

Roll no.

ID: 221924

**2nd semester/ Branch: DMLT
Subject Name: Applied Hematology**

Time Allowed: 3 Hrs.

MM: 60

Section -A

Note: Multiple Choice questions. All questions are compulsory.

$$6 \times 1 = 6$$

- Q.1 Increase number of WBCs is known as _____
(a) Leukocytopenia (b) Leukocytosis
(c) erythrocytopenia (d) None of these

Q.2 Which one is used for cell count.
(a) Haemocytometer (b) Centrifuse
(c) Glucometer (d) None of these

Q.3 What is the normal size of Monocyte?
(a) 10-12 micrometer (b) 8-10 micrometer
(c) 16-22 micrometer (d) None of these

Q.4 In Haemoglobin Haem is _____ part.
(a) Iron (b) Protein
(c) Calcium (d) all of these

Q.5 Which converts light photons to electronic signals?
(a) Photodiodes (b) Electrodes
(c) Mirrors (d) None of these

Q.6 In which disease/ conditions RBS counts decreased?
(a) High Altitude (b) Tobacco uses
(c) Anaemias (d) None of these

Section-B

Note: Objective/Completion type questions. All questions are compulsory. 6x1=6

- Q.7** The Technique which is used for Hb. Estimation is known as (Haemocytometry / Hemoglobinometry).

Q.8 Define Standard Deviation.

Q.9 Write the normal value of DLC.

Q.10 Define Precision.

Q.11 Normal %age of Lymphocytes.

Q.12 What is the molecular weight of Haemoglobin.

Section -C

Note: Short answer type Questions. Attempt any eight questions out of ten questions.

$$8 \times 4 = 32$$

- Q.13 Explain formation of Haemoglobin.
 - Q.14 Explain various errors involved in Haemocytometry.
 - Q.15 Explain about Neubauer counting chamber in brief.
 - Q.16 Explain preparation and staining of blood film in brief.
 - Q.17 Explain Internal quality assurance in brief.
 - Q.18 Write a short note on Automation.
 - Q.19 Write the various function of Blood.
 - Q.20 Explain clinical significance of WBC count.
 - Q.21 Draw and explain Funchs-Rosenthal counting chamber.
 - Q.22 Write the procedure of Platelets count.

Section-D

Note: Long answer questions. Attempt any two questions out of three questions.

$$2 \times 8 = 16$$

- Q.23 Explain Cyanmethemoglobin method for Haemoglobin estimation with specific reference.

Q.24 Explain RBS count with their calculation & clinical significance.

Q.25 (a) Write any four importance of coulter cell counter.
(b) Explain External Quality Assurance in brief.