbes in it.

Or

(b) What is polio what are its causes, symptoms and prevention?

Page 6 Code No. : 20255 E