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BAHI-010

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B.Sc. IN MEDICAL LABORATORY TECHNOLOGY (BMLT)

Term-End Examination

December, 2014

BAHI-010 : APPLIED HEMATOLOGY

Time : 3 hours *Maximum Marks : 70*

Note : *Follow directions in each part of question paper.*

PART-A

Answer **any five** questions of the following : **5x8=40**

1. What are indications of bone marrow examination ? Describe preparation of smear and method of staining by "Giemsa method".

2. Define Osmatic fragility. Describe the principle and preparation of test procedure to demonstrate fragility of cells. How do you report the findings ? Give its clinical importance.

3. What is sickling phenomenon ? Describe the procedure and preparation of smears for examination.

4. Enumerate coagulation factors. Describe the mechanism of coagulation.

5. Describe automation and recent trends of advances in coagulation techniques for diagnosis.

6. Define major and minor thalassemia. Describe the principle and procedure of haemoglobin A_2 estimation.

7. Define haemolytic anemia. Enumerate various tests for bleeding disorders.

8. What is foetal haemoglobin (HbF) ? Describe the principle, procedure for estimation of HbF by Alkali denaturation technique.

PART-B

9. Write short notes on **any five** of the following : **5x6=30**
   (a) Immuno peroxidase staining in bone marrow aspirate smears
   (b) Hemosiderin iron staining
   (c) Hb-electrophoresis
   (d) Myeloid Erythroid ratio (M/E ratio)
   (e) Hereditary spherocytosis
   (f) Hb-C and Hb-D haemoglobinopathy
   (g) L.E. Cell
   (h) Cytochemical stains