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Total No. of Pages : 02

Total No. of Questions : 11

M.Sc. (Medical Microbiology) (Sem-2)

**HEMATOLOGY**

Subject Code : MMB-202-21

M.Code : 92125

Date of Examination : 09-06-2023

Time : 3 Hrs.

Max. Marks : 70

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains EIGHT questions carrying FIVE marks each and students have to attempt any SIX questions.
3. SECTION-C will comprise of two compulsory questions with internal choice in both these questions. Each question carries TEN marks.

**SECTION-A**

**1. Write briefly :**

- a) Write the normal hemoglobin range in males and females.
- b) What is EDTA?
- c) Write the uses of methyl peroxidase stain.
- d) What is the normal range of RBCs in blood?
- e) What is the clinical significance of MCV and MCHC?
- f) Define homeostasis.
- g) What is fibrinolysis?
- h) Write the use of coagulometer.
- i) What do you understand by thrombocytopenia?
- j) What is myelodysplastic syndrome?

### SECTION-B

2. Write the classification of WBC and their functions.
3. Differentiate between iron deficiency anemia and megaloblastic anemia.
4. Write the principle, procedure and interpretation of sudan black stain.
5. Write the FAB classification of leukemia.
6. Describe any two platelet disorders.
7. Write a brief note on thalassemia.
8. Explain the principle and clinical significance of TLC, packed cell volume and ESR.
9. Briefly explain automated digital analysis of cells.

### SECTION-C

10. Give a detailed account on composition and formation of blood cells in bone marrow.

**OR**

Write a detail note on principle, working and maintenance of reticulocyte, platelet and hemoglobin analyzer.

11. Differentiate between leukemoid reaction and leukemia. Elaborate the lab investigations to distinguish between them.

**OR**

What is coagulation? Describe the coagulation cascade along with a coagulation disorder.

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