

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

**Term-End Examination**

**June, 2014**

**BAHI-010 : APPLIED HEMATOLOGY**

*Time : 3 hours*

*Maximum Marks : 70*

**PART-A**

Answer **any four** questions. Each question carries  
10 marks.

**4x10=40**

1. What is the principle of the osmotic fragility test ? Describe the method of doing osmotic fragility. What will you find in osmotic fragility in :
  - (a) Spherocytosis
  - (b) Iron deficiency anaemia
  - (c) Thalassemia
2. Name the screening tests used for bleeding disorders. Describe the prothrombin time test.
3. Define leukemias. Describe the method of staining for leukocyte alkaline phosphatase and its interpretation.
4. What is meant by thalassemia ? Describe the laboratory diagnosis of thalassemia. Give the morphological picture in peripheral blood smear.

5. Name the indications for bone marrow examination. What are the common sites of bone marrow sampling ? Describe the appearance of normal bone marrow.

**PART - B**

Write short notes on **any six** of the following. Each short note carries **5** marks.

**6x5=30**

- (a) HLA typing
  - (b) PAS staining
  - (c) Bleeding Time
  - (d) In vitro sickling tests
  - (e) Demonstration of iron in marrow
  - (f) Thalassemia minor
  - (g) Control pool plasma for coagulation studies
  - (h) Haemoglobin electrophoresis
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