

Reg. No. :

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Question Paper Code : P 1115

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2009.

Seventh Semester

Biotechnology

BT 1402 — IMMUNOLOGY

(Regulation 2004)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is an adaptive immune response?
2. What are secondary lymphoid organs?
3. How will you identify a human B cell?
4. What is SRID?
5. Define a polyclonal antibody.
6. What is contact hypersensitivity reaction?
7. Define tolerance.
8. What is meant by transplantation?
9. What is secondary immune deficiency?
10. What is a granuloma?

PART B — (5 × 16 = 80 marks)

11. (a) Describe the structure and function of lymph nodes.

Or

(b) Explain how a human B cell is triggered to produce antibodies.

12. (a) Discuss the development of human T cells and how they become matured functional cells.

Or

(b) Give the applications of monoclonal antibodies by citing examples.

13. (a) Discuss Type I and Type III hypersensitivity reactions.

Or

(b) Describe the mechanisms of macrophage activation.

14. (a) Discuss the production and mechanism of action of edible vaccines.

Or

(b) Describe the mechanisms of pathogenesis of a tumour.

15. (a) Write notes on :

(i) Dendritic cells (8)

(ii) RIA. (8)

Or

(b) Write notes on :

(i) Complement system. (8)

(ii) Autoimmunity. (8)

PART B — (5 × 16 = 80 marks)

11. (a) Describe the structure and function of lymph nodes.

Or

(b) Explain how a human B cell is triggered to produce antibodies.

12. (a) Discuss the development of human T cells and how they become matured functional cells.

Or

(b) Give the applications of monoclonal antibodies by citing examples.

13. (a) Discuss Type I and Type III hypersensitivity reactions.

Or

(b) Describe the mechanisms of macrophage activation.

14. (a) Discuss the production and mechanism of action of edible vaccines.

Or

(b) Describe the mechanisms of pathogenesis of a tumour.

15. (a) Write notes on :

(i) Dendritic cells

(8)

(ii) RIA.

(8)

Or

(b) Write notes on :

(i) Complement system.

(8)

(ii) Autoimmunity.

(8)