(6 pages) **Reg. No. :** .....

Code No. : 8429 **Sub. Code : HZOM 31**

M.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2016.

Third Semester

Zoology

IMMUNOLOGY

(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. From where we got active immunity?
   (a) Anti-bodies
   (b) Live germ in injection
   (c) Weak end germs in injection
   (d) Blood transfusion
2. Immunity acquired after an injection is known as
   (a) Active immunity (b) Passive immunity
   (c) Innate immunity (d) Both (b) and (c)
3. Both B and T-cells of immune system are produced in
   (a) Spleen (b) Lymphoid noides
   (c) Bone Marrow (d) Thymus
4. An antigen is
   (a) Foreign Molecules (b) Protein
   (c) Poly saccharide (d) Micro organism
5. Which part of body is known as "Police guard"?
   (a) Tonsils (b) Skin
   (c) Liver (d) Levco cytes
6. When body cannot distinguish between self and foreign Matter. It is
   (a) Acquired immunity
   (b) Passive immunity
   (c) Auto immunity
   (d) Immunodeficiency

7. Immunoglobulin whose function is to help B-cells in recognition of antigen is

(a) IgA (b) IgE

(c) IgD (d) IgG

8. The primary lymphoid organs are

(i) Thymus (ii) Liver

(iii) Bone Marrow (iv) Spleen

(a) (i) and (iii) (b) (ii) and (iii)

(c) (iii) and (iv) (d) (i) and (iv)

9. Immnoglobulins are proteins which gives resistance against disease. These are of how many Major types

(a) 5 (b) 4

(c) 3 (d) 2

10. Myasthenia gravis is a

(a) Communicable disease

(b) Non-Communicable disease

(c) Leukemia

(d) No such condition exists

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Write a short notes on alternative complement pathway.

Or

(b) Describe about Anatomic barriers.

12. (a) Explain on processing and presentation of Antigen to T-cells.

Or

(b) Write the role of Natural Killer Cells (NKCell) and Interferon (IFN) in Innate immunity.

13. (a) Write a short notes an Immune response development against Extra cellular and Intra cellular Bacteria.

Or

(b) Explain combined Immunodefiuincies with example.

14. (a) Write a note on different kinds of precipitin reaction.

Or

(b) Explain in detail about western blot analysis and its application.

15. (a) Describe Monoclonal antibodies involed in cancer Immunotherapy.

Or

(b) Give an account of Mechanism and applications of ELISA.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Give an account on primary and secondary lymphoid organs.

Or

(b) Give a brief notes of different types of barriers involved in Innate Immunity.

17. (a) Write the role of Macrophage in immune response in detail.

Or

(b) Write different types of 'T'-cells and their role in immune system.

18. (a) Write detailed notes on Immune response against Tuberculosis.

Or

(b) Write a brief notes on Immune response against protozoan diseases.

19. (a) Give an account on composition of blood cell and its counting.

Or

(b) Explain in detail :

(i) Radial immuno diffusion

(ii) Double immuno diffusion

20. (a) Give an account on different types of immediate hypersensitivity.

Or

(b) What is the mechanism of Immune response against cancer.

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