Reg. No ....

#### Name .....

#### 18P3647

#### **MSc DEGREE END SEMESTER EXAMINATION - OCTOBER 2018**

#### SEMESTER 3 : ZOOLOGY

#### COURSE : 16P3ZOOT12 : IMMUNOLOGY

(For Regular - 2017 Admission & Supplementary - 2016 Admission)

Time : Three Hours

Max. Marks: 75

## Section A Answer any 8 (2 marks each)

- 1. What is GALT?
- 2. How does functional flexibility enhance antibody diversity?
- 3. What is ADCC?
- 4. List out the non covalent interactions that forms the basis of Ag-Ab binding.
- 5. Distinguish between affinity and avidity.
- 6. Brief on lectin pathway of complement activation.
- 7. What are the main functions of cytokines?
- 8. Brief on type-1 hypersensitivity.
- 9. Struture of Class II MHC.
- 10. What is LAD?
- 11. What is SLE?
- 12. What is immune electron microscopy?

 $(2 \times 8 = 16)$ 

### Section B Answer any 7 (5 marks each)

- 13. Brief on hematopoiesis.
- 14. What are the main factors which affect immunogenicity?
- 15. Describe the structure and functions of major antibodies in humans.
- 16. What is ELIZA? Mention the major types.
- 17. Note on Ab dependent complement activation pathway.
- 18. Brief on the major types of hypersensitivity?
- 19. Role of mast cells and basophils in type-1 hypersensitivity.
- 20. Brief on the general organization and inheritance of MHC.
- 21. Mention on organ specific autoimmunity.
- 22. Give an account of Flow cytometry and fluorescence.

# Section C Answer any 2 (12 marks each)

- 23. Give an elaborate account of B cell maturation and activation.
- 24. What are monoclonal antibodies? How are they produced? Mention their main functions.
- 25. Elaborate the main complement activation pathways.
- 26. What are vaccines? Mention different types.

 $(12 \times 2 = 24)$