Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐   **Total No. of Pages : 02**

Total No. of Questions : 09

B.Sc. (MLS)   (Sem.–3)

BASIC HEMATOLOGY & HEMATOLOGICAL TECHNIQUES-I

Subject Code : BMLS-301-18
M.Code : 93327
Date of Examination : 11-01-23

Time : 3 Hrs.   **Max. Marks : 60**

INSTRUCTIONS TO CANDIDATES :
1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. **Write briefly :**

    a) What is the function of erythropoietin?

    b) What is advantage of Westergren's tube?

    c) Give the name and composition of leucocyte count diluents.

    d) Define reticulocyte.

    e) Why RBC shape in biconcave?

    f) What is importance of hematology lab?

    g) Give Maturational Sequence of Thrombocyte.

    h) What are HSCs?

    i) Name diluents used for absolute eosinophil count.

    j) What is the principle of Sahli's method for haemoglobin estimation?

SECTION-B

2. What is supravital staining? Give its importance in haematology laboratory.

3. Discuss principle, procedure and results of Wright's stain.

4. Discuss the principle and importance of various analyzers used in haematology lab.

5. Define each of the erythrocyte indices: Mean Corpuscular Volume (MCV), Mean Corpuscular Haemoglobin (MCH), and Mean Corpuscular Haemoglobin Concentration (MCHC).

6. Name the sites of erythropoiesis from the early embryonic stage of development until fully established in adults.

SECTION-C

7. Discuss various types of blood collection methods. Give the advantages and disadvantages of each.

8. Describe atleast four haemoglobin estimation methods and explain the purpose of each procedure.

9. Discuss principle, procedure and clinical significance of differential leucocyte count.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.