



DMLT/DMRT EXAMINATION BOARD, ODISHA

SECOND D.M.L.T. Annual Exam Of 2021

QUESTIONS (PATHOLOGY, PAPER-I)

(IMMUNO-HAEMATOLOGY, BLOOD BANKING & CLINICAL HAEMATOLOGY)

Time- 3 Hours

FULL MARKS:100

Answer all questions

1. Answer any TWO:

(15x2=30)

- a. Enumerate the Romanowsky stains. Describe the composition of Leishman's stain. Write the staining procedure of peripheral blood smear. Describe the morphology of different WBCs in a Leishman-stained smear. [2+2+3+8=15]
- b. Describe the Blood donation in detail under the following headings: [i] Steps involved in voluntary blood donation, [ii] Criteria for Donor selection, [iii] Phlebotomy procedure, [iv] Donor reactions and [v] Donor unit processing. [2+5+3+2+3=15]
- c. What are the different types of sample collection methods for urine examination with their indications? Enumerate the different chemical tests performed in a sample of urine. Describe the principle and procedure of Heat and acetic acid test and Rothe-ra's test. [2+7+6=15]

2. Write short notes on any FIVE:

(6x5=30)

- a. Laboratory anticoagulants.
- b. Antiglobulin tests – principles and procedures.
- c. Specific gravity of urine.
- d. Donor selection
- e. Blood components.
- f. Transfusion reactions

3. Write briefly on any TWO:

(5x2=10)

- a. Wintrobe's tube
- b. Benzidine test – principle and procedure.
- c. Fresh frozen plasma [FFP].

4. Fill in the blanks:

(1x10=10)

- a. _____ blood group is commonly known as the Universal recipient.
- b. Anticoagulants used for blood banking are _____.
- c. Major cross-matching is done using _____ of the recipient.
- d. Tests done for demonstration of hemoglobinuria is _____.
- e. _____ is the ideal method of hemoglobin estimation .
- f. Example of supravital stain is _____.
- g. Cryoprecipitate is rich in _____ factor.
- h. Two causes of eosinophilia are _____ & _____.
- i. _____ hormone stimulates erythropoiesis [RBC formation].
- j. Bone marrow aspiration is done using _____ needle.

5. Match the following:

(2x5=10)

- | | |
|----------------------|-----------------------------|
| a. Lavender top tube | 1. Biochemical study |
| b. Blue top tube | 2. ESR estimation |
| c. Red top tube | 3. Coagulation study |
| d. Gray top tube | 4. Hemogram |
| e. Black top tube | 5. Blood glucose estimation |

6. Write the full form of the following:

(2x5=10)

- a. RDW
- b. MCV
- c. MCH
- d. PCV
- e. MCHC
