B.Sc. IN MEDICAL LABORATORY TECHNOLOGY (BMLT)

Term-End Examination December, 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.

2+3+3

- 1. (a) What are Immunoglobulins?
 - (b) Give illustrations of each class of Immunoglobulins.
 - (c) Describe the structure and function of IgG.
- 2. (a) What is meant by 'Complement System'?
 - (b) Name the components of this system.
 - (c) Describe the Classical Pathway of Complement activation.
- 3. (a) What is meant by Autoimmunity? 1+2+5
 - (b) Enumerate Autoimmune disorders.
 - (c) Illustrate pathogenic mechanism of any one of the autoimmune diseases.

- Define Immunity. 4. (a) 1 + 2 + 5Classify Immunity. (b) Describe mechanisms of Innate Immunity. (c)
- 5. (a) Define Antigen and Antibody. 2+2+4
 - Name antigen-antibody reactions used in (b) diagnostic microbiology.
 - Discuss immuno-fluorescence methods. (c)
- 6. Define Hypersensitivity. (a) 1+2+5 Classify Hypersensitivity.
 - (b)
 - Describe Type I Hypersensitivity. (c)
- 7. Define Hospital Associated Infection (HAI) (a)
 - What are the possible sources of HAI? (b)
 - Describe "Hand Hygiene" and its (c) importance in spread of nosocomial 2+2+4 infections.

PART - B

- Write short notes on any five: 8. 5x6 = 30
 - **ATOPY** (a)
 - (b) Immunodiffusion tests
 - Activation of B-lymphocyte (c)
 - (d) Heterophil antigen
 - Live oral vaccines (e)
 - (f) Monoclonal antibodies
 - Clinical importance of Histocompatibility (g) antigens