

B.Sc. IN MEDICAL LABORATORY TECHNOLOGY

Term-End Examination

December, 2013

BAHI-002 : BASIC HAEMATOLOGY

Time : 3 hours

Maximum Marks : 70

Note : *Part-A contains 10 objective questions.*

Part-B contains 5 short answer questions.

Part-C contains 6 short notes. Answer any four questions.

Part-D contain 4 essay questions. Answer any three questions.

PART - A

1. (a) Fill in the blanks 1x10=10
- (i) ESR value in Multiple myeloma is _____ .
- (ii) Thalassaemia is also called _____ .
- (iii) Haemoglobin seen in sickle cell anemia is _____ .
- (iv) Thrombocytes are also called _____ .
- (v) In Hereditary spherocytosis osmotic fragility of red cells is _____ .

- (b) Write **true** or **false** for the following :
- (i) In Acute myeloid leukaemia the myeloblast count is increased.
 - (ii) Myeloblasts are peroxidase negative.
 - (iii) Granules in eosinophil after Romonowsky staining is orange pink.
 - (iv) High leucocyte count in acute infection shows shift to the right.
 - (v) Usual dilution used for red blood cell count is $\frac{1}{100}$.

PART - B

2. Write short notes on *any four* of the following : 5x4=20
- (a) E.D.T.A
 - (b) Arneth count
 - (c) Chronic myeloid leukaemia
 - (d) Leishman stain
 - (e) RBC inclusions
 - (f) Thick blood smear

PART - C

3. Write short answers on the following : 2x5=10
- (a) Define bleeding time and clotting time
 - (b) Enumerate complete blood count (Haemogram)
 - (c) Importance of bone marrow examination
 - (d) Causes of iron deficiency anaemia
 - (e) Factors influencing ESR (Erythrocyte Sedimentation Rate)

PART - D

Answer *any three* questions :

4. (a) Describe the morphology and methods of counting platelets. **4+6=10**
- (b) Write the functions of platelets and conditions affecting disintegration of platelets.
5. (a) List four abnormal forms of erythrocytes seen in peripheral blood and indicate name of disorders in each. **2+8=10**
- (b) Give an account and significance of abnormal forms of RBC and WBC in peripheral blood.
6. Describe Haemopoiesis. Draw the well labelled diagram of each stage of development. **10**
7. (a) Describe in detail the mechanism of coagulation of blood. **6+4=10**
- (b) Name screening tests used in the laboratory to investigate a case of Haemophilia A and B.
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