



HG-204

Seat No. _____

B. Sc. (Sem. VI) (Biotechnology) Examination

March / April - 2015

CC-1-11 Fundamentals of Immunology

Time : 3 Hours]

[Total Marks : 70

1 Answer all questions. Each question carries 1 mark .

10×1=10

- (1) Which cells are known as APC
 - (A) Macrophage & B-Cell
 - (B) Stem cell & T-Cell
 - (C) B-Cell & Neutrophil
 - (D) T-Cell & Dendritic cell
- (2) T-cells are matured in which organ
 - (A) B-marrow
 - (B) Lymph
 - (C) Thymus
 - (D) Glands
- (3) Binding site of Antigen on Antibody
 - (A) Fab
 - (B) Hinge Region
 - (C) Fc
 - (D) None of these
- (4) Antibodies are composed by
 - (A) Lipoproteins
 - (B) Fatty acids
 - (C) Glycoprotein
 - (D) Peptidoglycan
- (5) Which organs are known as Secondary organs
 - (A) Thymus
 - (B) B-Marrow
 - (C) Spleen
 - (D) Liver
- (6) Full form of APC
- (7) Types of W.B.C.
- (8) Full form of ELISA
- (9) Full form of RIA
- (10) Types of Secondary Organs of immune system

2 Answer any five questions each carries 6 marks

6×5=30

- (1) Explain cells are involved in immune response
- (2) Describe Structure and function of IgG
- (3) Explain types of Antigen
- (4) Describe Acquired immunity
- (5) Explain structure and functions of bone marrow
- (6) Describe difference of Primary and Secondary immune response
- (7) Explain the antigen antibody interactions

3 Answer any three questions each carries 10 marks

10×3=30

- (1) Describe types & role of T-cells and B-cells in immune system.
- (2) Explain Primary and Secondary organs structures and functions.
- (3) Describe antibody diversity and germ line theory.
- (4) Explain and applications of Monoclonal antibody.