

00644

**B.Sc. IN MEDICAL LABORATORY TECHNOLOGY**

**Term-End Examination**

**December, 2014**

**BAHI-002 : BASIC HAEMATOLOGY**

*Time : 3 hours*

*Maximum Marks : 70*

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**PART - A**

Answer **three** questions.

1. (a) Define anemia. 2+8  
(b) Explain the morphological classification of anemia. Describe the blood picture of megaloblastic anemia with diagram.
  
2. (a) Define anticoagulant. 2+8  
(b) Classify the various anticoagulants used in clinical laboratory, based on their mode of action and concentration of its use.
  
3. (a) What is the importance of peripheral blood picture examination ? 2+8  
(b) Explain the preparation of a blood smear. Describe the staining procedure of the smear. How do you examine a peripheral blood smear ?

4. (a) Draw and describe the maturation process of Erythrocyte. **6+4**
- (b) Give the sample values in the following conditions :
- (i) Hb in polycythemia vera.
  - (ii) Total WBC count in aplastic anemia.
  - (iii) Normal Reticulocyte count in new born.
  - (iv) Platelet count in acute myeloid leukaemia.

### **PART - B**

5. Write short notes on **any four** of the following : **5x4=20**
- (a) ESR
  - (b) LE cells
  - (c) Abnormal RBC
  - (d) Osmotic fragility
  - (e) Bleeding time
  - (f) PCV
6. Write short answers of the following : **2x5=10**
- (a) Megakaryocyte
  - (b) Anticoagulant
  - (c) Basophil
  - (d) Leukocytosis in 2 conditions
  - (e) Principles of leishmans stain.

**PART - C**

7. (a) Fill in the blanks. 1x5=5
- (i) Osmotic fragility will be increased in \_\_\_\_\_ .
  - (ii) In haemophilia \_\_\_\_\_ is normal.
  - (iii) The commonly used RBC diluting fluid \_\_\_\_\_ .
  - (iv) The normal Absolute Eosinophil is \_\_\_\_\_ .
  - (v) Normal pH of blood is \_\_\_\_\_ .
- (b) Write **true / false** in the following : 1x5=5
- (i) Normoblast are normally present in peripheral blood.
  - (ii) Hypocellular bone marrow is seen in aplastic anemia.
  - (iii) In myeloid leukaemia peroxidase is positive.
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