





# HAEMATOLOGY AND BLOOD BANKING HSSC-II

89

Time allowed: 2:20 Hours

Total Marks Sections B and C: 40

**NOTE:** Answer any twelve parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

## SECTION – B (Marks 24)

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

- (i) How is blood circulated in our body?
- (ii) Write down the composition of blood.
- (iii) Write down procedure for reticulocyte count.
- (iv) What is clinical significance of osmotic fragility test?
- (v) Define helmet cell and sickle cell.
- (vi) How is hemoglobin formed?
- (vii) What is laboratory diagnosis for thalassemia?
- (viii) Enumerate blood parasites.
- (ix) How are thick and thin films used to diagnose malaria?
- (x) Write down indications for bone marrow aspiration.
- (xi) How do we obtain a bone marrow trephine specimen?
- (xii) What are clinical features of acute myeloblastic leukemia?
- (xiii) Explain tube technique of forward ABO grouping.
- (xiv) What are different types of blood groups?
- (xv) How is blood collected in blood bank?
- (xvi) Differentiate between major and minor X-match.

## SECTION – C (Marks 16)

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

- Q. 3** What is TLC? Write down its requirements, procedure, calculations and normal value. (08)
- Q. 4** Define coagulation. What are clotting factors? Explain intrinsic and extrinsic pathways for coagulation. (08)
- Q. 5** Write notes on any two of the following:
- a. Westergren's method of ESR (04)
  - b. Direct and Indirect Coomb's test (04)
  - c. Donor selection criteria (04)