

B.Sc. IN MEDICAL LABORATORY TECHNOLOGY

Term-End Examination

December, 2010

BAHI-002 : BASIC HAEMATOLOGY

Time : 3 hours

Maximum Marks : 70

PART - A

Answer *any three* questions : **3x10=30**

1. What are anticoagulants ? Discuss the various anticoagulants used in haematology.
2. Describe the development of myelopoiesis with the help of diagrams.
3. Describe the preparation of blood smear and write the procedure of peripheral smear staining by Leishman Stain.
4. (a) Explain the morphology and the functions of platelets.
(b) Describe in brief the most common platelet function tests that you perform in your laboratory.

PART - B

5. Write short notes on *any four* of the following : **5x4=20**
- (a) Absolute eosinophil count.
 - (b) L.E. cell
 - (c) PCV
 - (d) Abnormal RBC
 - (e) Osmotic fragility
 - (f) Sickle cell.
6. Write short answers of the following : **2x5=10**
- (a) Define Leukocytosis with two conditions.
 - (b) Write morphological classification of anaemia.
 - (c) Enlist four physiological factors influencing the rate of sedimentation.
 - (d) Enlist four erythrocyte indices with normal values.
 - (e) Explain total WBC count in chronic lymphatic Leukaemia.

PART - C

7. (a) *Fill in the blanks :* **1x10=10**

- (i) The normal reticulocyte count in new born is _____ %.
- (ii) The commonly used RBC diluting fluid is _____.
- (iii) PCV in Polycythemia vera is _____ %.
- (iv) Platelet count in acute leukaemia is _____.
- (v) Normal size of RBC is _____.

(b) *Write True/False for the following :*

- (i) Total WBC count is done using oil immersion objective.
 - (ii) Myeloblasts are peroxidase positive.
 - (iii) ESR is increased if the tube is tilted and not vertical.
 - (iv) The osmotic fragility of red blood cells is decreased in hereditary spherocytosis.
 - (v) The basophil is the largest white blood cell.
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