

M.Sc. (Bio-Chemistry) (NEP Pattern) Semester-II
STPG02BCH03 - Advanced Immunology

P. Pages : 2

Time : Three Hours



GUG/S/25/16391

Max. Marks : 80

- Notes :
1. All questions are compulsory.
 2. Draw Neat and labeled diagrams whenever it necessary.
 3. All questions carry equal marks.

1. Discuss in detail structure of basic antibodies. **16**

OR

1) Write a note on lymph node and spleen. **8**

2) Discuss different types of antigen. **8**

2. Discuss in detail antigen presentation with endocytic and exocytic pathway. **16**

OR

1) Discuss cell mediated immune response. **8**

2) Discuss in detail classical pathway of complement activation. **8**

3. Discuss in detail immune response in AIDS. **16**

OR

Write a detail note on –

i) DNA vaccine. **8**

ii) Recombinant DNA vaccine. **8**

4. Discuss in detail Types II hypersensitivity. **16**

OR

1) What is autoimmunity? Explain with pernicious anemia and myasthenia gravis. **8**

2) Discuss with example graft rejection mechanism. **8**

5. Attempt **any 8** from following **8x2=16**

a) Give the function of thymus

b) Give the function of bone marrow.

c) Classify the immune cells.

- d) What is another name of alternate pathway of complement activation? Give the component of C3 convertase of alternative pathway.
- e) Give the function of MAC complex
- f) What is effectors response?
- g) Which antibodies generates after helminth infections?
- h) What is whole organism vaccine?
- i) Differentiate active and passive immunization.
- j) Give the Coombs classification of hypersensitivity.
- k) What is immune tolerance? Give one example.
- l) Define immunosuppressant with example.
