

Unique Paper Code : 32237909
Name of the Paper : DSE- Immunology
Name of the Course : B.Sc.(H)Zoology, 2020-CBCS
Semester : V
Duration : 3 Hours
Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No., Name of the paper, Course, Semester and Date of examination on each page and number the sheets used.
2. Attempt **ANY FOUR** questions. All questions carry equal marks.
3. Draw well labeled diagrams wherever required.

- Q1. Explain how the T and B lymphocytes elicit adaptive immunity and discuss structure of the organs in which they mature and become immunocompetent. (18.75)
- Q2. Explain how complement system complements the humoral adaptive response and discuss its biological consequences. (18.75)
- Q3. Discuss the effector functions of antibodies and explain the technique used to generate monoclonal antibodies (mAb). What is the advantage of using mAb in diagnostic tests? (18.75)
- Q4. Explain the difference in active and passive immunization. What are the conditions that warrant the use of passive immunization? Write a note on recombinant vector vaccine. (18.75)
- Q5. Name the four types of noncovalent forces involved in antigenic epitope and paratope of antibody. Discuss the different variants of Enzyme Linked Immunosorbent Assay (ELISA) for qualitative and quantitative measurement of an antigen or an antibody. (18.75)
- Q6. A virally infected cell can present viral antigens on its cell surface MHC molecules. Explain how these antigens are usually processed and presented by the infected cells and the consequence of such presentation. (18.75)