

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

Term-End Examination

June, 2015

**BAHI-011 : APPLIED SEROLOGY, IMMUNOLOGY
AND MICROBIOLOGY**

Time : 3 hours

Maximum Marks : 70

Note : Answer questions in Part-A and Part-B according to instructions in each part.

PART - A

Answer any five questions :

1. (a) Define Immune Tolerance. 2+3+3
(b) Enumerate examples of immune tolerance with advantages in clinical medicine.
(c) Role of Immuno competent cell in immune tolerance.

2. (a) What are the types of Immune Response and
(b) How do they develop ? 1+3+4
(c) Explain the differences between the types.

3. (a) Name the commonly used antigen-antibody reactions in diagnostic microbiology. 2+5+1
(b) Explain the principle and types of ELISA.
(c) Name Two important uses of ELISA in diagnostic microbiology.

4. (a) Define Hypersensitivity reactions. **1+2+5**
(b) Classify Hypersensitivity. Illustrate Ceomb's and Gel classifications.
(c) Describe Delayed Type Hypersensitivity.
5. (a) Name four diseases transmitted by water contamination. **2+2+4**
(b) What is "Presumptive Coliform Count" and
(c) How is this carried out ?
6. (a) What is an Immunoglobulin ? **1+3+4**
(b) Draw and label an immunoglobulin molecule.
(c) Name the functions of each of the immunoglobulin classes.
7. (a) What is passive immunity ? **1+2+5**
(b) Give examples of passive immunity.
(c) Describe the role of Bacterial vaccines in active immunity.

PART - B

8. Write short notes on **any five** : **5x6=30**
- (a) Bacteriological examination of water
 - (b) T lymphocyte
 - (c) Latex agglutination tests
 - (d) HLA complex
 - (e) Anaphylaxis
 - (f) Classical Complement pathway
 - (g) Monoclonal antibodies
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