

(6 pages)

Reg. No. :

Code No. : 6411

Sub. Code : HZOM 31

M.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2013.

Third Semester

Zoology

IMMUNOLOGY

(For those who joined in July 2012 onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 1 = 10 marks)

Answer ALL the questions.

Choose the correct answer.

1. Which immunity molecule at the fetal maternal interface has been implicated in the protection of the fetus from being recognized as foreign

- (a) T_H cells (b) Class IMHC
(c) T_C cells (d) T-Receptor's.

2. Which of the following antibodies induces mast cell degranulation?

- (a) IgA (b) IgM
(c) IgE (d) IgG.

3. Which cell type is involved in B-cell activation?

- (a) CTL (b) TH_1
(c) TH_2 (d) TCR.

4. Delayed type hypersensitivity reactions are mediated by

- (a) CD_4+ (b) CD_8+
(c) T-cell (d) CTL.

5. Which of the following is a characteristic of the inflammatory response against extracellular bacterial infections?

- (a) Increased levels of IgE
(b) Activation of self reactive CD_8+ , T cells
(c) Activation of complement
(d) Degranulation of tissue mast cells.

6. Mycobacterium tuberculosis is primarily controlled by which type of cell?

- (a) CD_4+ (b) T_H cells
(c) B-cell (d) T-cells.

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7. Antibody concentration is detected by
- (a) immunoelectrophoresis
 - (b) rocket electrophoresis
 - (c) ELISA
 - (d) double diffusion electrophoresis.
8. Which technique is used in the identification of a specific protein?
- (a) southern blotting (b) western blotting
 - (c) northern blotting (d) ELISA.
9. What type of reactions involved in cell mediated hypersensitivity?
- (a) Type-I (b) Type-II
 - (c) Type-III (d) Type-IV.
10. Monoclonal antibodies was identified by
- (a) George Kohler and Cesar Milstein
 - (b) Charles Richet
 - (c) Emil Won Behring
 - (d) Karl Landsteiner.

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SECTION B — (5 × 5 = 25 marks)

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

11. (a) Write short notes on Edward Jenner technique.

Or

- (b) Briefly explain lymphoblasts.

12. (a) Describe cell-mediated cytotoxicity.

Or

- (b) Comment on exocytosis.

13. (a) Write the role of innate immunity and control of fungal infections.

Or

- (b) Discuss the advantages and disadvantages of live attenuated vaccines.

14. (a) Explain about the components of blood.

Or

- (b) Explain the types of antigen.

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[P.T.O.]



15. (a) What type of hypersensitivity responses do IgM and IgG mediate?

Or

- (b) Describe sandwich tests.

SECTION C — (5 × 8 = 40 marks)

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

16. (a) Write about immunoglobulins with neat diagrams.

Or

- (b) Explain the history and scope of immunology.

17. (a) Give the general properties of cell mediated cytotoxicity.

Or

- (b) Describe about regulation of immune response.

18. (a) Write about the mechanism of humoral and cell-mediated immune response to viruses.

Or

- (b) Describe about primary and secondary immuno-deficiencies.

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19. (a) Explain the mechanism of antigen-antibody reactions.

Or

- (b) Describe on blood, its composition, functions and ABO blood grouping.

20. (a) Discuss in detail about tumor antigens.

Or

- (b) Comment on Type I and II hypersensitivity reactions.

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