

D 70952

(Pages : 2)

Name.....

Reg. No.....

**THIRD SEMESTER M.Sc. DEGREE (REGULAR) EXAMINATION
NOVEMBER 2019**

(CUCSS)

General Biotechnology

GN 3C 4—IMMUNOLOGY

Time : Three Hours

Maximum : 36 Weightage

Section A

Answer all questions.

Each question carries a weightage of 1.

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|--------------------------|----------------------------|
| 1. Immunological memory. | 2. Hematopoiesis. |
| 3. Hapten. | 4. Precipitation reaction. |
| 5. NK cells. | 6. C3b. |
| 7. Grave's disease. | 8. HIV. |
| 9. Xenograft. | 10. HAT medium. |

(10 × 1 = 10 weightage)

Section B

Answer any seven questions.

Each question carries a weightage of 2.

11. Explain briefly any *two* factors affecting immunity.
12. Give a brief account on distribution and functions of dendritic cells.
13. How do superantigens elicit immune response ?
14. Explain the mechanism of haemagglutination reaction.
15. What are the events involved in activation of B lymphocytes ?
16. Explain the therapeutic use of cytokines.
17. Write a short note on various reasons for onset of autoimmune diseases.
18. What are the evasive mechanisms adapted by helminth parasite against host immune responses ?

Turn over

19. Explain the types and applications of immunosuppressive agents.
20. Distinguish between polyclonal and monoclonal antibodies.

(7 × 2 = 14 weightage)

Section C

*Answer any **two** questions.*

Each question carries a weightage of 6.

21. Explain the mechanisms of antigen and antibody interactions.
22. How does immune system manifest Type-I hypersensitivity reaction ?
23. Elucidate various types of immune responses expressed against cancer.

(2 × 6 = 12 weightage)