C 82422 (Pages : 2) Name.....

Reg. No.....

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, JUNE 2015

(CUCSS)

Zoology

ZO 4 CT 10—IMMUNOLOGY

Time : Three Hours Maximum : 36 Weightage

I. Answer the following :–

1 Define innate immunity.

2 Name any two non-peptidc antigenic determinants.

3 Mention the applications of RIA.

4 Mention any *two* importance of antibody engineering.

5 Briefly describe CD3 complex.

6 Briefly explain cross reactivity.

7 What is secondary immune response ? How it is elicited ?

8 Describe the genetic basis of anaphylaxis.

9 Describe any *two* properties of T cell epitope.

10 Discuss about the classical pathways of complement activation.

11 Write brief note on immunological tolerance.

12 Briefly explain endogenous pathway of antigen presentation.

13 What is FACS analysis ?

14 Describe the immune response to bacterial antigen.

(14 × 1 = 14 weightage)

II. Answer any *seven* of the following :–

15 Describe the structure of a reticulocyte.

16 Write a brief note on antigenic properties of a substance.

17 List out the applications of Flow cytometry in Immunology.

18 Briefly explain the mechanism of agglutination reaction of AB blood group.

19 Give a brief account of humoral response.

20 Explain about Toll like receptor.

Turn over

21 Describe the immune response to infection of viral antigen.

22 Describe the mode of presentation of non-peptide bacterial antigens.

23 Give a brief account of cellular distribution of MHC antigens.

24 Briefly explain the application of ELISA in Immunology.

(7 × 2 = 14 weightage)

III. Answer any *two* questions :–

25 With a labeled diagram, explain the structure of lymph node.

26 Differentiate cytologically a T cell and a B cell.

27 Write an account on method of production of monoclonal antibodies.

28 Give an account on the organization of immunoglobulin genes.

(2 × 4 = 8 weightage)