

AQ - 1021

Third Semester M. Sc. (Part-II) Examination

MICROBIOLOGY

Paper - XII

Immunology

P. Pages : 2

Time : Three Hours }

[Max. Marks : 80

Note : All questions are compulsory and carry equal marks.

1. Discuss primary and secondary immune responses.

OR

Describe in detail various cells of immune system.

16

2. Describe major classes of immunoglobulines by comparing their structures and properties. 16

OR

- (a) Define the terms affinity, avidity, specificity and sensitivity of Ab - Ag reaction. 8

- (b) Give the principle and clinical applications of immufluorescence technique. 8

AQ-1021

P.T.O.

3. Describe the sequence of events when the classical pathway of the complement system is activated.

16

OR

- (a) What are autoimmune diseases ? 8

- (b) What are primary and secondary immune deficiency diseases.

Give suitable example of each. 8

4. Describe the classification of hypersensitivity and give detail account on type I reaction. 16

OR

- (a) Differentiate between live and killed vaccines. 8

- (b) Give the different theories of antibody diversity. 8

5. What are monoclonal antibodies ? How are they produced ?

OR

Give in detail the applications of monoclonal antibodies. 16

