**16P411** 

#### (Pages:2)

Name..... Reg.No.....

#### FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, MARCH 2018

(Regular/Supplementary/Improvement)

(CUCSS - PG)

## CC15 PZO4 C10-IMMUNOLOGY

(Zoology)

(2015 Admission onwards)

Time:Three Hours

Maximum: 36 Weightage

## Part A

### Answer *all* questions. Each question carries 1 weightage.

- 1. Bruton's Disease.
- 2. SCF-c-KIT complex.
- 3. Multivalent vaccines.
- 4. Autoantibodies.
- 5. Hybridoma technology.
- 6. Anti retroviral therapy.
- 7. MALT
- 8. Cell mediated immunity.
- 9. Interferons.
- 10. Adjuvants.
- 11. Antigenicity and immunogenicity.
- 12. Role of IL7 in B cell maturation.
- 13. CLIP
- 14. ITAM

(14x1=14 Weightage)

### Part B

Answer any seven questions. Each question carries 2 weightage.

- 15. Discuss the structure of Class I MHC molecule.
- 16. Give an account of the Type I hypersensitivity reaction.
- 17. Explain the different stages in HIV proliferation.
- 18. Discuss about systemic autoimmune diseases.
- 19. Explain the TCR- CD3 complex.
- 20. Explain the mechanism of antibody diversity.
- 21. Comment on the interactions between macrophages and antigen.
- 22. Highlight the role of Toll-like receptors in immunity.
- 23. Explain the principle of ELISA and its significance.

24. Describe the structure and functions of Immunoglobulin molecule

(7x2=14 Weightage)

# Part C

Answer any *two* questions.Each question carries *4* weightage.

25. Discuss in detail the major cells and organs of the immune system.

- 26. Explain the process of B- cell and T- cell generation, activation and differentiation.
- 27. Write an essay on the complement system.
- 28. Explain the cytosolic pathway of antigen processing and presentation.

(2x4=8 Weightage)

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