

M.Sc. (Microbiology) (NEP Pattern) Semester-IV
STPG04MCB002 - Major : Immunology

P. Pages : 1

Time : Three Hours



GUG/S/25/16369

Max. Marks : 80

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- Notes : 1. All the questions are compulsory and carries equal marks.
2. Draw the diagram wherever it is necessary.

1. Describe the structure and functions of secondary lymphoid organs. **16**

OR

- a) Write different classes of immunoglobulins and their functions. **8**
- b) Describe the role of lymphocytes in immunity. **8**

2. Explain the mechanism of cell mediated immunity. **16**

OR

- a) Classical pathway of complement system. **8**
- b) Describe the main pathway of complement system. **8**

3. Describe the concept of precipitation reaction and explain its applications in antigen. **16**

OR

Write an account on -

- a) Hybridoma technology. **8**
- b) Complement fixation test. **8**

4. Describe in detail the concept of all to immunity and immunological tolerance. **16**

OR

- a) Discuss about Addison's diseases. **8**
- b) Type II hypersensitivity. **8**

5. Write short note on followings:

- a) Structure of Ig M. **4**
- b) MHC – I molecules **4**
- c) ELISA **4**
- d) Type-IV hypersensitivity **4**
