



JAX-1603120102030700 Seat No. _____

M. Sc. (Biochemistry) (Sem. III) (CBCS) Examination

December – 2019

CBC - 7 : Immunology

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

Instructions :

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures on the right indicate full marks.

1 Answer briefly any seven of the following questions : **14**

1. Define immune response.
2. What do you understand by the term ELISA ?
3. Define Naive Cell.
4. Which type of cells is functionally important for cell mediated immunity ?
5. Enlist at least two proteins of complement system.
6. Write the functions of macrophage.
7. Give the names of primary lymphoid organs.
8. Define the term tumor antigen.
9. Which type of hypersensitivity is associated with the allergens ?
10. Write the full form of SCID.

2 Answer any two of the following questions : **14**

1. Explain the concept of clonal selection with brief" description.
2. Explain primary and secondary immune response with suitable diagram.
3. Explain the role of T_H cell in cell mediated immune response.

3 1. Write a brief note on MHC molecules. **7**
2. Write a brief account on activation of T and B Lymphocytes. **7**

OR

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| 3 | 1. Write the full form of MAC and draw the structure of 'C ₁ ' protein and write its significance. | 7 |
| | 2. Write a note on types of ELISA with suitable diagrams. | 7 |
| 4 | 1. Explain the molecular structure and functions of immunoglobulin with diagram. | 7 |
| | 2. Explain immunoelectrophoresis with its importance in diagnosis. | 7 |
| 5 | Answer any two of the following : | 14 |
| | 1. Enlist different types of vaccines and explain any two types in detail. | |
| | 2. Write an overview on the mechanism of Graft rejection with illustration. | |
| | 3. Explain Type II Hypersensitive reactions. | |
| | 4. Define autoimmune response and explain any two autoimmune disorders with their molecular basis. | |
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