Mode of Examination: ONLINE

| Unique Paper Code | : 42237904 |
|--------------------|---------------------------------|
| Name of the Paper | : Immunology |
| Name of the Course | : B.Sc. (P) Life Sciences (DSE) |
| Semester | : VI, CBCS |
| Duration | : 2 Hours |
| Maximum Marks | : 75 |

Instruction for Students

Write your Roll No., Name of the paper, Course, Semester, and Date of examination on the first page of answer sheet.

Attempt ANY FOUR questions. All questions carry equal marks.

Substantiate your answer with diagrams wherever necessary

Q1. Innate and adaptive immunity act in cooperative and interdependent ways to protect the host from infection. Discuss the role of macrophages, NK cells and cytokines in collaboration of these two forms of immunity to produce an effective immune response. Draw suitable diagrams.

18.75

Q2. Describe the process of recognition of extracellular/ exogenous antigen by T_H cells and their role in the activation of B cells to produce humoral immune response. Draw suitable diagrams.

18.75

Q3. The blood system is an assembly of cells with different functions. Their formation involves pluripotent cells, growth factors and a congenial environment. Discuss giving suitable examples.

18.75

Q4. Explain with suitable examples the types of immune dysfunctions that can occur in human body. Briefly discuss their manifestations in diseases that occur in each case. 18.75

Q5. The immunoglobulin structure was elucidated with the help of different experiments. Briefly discuss these experiments and explain general structure of immunoglobulins. Draw suitable diagrams. 18.75

Q6. Hypersensitivity can be immediate or delayed. Discuss the cell components and mechanism involved in both giving suitable examples. Draw suitable diagrams. 18.75