

00199

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

**Term-End Examination**

**June, 2013**

**BAHI-010 : APPLIED HEMATOLOGY**

*Time : 3 hours*

*Maximum Marks : 70*

---

**PART- A**

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

1. (a) Describe in detail the preparation and examination bone marrow aspirate.  
(b) Indicate the role of bone marrow studies in clinical medicine.
  
2. What is Lupus Ery the matosus (L.E.cell). Write the procedure of preparation & buffy coat. Give morphology and clinical significance of LE cells.
  
3. What is Hereditary spherocytosis ? Describe in detail the Osmotic fragility test giving its clinical significance.

4. (a) Enumerate the laboratory tests for screening of hemolytic and coagulation disorders.  
(b) Describe the sickling phenomenon.
5. Define Cellulose Acetate Membrane (CAM) electrophoresis and describe the role of haemoglobin electrophoresis in diagnosis of hemoglobinopathies and thalassaemias.
6. Enumerate the cyto chemical stains used in hematology, and describe how they help in diagnosis of Adite leukaemia.
7. (a) What are the recent advances in laboratory automation ?  
(b) Describe the automation in coagulation analysis.
8. (a) Explain the techniques of HLA typing.  
(b) Explain the clinical importance of Human Leukocyte Antigens (HLA)

**PART - B**

9. Write short notes on *any five* of the following.

Each carries *six* marks.

5x6=30

- (a) May- Grunwald Giemsa Stain
  - (b) Sudan Black stain
  - (c) PAS stain
  - (d) Alkali denaturation test
  - (e) Demonstration of hemosiderin in urine
  - (f) Sucrose - lysis test
  - (g) LAP score
  - (h) Demonstration of Heinz bodies.
-