

Sr. No. 7062

Exam. Code: 210004
Subject Code : 4854

M.Sc. Botany - 4th Sem.

(2517)

Paper - BOTC-725: Immunology

Time allowed: 3 hrs.

Max. Marks: 50

Note : Section A Compulsory (marks 1 X 8) Section B : Attempt any seven questions . The answers should not exceed 2 pages (Marks 7 x 3) Section C : Attempt any three questions. The answer should not exceed four pages (Marks 3 X 7)

SECTION - A (Compulsory)

Give a brief account of the following ;

- I) contribution of Landsteiner in Immunology
- II) Attenuation
- III) PHA
- iv) Freund's complete and incomplete adjuvant
- V) How to check cross reactivity
- VI) Isotypes
- VII) Morphological features of granulocytes
- VIII) vaccines

SECTION - B

- Q B1 Describe the role of innate immunity in defence
- B2 Describe the experiments by Louis Pasteur leading to some immunological phenomenon
- B3. What are the qualities of the immunogens to elicit the immune response
- B4. How antigens are recognized by B cells
- B5. Describe allotypes and their significance
- B6. What type of interactions occur in Antigens and antibodies
- B7. Give the structure and role of thymus in development of T cells
- B8. Which mechanism is adopted by macrophages for nonspecific killing of microorganisms
- B9. Immune system may result in negative effect. Comment by example of hypersensitivity
- B 10 Describe the biological functions of antibodies

SECTION - C

- C1. Describe the consequences of primary immunodeficiency diseases with one example
- C2. Give the mechanism by which T cells recognize the antigen
- C3. How to raise monoclonal antibodies. The hybridoma technology is better than conventional technologies . Comment
- C4. Describe the methods of MHC typing and its significance
- C5 Describe the role of vaccines in human health especially infectious diseases.

7062(2517)100