

30/4/17

15P411

(Pages:2)

Name.....

Reg.No.....

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, MARCH 2017

(CUCSS - PG)

(Zoology)

CC15P ZO4 C10-IMMUNOLOGY

(2015 Admission)

Time: 3 Hours

Maximum: 36 Weightage

I. Answer all questions.

1. What is a mitogen?
2. Define cross-reactivity.
3. Name two antibodies without hinge region.
4. What is opsonization?
5. What are haptens?
6. Write on abzymes.
7. What is prophylaxis?
8. What are anaphylatoxins?
9. Why doesn't circulating IgM activate the complement components?
10. What are adjuvants?
11. Write on SCID.
12. Define clonal selection theory.
13. What are the cardinal symptoms of inflammation?
14. Write the main characteristics of memory cells.

(14x1=14 Weightage)

II. Answer any seven of the following.

15. Write on Gamma-delta T- cells.
16. Illustrate the principle of Western Blot.
17. Explain the structure and function of CD3.
18. Describe the immune response against Tuberculosis.
19. Write notes on cytokine antagonists.
20. What are immunotoxins? How do they help in cancer treatment?
21. Write on toll-like receptors.
22. Explain type IV-hypersensitivity.

23. What is a multivalent vaccine? Explain.

24. Explain autoimmunity. Cite any two examples from organ specific autoimmunity.

(7x2=14 Weightage)

III. Answer any two questions.

25. Explain the structure and functions of MHC molecules.

26. Describe the processing and presentation of endogenous and exogenous antigens.

27. Explain hybridoma technology as an efficient method for producing monoclonal antibodies. Write the applications of monoclonal antibodies.

28. Write an essay on complement activation and their regulation.

(2x4=8 Weightage)
