D 31373

(Pages : 2)

Name

Reg. No.......................

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2012

(CUCSS)

Biotechnology

GB 3C 4—IMMUNOLOGY

(2010 Admissions)

Time : Three Hours

Maximum : 36 Weightage

Section A

Answer all *questions.*

1. Differentiate between isotype and allotype.
2. What do you mean by superantigens ?
3. What is Hapten ?
4. What are interleukins ?
5. How attinity is different from avidity ?
6. What is memory cell ?
7. Where can you see variable domain and what is its significance ?
8. What do you mean by natural killer cells ?
9. What is Antigen presentation ?
10. What is Monoclonal Antibody ?

(10 x 1 = 10 weightage)

Section B

Answer any seven *questions.*

11. Briefly explain the technique of RIA.
12. Describe the principle of HAT selection.
13. What is the role of lymphatic system in defense ?
14. Describe the mechanisms by which tumor antigens escape from immune response ?
15. Which are the important classes of immunoglobulins ? Add a note on their functions ?
16. Give a brief description on Type I and Type II Hypersensitivity reactions.
7. Explain the structure of T-cell receptor.
18. Give a list of important secondary lymphoid organs and their functions.
19, How innate immunity is helpful in defense mechanisms ?
20. Explain ouchterlony Double Diffusion.

(7 x 2 = 14 weightage)

Turn over

Section C

Answer any two questions.

21. Briefly explain the differentiation of B-cells and T-cells.

22. Describe the structure and organization of MHC.

23. Which are the pathways involved in the action of complements ? Explain with details.

(2 x 6 = 12 weight,