

**B.Sc. IN MEDICAL LABORATORY TECHNOLOGY  
(BSCMLT)**

**Term-End Examination**

**December, 2014**

**BAHI-007 : IMMUNOLOGY**

*Time : 3 Hours*

*Maximum Marks : 70*

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**PART - A**

Answer **any three** questions. Each question carries **ten** marks. **3x10=30**

1. Define Immunity. List the types of immunity and describe in detail Acquired Immunity.
2. List the various types of serological reactions. Describe in detail Agglutination Reactions.
3. What are immunoglobulins ? Describe the structure of an immunoglobulin and add a note on IgM.
4. Define ELISA. Write in detail about the types, principles and uses of ELISA with neat diagram.

## PART - B

5. Write short notes on **any four** of the following : **4x5=20**
- (a) What is Lattice Hypothesis ? Add a note on Electro immunodiffusion.
  - (b) Laboratory diagnosis of syphilis.
  - (c) Delayed hypersensitivity.
  - (d) Widal test.
  - (e) Biological classes of Antigens.
6. Write in brief on the following : **5x2=10**
- (a) Difference between primary and secondary immune response.
  - (b) Role of complement system.
  - (c) List the primary and secondary lymphoid organs and add a note on T cells.
  - (d) Classification of hypersensitivity reactions.
  - (e) Radial immunodiffusion.

## PART - C

7. Write **True** or **False** for the following : **5x1=5**
- (a) Antigen and antibody reactions are irreversible.
  - (b) IgG is the only maternal antibody that is transported across the placenta.
  - (c) Resistance induced by vaccines is called Artificial Active immunity.
  - (d) Anaphylaxis is a delayed type of hypersensitivity reaction.
  - (e) Bone marrow is a peripheral lymphoid organ.

8. Fill in the blanks by choosing the appropriate from the following : 5x1=5
- (a) Hapten is \_\_\_\_\_ .  
(i) Complete antigen  
(ii) Incomplete antigen
- (b) In precipitation reaction \_\_\_\_\_ antigen combines with its antibody at suitable temperature and pH.  
(i) Soluble (ii) Particulate
- (c) VDRL is an example of \_\_\_\_\_ .  
(i) Agglutination (ii) Flocculation
- (d) \_\_\_\_\_ is called secretory antibody.  
(i) IgM (ii) IgA
- (e) In direct Coomb's test, sensitization of RBCs with antibodies occur \_\_\_\_\_.  
(i) in vivo (ii) in vitro
- \_\_\_\_\_