

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

Term-End Examination

December, 2012

BAHI-010 : APPLIED HEMATOLOGY

Time : 3 hours

Maximum Marks : 70

PART-A

Answer *any five* questions. Each question carries
8 marks. 5x8=40

1. Enumerate the indications for bone marrow aspiration study and describe in detail the procedure and preparation of bone marrow aspiration.
2. Describe procedure of preparation and demonstration of Lupus - Erythematosis cell (LE cells) and enumerate its clinical significance.
3. Describe the principle, procedure and clinical importance of osmotic fragility test.
4. Enumerate and describe the various laboratory investigations used in diagnosis of sickle cell anaemia.

5. Describe the principle, method and interpretation of Haemoglobin electrophoresis qualitatively and quantitatively for evaluation.

6. Enumerate and describe the role of various cytochemical stains used in diagnosis of acute leukaemias.

7.
 - (a) Define automation and explain the advantages of automation in laboratory.
 - (b) Explain the automated techniques in coagulation analysis.

8. Explain with the help of diagrams the Human Leukocyte Antigen complex (HLA). Describe the clinical importance of HLA typing.

PART-B

9. Write short notes on *any five* of the following.
Each carries *six* marks. 5x6=30

- (a) May Greenwald-Grunwald stain
 - (b) Perls Prussian blue reaction
 - (c) K li hauer test
 - (d) Peroxidase stain
 - (e) HAMS test
 - (f) Naked Eye Single Tube Red cell Osmotic Fragility test (NESTROF)
 - (g) LAP score
 - (h) PAS stain
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