

Exam.Code:0908
Sub. Code: 6705

1058

B.E. (Bio-Technology)
Fourth Semester

BIO-415: Immunology and Immuno-Technology

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Section.

x-x-x

Q 1. Write a short note on followings

(1*10=10)

- a) Importance of TAP in antigen presentation
- b) Role of MHC
- c) Types of agranulocytes
- d) Application of idiotypic determinants of antibody
- e) Importance of secretory component of antibody
- f) Role of secondary lymphoid organs
- g) Mechanism of activation of alternate pathway of complement system
- h) Demerits of attenuated vaccine
- i) Reason for rheumatoid arthritis
- j) Application of supershift assay

Section- A

- Q. 2.a) Describe in details structure and function of IgG antibody. Explain why IgG is less effective in activating complement pathway compared to IgM. Briefly explain about hybridoma technology. (6)
- b) Give structural and functional differences between spleen and lymph node. (4)
- Q. 3 a) Explain structural and functional details of all types of cells originating from myeloid progenitors. (5)
- b) Give an account of different factors and mechanisms responsible for antibody diversity. (5)
- Q. 4 a) Differentiate between cytosolic and endocytic pathway of antigen processing and presentation. Briefly describe the importance of tapasin and CLIP. (5)
- b) Describe in detail structure, function and types of MHC molecules. (5)

P-T-O