S.No. 3537 P 16 BC 31

(For candidates admitted from 2016–2017 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

Biochemistry

IMMUNOLOGY

Time: Three hours

Maximum: 75 marks

SECTION A — $(10 \times 2 = 20)$

Answer ALL the questions.

- 1. Define immunity.
- 2. What is meant by innate immunity.
- 3. Write about functions of B-cell antibody.
- 4. Define immune tolerance.
- 5. Write about the autoimmunity.
- 6. What causes hypersensitivity?
- 7. What is meant by genetically engineered antibodies?
- 8. Define active immunization.
- 9. Write the principles of immuno electrophoresis.
- 10. Define term in Abzymes.

SECTION B —
$$(5 \times 5 = 25)$$

Answer ALL the questions, choosing either (a) or (b).

11. (a) Write about the humoral and cell mediated immunity.

Or

- (b) Write on plasma cells.
- 12. (a) Explain the complement activation system.

Or

- (b) Give a short note on the cell mediated cytotoxicity.
- 13. (a) Give a note on auto immune diseases.

Or

- (b) Elucidate the polymorphism of MHC genes.
- 14. (a) Write about the recombinant vector vaccines.

Or

- (b) Give a short note on the monoclonal antibodies.
- 15. (a) Explain the immunoferritin technique.

Or

(b) Write about knockout mice cell culture system.

SECTION C —
$$(3 \times 10 = 30)$$

Answer any THREE questions.

- 16. Explain briefly on the lymphatic system.
- 17. Discuss about the T-cell and B-cell functions.
- 18. Describe the transplantation types.
- 19. Explain briefly identification of lymphocytes and their subset in blood.
- 20. Give note on the immune electrophoresis technique.