HAEMATOLOGY AND BLOOD BANKING  HSSC-II

SECTION – A (Marks 10)

Q. 1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i) Megaloblasts are found in the bone marrow in
   A. Aplastic anaemia    B. Folic acid deficiency
   C. Infections         D. Acute leukemia

(ii) Which of the following anticoagulants is used for coagulation screening tests?
   A. EDTA               B. Heparin
   C. Sodium citrate     D. Potassium oxalate

(iii) A patient with decreased platelet count (35,000/cmm) is liable to present with
      A. Bleeding in the joints   B. Bleeding from nose
      C. Infection              D. Anaemia

(iv) Which of the following antibodies will be found in the blood of a person having 'AB' blood group?
     A. Antibody-A            B. Antibody-B
     C. Antibody-A as well as antibody-B D. Neither antibody-A nor antibody-B

(v) Which of the following coagulation factors is NOT a part of the intrinsic pathway of coagulation?
    A. Factor-XI            B. Factor-X
    C. Factor-VIII          D. Factor-IX

(vi) Bleeding time is prolonged in
     A. Hemophilia-A        B. Hemophilia-B
     C. Iron deficiency anaemia D. None of these

(vii) Which of the following is NOT a Romanowsky’s stain?
     A. Giemsa Stain        B. Wright Stain
     C. Haematoxylin Stain  D. Leishman Stain

(viii) In the blood bank, platelet concentrates are stored at
       A. 20° C               B. −4° C
       C. 2.4° C             D. 37° C

(ix) Normal MCH ranges from
     A. 20-25 pg            B. 15-20 pg
     C. 27-31 pg            D. 32-35 pg

(x) Spherocytosis is observed in
     A. Megaloblastic anaemia B. Iron deficiency
     C. Aplastic anaemia     D. Autoimmune hemolytic anaemia

For Examiner’s use only:

Total Marks: 10

Marks Obtained: [ ]
SECTION – B (Marks 24)

Q. 2 Attempt any TWELVE parts. The answer to each part should not exceed 2 to 4 lines. (12 x 2 = 24)

(i) Name the parasites which cause anaemia.
(ii) Name the stages of maturation of Neutrophils.
(iii) What is the importance of red cell morphology in the diagnosis of anaemia?
(iv) How will you prepare a thick film for malarial parasites?
(v) What do you know about Rh blood group system?
(vi) How will you prepare and store platelet concentrate in the blood bank?
(vii) Give the normal ranges of Hb level in males, females, infants and children.
(viii) What is an atypical lymphocyte? What is its importance?
(ix) You are provided with a blood smear stained with Wrights' stain. List the points that you will like to note in the detailed examination of the smear.
(x) What is Neutrophilic leukocytosis? What are its causes?
(xi) Write a note on direct coombs' test.
(xii) What are the causes of prolonged bleeding time?
(xiii) How will you select a blood donor in the blood bank?
(xiv) List the screening tests for safe blood transfusion.
(xv) What is the importance of reticuloocyte count?
(xvi) Give the normal ranges of
   a. Neutrophil count
   b. Lymphocyte count
   c. Eosinophil count

SECTION – C (Marks 16)

Note:- Attempt any TWO questions. All questions carry equal marks. (2 x 8 = 16)

Q. 3 Give a detailed classification of Anaemia.
Q. 4 Describe blood transfusion reactions.
Q. 5 Describe the normal coagulation mechanism.