

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

Term-End Examination

June, 2014

**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. **5x8=40**

1. What are automations in diagnostic microbiology services? Describe advantages and disadvantages of isolation of bacteria using rapid automatic technology. **3+3+2**

2. Define PCR. Describe procedure, basic principle, uses and applications of PCR technology. **2+3+3**

3. What is Hospital Acquired Infection (HAI) ? **3+5**
Describe the methods of prevention of HAI in large hospitals.

4. Distinguish active and passive immunity. Give examples of each. Describe the mechanism of development of immunity in definitive host. **2+2+4**

5. What is gel electrophoresis ? Give clinical significance of immuno electrophoretic patterns in various known diseases. 4+4
6. What are the various techniques of ELISA/EIA ? Describe the role of enzyme Immuno assays in detection of various hormones and tumor markers giving its clinical significance. 2+3+3
7. What is immunological apparatus ? Describe the role of immuno competent cells in production of various types of immune responses. 3+5

PART-B

8. Write short notes on **any five** of the following : 5x6=30
- (a) Auto immune disorders
 - (b) Immunological tolerance
 - (c) T and B Lymphocytes
 - (d) Clinical uses of flow cell cytometry
 - (e) Immunoglobulin E
 - (f) Presumptive coliform count
 - (g) Anaphylaxis
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