

00211

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

Term-End Examination

December, 2015

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

Time : 3 hours

Maximum Marks : 70

Note : Answer *any five* questions from Q.No.1-7. Question
No. 8 is *compulsory*.

Answer **any five** questions :

1. (a) Define antigen and antibody. **2+3+3**
(b) What is Indirect Immunofluorescent Antibody (IFA) ? Give examples of various diseases in which diagnosis by IFA is helpful.
(c) Hyper sensitivity reactions.
2. (a) What is active immunity ? **1+4+3**
(b) Describe in brief the mechanism of active immunity giving examples.
(c) What are indications of passive immunity ?
Give examples of passive immunity.
3. (a) Define immunodiffusion. **1+3+4**
(b) Enumerate the diseases where ELISA technique is used for diagnosis.
(c) Write briefly on Automation and its applicability in present diagnostic era.

4. (a) What is immune paralysis ? **1+4+3**
(b) Illustrate mechanism of immune paralysis system.
(c) Give clinical application of immune paralysis.
5. (a) What are antigen antibody reactions ? **3+3+2**
(b) Enumerate various antigen-antibody reactions used in clinical applicability.
(c) Use of Gel - electrophoresis in laboratory diagnosis services.
6. (a) What is PCR (Polymerase Chain Reaction) ?
(b) Use of PCR in clinical applicability. **2+3+3**
(c) RT - PCR in clinical diagnostic applications.
7. (a) What is Flow Cell Cytometry (FCM) ? **2+4+2**
(b) On what principle FCM is based ?
(c) Clinical applications of FCM.
8. Write briefly on any five of the following : **5x6=30**
(a) Role of technical and Nursing Staff in Hospital acquired infection.
(b) Spread and Prevention of nosocomial infections. (N and I).
(c) Coliform bacterial count.
(d) Bacteriological culture of water.
(e) Role of automation in microbiology.
(f) Quality control measures in microbiology.
(g) Anaphylaxis.
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