Roll No. | | | | | | | | | | | | |  Total No. of Pages : 02

Total No. of Questions : 09

B.Sc.(MLS) (2014 to 2017) (Sem.–4)

# APPLIED HEMATOLOGY

Subject Code : BMLS-403

M.Code : 48118

Time : 3 Hrs. Max. Marks : 60

**INSTRUCTION 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) Answer briefly :**

a) What are transferrins?

b) What is the nature of alpha and beta rays?

c) Name vitamin K dependent factors.

d) List the function of transcobalmins.

e) Define megaloblast?

f) What is the function of vWF?

g) Name some agonists of platelet aggregation.

h) What is the function of tPA?

i) What is full form of MPO in cytochemical staining?

j) What are leukamoid reactions?

## SECTION-B

2) Give the principle, procedure and clinical significance of APTT/PTTK.

3) What is half life of radioactive isotopes? What is its importance?

4) Discuss how iron is transported and absorbed in our body.

5) Give the principle, procedure and clinical significance of plasma Hb.

6) Write short note on use of cytochemical staining for the diagnosis of leukemias.

## SECTION-C

7) Write down the steps involved in the culture of cells for Karyotyping. Discuss various staining techniques employed.

8) Discuss the mechanism of normal fibrinolysis. Give various tests for hyperfibrinolysis.

9) What is role of G6PD in our system in relation to hematology? Discuss HMP pathway and the tests conducted for demonstrating G6PD deficiency.



**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.**