

B.Sc. IN MEDICAL LABORATORY TECHNOLOGY

Term-End Examination

December, 2012

BAHI-002 : BASIC HAEMATOLOGY

Time : 3 hours

Maximum Marks : 70

PART - A

Answer *any three* questions :

1. (a) Define leukaemia. 1+2+5+2
(b) Give FAB classification of Acute leukaemia.
(c) Explain in detail the peripheral blood picture in acute myeloid leukaemia with diagram.
(d) Write the Sample Values of the complete haemogram in a patient with the above condition.

2. (a) Explain the clinical importance of peripheral blood smears examination. 2+6+2
(b) Describe with diagram the blood picture of a patient with hook worm (*Ankylostium duodenale* infestation.)
(c) Write the cause of anaemia in the above case.

3. (a) Define anaemia. 1+4+5
(b) Give the morphological classification of anaemia.
(c) Describe the blood picture of anaemia caused by fish tape worm.
(diphyllobothrium latum infestation.)
4. (a) Define anticoagulant. 1+3+4+2
(b) List the various anticoagulants used in the haematology laboratory.
(c) Explain the mode of action, advantages and disadvantages of any two anticoagulants.
(d) Name the anticoagulants used for the following investigations :
(i) Prothrombin time
(ii) ESR
(iii) Platelet count
(iv) Transfusion Reactions

PART - B

5. Write short notes on *any four* of the following : 5×4=20
- (a) Factors affecting ESR
 - (b) Bleeding time
 - (c) Factor IX
 - (d) Haemophilia A
 - (e) Prothrombin time tests including INR
(International Normalisation Ratio)
 - (f) Functions of Platelet
6. Write in brief about the following : 2×5=10
- (a) Retienlocyte count
 - (b) Megakaryocyte
 - (c) Principle of Romanomsky stain
 - (d) Thick blood smears
 - (e) Sickling phenomenon

PART - C

7. (a) Fill in the blanks : 1x10=10
- (i) Pancytopenia means decrease in _____.
 - (ii) Myeloblasts are peroxidase _____.
 - (iii) In spherocytic anaemia osmotic fragility is _____.
 - (iv) Double population of cells seen in peripheral and mean _____ anaemia.
 - (v) Plate count in chronic myeloid leukaemia.
- (b) Write True or False for the following :
- (i) In haemophilia BT is prolonged
 - (ii) Auer rods are seen in myeloblast.
 - (iii) Cabbot ring is an RBC inclusion
 - (iv) EDTA is used for Prothrombin time.
 - (v) In polycythemia ESR is decreased.
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