DECEMBER 2015 **P/ID 40314/PZLK**

Time : Three hours Maximum : 100 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions each in 50 words.

Explain/Define the following :

1. Adaptive immunity.

2. GALT.

3. Haptens.

4. Cytotoxic T cells.

5. Epitope.

6. Isotypes.

7. FACS.

8. Idiotype.

9. Complement.

10. Toxoid vaccines.

PART B — (5 × 6 = 30 marks)

Answer ALL questions each in 250 words.

11. (a) Write an account on antibody mediated immune responses.

Or

(b) Comment on clonal selection theory.

12. (a) Explain the process of phagocytosis.

Or

(b) Give a detailed account on thymus with suitable diagrams.

13. (a) Differentiate immunogenicity from antigenicity.

Or

(b) Differentiate T cell epitopes from B cell epitopes.

14. (a) Bring out the molecular events associated with Ig class switching.

Or

(b) Give a detailed account on structure and functions of immunoglobulin molecule.

15. (a) Write short notes on :

(i) Hyperacute rejection

(ii) Chronic rejection.

Or

(b) Write short notes on :

(i) Polysaccharide vaccine

(ii) Anti-idiotype vaccine.

PART C — (5 × 10 = 50 marks)

Answer ALL questions each in 500 words.

16. (a) Describe cell mediated immunity with suitable illustrations.

Or

(b) Discuss any four milestones in the field of immunology.

17. (a) Explain the structure of lymph nodes and the process of homing of lymphocytes to lymph nodes.

Or

(b) Describe the structure and functions of granulocytes with reference to their immune functions.

18. (a) Describe the features of an ideal antigen.

Or

(b) Give a detailed account on B and T cell epitopes. Add a note on epitope mapping.

19. (a) Explain the mechanisms involved in generation of antibody diversity.

Or

(b) Give a detailed account on MHC genes, products and their role in immune responses.

20. (a) Explain the cascades of events leading to the activation of classical pathway of complement components.

Or

(b) Discuss the recent technologies adopted for vaccine development.

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