25083

M.Sc. DEGREE EXAMINATION, APRIL 2018.

Biotechnology

SECOND SEMESTER

Paper III — IMMUNOLOGY

Time : Three hours Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

1. Macrophage
2. Acquired immunity
3. Avidity
4. Hapten
5. Zone of equivalence
6. HRP conjugate
7. MHC II
8. Complement fixation test.

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PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Briefly explain about structure and functions of different organs of Immune system.

Or

10. Explain in detail about different cells of immune system.

11. What is an antigen? Explain the properties of an antigen.

Or

12. How are monoclonal antibodies produced and selected? What are the applications of monoclonal antibodies?

13. Explain in detail about ELISA.

Or

14. Explain the principle and application of single and double immuno diffusion tests.

15. Describe classical and alternate pathways of complement system.

Or

16. What is a vaccine? Explain different old and modern strategies for the preparation of vaccines with suitable examples.

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