12UBTE01

(For the candidates admitted from 2012–2013 onwards)

B.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

Fifth Semester

Biotechnology

Elective – IMMUNOLOGY AND IMMUNOTECHNOLOGY

Time: Three hours

Maximum: 75 marks

PART A — $(10 \times 2 = 20 \text{ marks})$

Answer ALL questions.

- 1. Exogenous antigens.
- 2. Hematopoiesis.
- 3. Adjuvant.
- 4. Plasmablast.
- 5. Fab variable region.
- 6. Hybridoma.
- 7. TNF.

- 8. Isograft.
- 9. Immunological Tolerance.
- 10. Immunomodulators.

PART B \rightarrow (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Describe about innate immunity.

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- (b) Write short notes on mast cells.
- 12. (a) Write a note on antigen processing and presentation.

Or

- (b) Explain about maturation of B cells.
- 13. (a) Give a detailed account on structure and functions of Ig M.

Or

- (b) Explain about immunofluorescence.
- 14. (a) Elucidate the terminal complement pathway.

Or

(b) Write a short note on cytokines.

15. (a) Explain on delayed type hypersensitivity.

Or

(b) Give a detailed note on immunodiagnosis of tumors.

PART C — $(3 \times 10 = 30 \text{ marks})$

Answer any THREE questions.

- 16. Explain in detail on the functions of secondary lymphoid organs.
- 17. Give a detailed account on cell mediated immunity.
- 18. Explain the various types of precipitations reactions.
- 19. Elaborate Major histocompatability molecules with neat diagrams.
- 20. Explain various types of organ specific auto immune diseases.