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**DMLT**

**Subject:- Hematology III/ Clinical Hematology III**

Time : 3Hrs.

M.M. : 100

**SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

Q.1 Wintrobe tube is used for:

- a) ESR                                      b) PCV
- c) Both a and b                          d) None

Q.2 Packed cell volume is also known as:

- a) Haemoglobin                          b) Haematocrit
- c) Hemolysis                              d) All

Q.3 In hemolytic anemia breakdown of \_\_\_\_\_ is increased :

- a) WBC                                      b) PLT
- c) RBC                                        d) None

Q.4 Reticulocyte are immature \_\_\_\_\_

- a) RBC                                        b) WBC
- c) PLT                                        d) HB

Q.5 Which of the following is a supravital stain?

- a) BCB                                        b) Leishman's stain
- c) Giemsa's stain                        d) All

Q.6 Westergren tube is \_\_\_\_\_ cm long:

- a) 12 cm                                      b) 30 cm
- c) 20 cm                                      d) 10 cm

Q.7 Normal range of MCH is

- a) 27-31 pg                                  b) 80-100 fl
- c) 32-36 gm/dl                              d) None

Q.8 Red cell fragility test is also known as

- a) HB fragility                              b) Osmotic fragility
- c) PLT fragility                              d) All

Q.9 Tri-sodium citrate is used in \_\_\_\_\_ method:

- a) Wintrobe method                        b) Westergren method
- c) Capillary tube method                  d) None

Q.10 Microhematocrit method is used in \_\_\_\_\_ method:

- a) ESR                                        b) RBC count
- c) Retic count                                d) PCV

**SECTION-B**

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

Q.11 NMB stands for \_\_\_\_\_

Q.12 MCHC stands for \_\_\_\_\_

- Q.13 ESR stands for\_\_\_\_\_
- Q.14 The length of wintrobe tube is\_\_\_\_\_mm.
- Q.15 \_\_\_\_\_tube is used for macrohematocrit method.
- Q.16 Megaloblastic anemia is caused by\_\_\_\_\_.
- Q.17 Iron is caused by deficiency of\_\_\_\_\_.
- Q.18 \_\_\_\_\_is the normal range of MCV.
- Q.19 \_\_\_\_\_is the normal range of Reticulocyte count.
- Q.20 PCV is increased in\_\_\_\_\_condition.

### SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Give the requirements and clinical significance of osmotic fragility test.
- Q.22 Give the difference between wintrobe tube and westergren tube.
- Q.23 Name any two supravital stains with their composition.
- Q.24 Describe MCH with its formula and normal range.
- Q.25 Name the methods of ESR with their requirements.
- Q.26 What are the causes of anemia?
- Q.27 Explain the procedure of Foetal Hb.
- Q.28 Give the classification of anemia.
- Q.29 What are the various factors that affect ESR?

- Q.30 Explain the clinical significance of Hb estimation.
- Q.31 Give the normal value and clinical significance of PCV.
- Q.32 Explain Red cell Indices.
- Q.33 Give the clinical significance of Hb estimation.
- Q.34 Give the difference between microhematocrit and macrohematocrit method.
- Q.35 What is the procedure of osmotic fragility test?

### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain the procedure of ESR by Westergren method.
- Q.37 Explain the types of hemolytic anemia with its causes and lab diagnosis.
- Q.38 Explain the principle and procedure of reticulocyte count.