



BA-204

Seat No. _____

B. Sc. (Sem. VI) Examination

March/April - 2014

Biotechnology : Paper - XI

(Fundamentals Of Immunology)

Time : 3 Hours]

[Total Marks : 70

- 1 Attend all questions : (1 mark each) 10
- (i) Define Antigen.
 - (ii) What is valancy of Ig M ?
 - (iii) What are antibodies produced during primary response ?
 - (iv) What are isoantigens ?
 - (v) Define haptan.
 - (vi) Define adjuvants.
 - (vii) What are end stage cell of B-cell line ?
 - (viii) What is function of T helper cells ?
 - (ix) Define epitipes.
 - (x) What is anamnensis response ?
- 2 Attend any five out of seven : (2 marks each) 10
- (i) Define Innate immunity.
 - (ii) What is haematopoiesis?
 - (iii) What is difference between and Immunogen and a pathogen ?
 - (iv) Draw structure of Ig M.
 - (v) What is monoclonal Antibody?
 - (vi) Give two examples of immune diffusion techniques.
 - (vii) Give examples of any two components of innate immune system.

- 3 Attend any five out of seven : (6 Marks each) 30
- (i) Define immune response. Explain primary characteristics of immune response.
 - (ii) Explain in brief innate immunity.
 - (iii) Explain any two primary characteristics of immune response.
 - (iv) What is immunoglobulin? Explain general structure of Ig.
 - (v) Explain precipitation test with principle.
 - (vi) Explain about monoclonal antibodies.
 - (vii) Write a note on ELISA.

- 4 Attend any two out of four : (10 marks each) 20
- (i) Explain in detail cells involved in immune response with function of each cell.
 - (ii) Write a detailed note on general characteristics and major classes of antigen.
 - (iii) Explain in detail about generation of antibody diversity at genetic level.
 - (iv) Explain in detail T- Cell generation and activation.