

D 71376

(Pat 3 : 2)

Name

Reg. No.....

**THIRD SEMESTER M.Sc. DEGREE EXAMINATION
DECEMBER 2014**

(CUCSS)

General Biotechnology

GB 3C 4 – IMMUNOLOGY

Time : Three Hours

Maximum : 36 Weightage

Section A

*Answer **all** questions.*

Each question carries a weightage of 1.

1. Herd Immunity.
2. Adult stem cells.
3. Null cells.
4. Haptens.
5. Adjuvant.
6. Hemagglutination.
7. Cytokine.
8. SLE.
9. Oncogenes.
10. Myeloma cells.

(10 x 1 = 10 weightage)

Section B

*Answer any **seven** questions.*

Each question carries a weightage of 2.

11. What are the factors affecting the Immune system?
12. Explain Hybridoma technology.
13. Describe Antigen processing and presentation.
14. Give an account on Immune aversion mechanisms.
15. Explain immunoelectrophoresis and its applications.
16. Explain B-cell activation.
17. Distinguish Immunogenicity and Antigenicity.

Turn over

18. Describe antigenic determinant on Immunoglobulin.
19. Describe different types of agglutination reactions.
20. Give an account on Oncogenes and Tumor antigens.

(7 x 2 = 14 weightage)

Section C

*Answer any **two** questions.*

Each question carries a weightage of 6.

21. Describe different cells of Immune system.
22. Explain the structure and organization of MHC.
23. Explain different complement activation pathways and their role in immune regulation.

(2 x 6 = 12 weightage)