D 110098	(Pages : 2)	Name
		Reg No

FIFTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION NOVEMBER 2024

Biotechnology

BTY 5B 08—IMMUNOLOGY AND IMMUNOTECHNOLOGY

(2019 Admission onwards)

Time: Two Hours

Maximum: 60 Marks

Section A (Short Answer Type Questions)

All questions can be answered. Each question carries 2 marks.

- 1. Anaphylaxis.
- 2. Humoral immunity.
- 3. Phagocytes.
- 4. MALT.
- 5. Adjuvants.
- 6. SCID.
- 7. HLA.
- 8. Allotype and idiotype.
- 9. Hashimoto's disease.
- 10. TNF.
- 11. Flow cytometry.
- 12. Recombinant vaccine.

(Ceiling = 20 marks)

Turn over

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Section B (Paragraph Type Questions)

2

All questions can be answered. Each question carries 5 marks.

- 13. What are the factors affecting immunogenicity?
- 14. Describe the classical pathway of compliment activation.
- 15. What are immuno toxins? How it is use full to treat human diseases.
- 16. Give a brief note on systemic autoimmune diseases.
- 17. Describe the principle, and applications of western blotting.
- 18. Discuss different passive immunization methods.
- 19. Describe the nature and properties of an antigen.

(Ceiling = 30 marks)

Section C (Essay Type Questions)

Answer any one, which carries 10 marks.

- 20. Describe different types of antigen and antibody interactions.
- 21. Explain any four advanced immunological techniques employed for disease diagnosis.

 $(1 \times 10 = 10 \text{ marks})$