

BS-2051

IMMUNOLOGY-C9-BHB-18

(Semester-IV)

Time : Three Hours]

[Maximum Marks : 74

Note : Attempt *two* questions each from Section A and B carrying 11 marks each and the entire Section C consisting of 15 short answer type questions carrying 2 marks each.

SECTION-A

- I. Describe the organs involved in immune response. 11
- II. (a) Give in detail the structure of an immunoglobulin molecule. 6
(b) Describe the functions of all types of antibody molecules. 5
- III. How cellular response is generated by an antigen ? 11
- IV. Write the molecular diversity of antibodies generation mechanism. 11

SECTION-B

- V. (a) Give the structure and functions of MHC Class II molecules. 6
- (b) Write an account of immunity in AIDS. 5
- VI. Describe the traditional and DNA vaccines and their merits. 11
- VII. Write notes on :
- (a) R1A, 3½
- (b) R1D, 3½
- (c) Passive agglutination. 4
- VIII. Give the mechanism of autoimmune response generation. 11

SECTION-C

- IX. Give a brief account of the following :
- (a) The cell markers.
- (b) Plasma cell.
- (c) TCR chains.
- (d) Idiotypes.
- (e) Complement system components.
- (f) Pathogen defense strategies.

- (g) Papain digestion of antibody.
 - (h) Hinge region.
 - (i) Allotypes.
 - (j) BCG vaccine.
 - (k) Freund's adjuvant.
 - (l) Principle of ELISA (Indirect).
 - (m) Demerits of Passive immunization.
 - (n) Polio vaccine.
 - (o) In cytokines : Redundancy. (15×2=30)
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