#### **MAY 2015**

#### P/ID 40314/PZLK

Time: Three hours Maximum: 100 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL questions each in 50 words.

- 1. Comment on the contribution of Louis Pasteur.
- 2. What do you mean by opsonization?
- 3. What are stem cells?
- 4. Mention the importances of Bursa fabricius.
- 5. Differentiate epitope and paratope.
- 6. Define avidity.
- 7. Define isotype.
- 8. What are cell adhesion molecule?
- 9. Comment on TNF.
- 10. Mention the significance of MAC.

PART B —  $(5 \times 6 = 30 \text{ marks})$ 

Answer ALL questions each in 250 words.

11. (a) Identify the properties of B cell epitope.

Or

- (b) Distinguish cross reactive antigens and Fossman antigens.
- 12. (a) Bring out the historical perspectives of Immunology.

Or

- (b) Point out the differences between active acquired immunity and passive acquired immunity.
- 13. (a) List down the types of granulocytes and mention their functions.

Or

- (b) What are dentritic cells? Explain their types and functions.
- 14. (a) With a neat labelled sketch explain the structural organization of Immunoglobulin.

Or

(b) Deduce the synthetic pathway of Immunoglobulin.

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15. (a) With an example explain the mechanism of delayed type hypersensitivity reaction.

Or

(b) Write an account on serum therapy and its significances.

PART C — 
$$(5 \times 10 = 50 \text{ marks})$$

Answer ALL questions each in 500 words.

16. (a) Outline the process of innate immunity mechanism of our body.

Or

- (b) Discuss the mechanism of cell mediated immunity and its biological functions.
- 17. (a) Describe the structural organisation of spleen and its immunological functions.

Or

- (b) With a neat labelled sketch explain the structure of thymus and its functions.
- 18. (a) Discuss the factors that influence immunogenicity.

Or

(b) Compare and contrast immunogenicity and antigenicity.

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19. (a) Highlight the principle, technique and applications of monoclonal antibodies.

Or

- (b) Examine the major types of antigen antibody reaction and their applications.
- 20. (a) What is anaphylaxis? Discuss the causes, mechanism and symptom of anaphylaxis.

Or

(b) What do you mean by complement? Explain their composition, properties and classical pathway of complement activation.

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