



HDU-1603120102030700 Seat No. _____

M. Sc. (Biochemistry) (Sem. III) (CBCS) Examination
November / December – 2017
CBC-7 : Immunology

Time : Hours]

[Total Marks : 70

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

- (a) State the mechanism of cytokine action.
- (b) What is humoral immunity?
- (c) Difference between Immunogenicity and Antigenicity.
- (d) What are Hapten and Adjuvants?
- (e) Explain oxygen dependent killing of pathogen.
- (f) State the components and role of MAC.
- (g) State the role of proteasome.
- (h) Explain Adaptive immunity.
- (i) Give the role of basophils.
- (j) What are Complementary Determining Region?

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

- (a) Explain about Isotypic, idiotypic and allotypic recognition in antibodies.
- (b) Write a detailed note on innate immunity and its defensive barriers.
- (c) Explain about hybridoma technology.

3 (a) Write a note on types of Hypersensitivity reactions. **7**

(b) Give a detailed note on IgG, IgE and IgA. **7**

OR

(a) Explain in detail primary lymphoid organs. **7**

(b) Explain: Role of immunity in Cancer. **7**

- 4 Answer the following questions : 14
- (a) Discuss about Mechanism of Variable-Region DNA Rearrangements.
 - (b) How exogenous antigen processing and presentation occurs?
- 5 Answer the following questions : (any **two**) 14
- (a) Discuss about types and uses of different vaccines.
 - (b) What is cross reactivity and explain various techniques of antigen-antibody reaction on the basis of precipitation principle?
 - (c) What are Autoimmune disorders? Explain with two examples.
 - (d) Justify: Severe immunodeficiency is caused by the human immunodeficiency virus.
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