



# 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)

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

4. Fill in the blanks:

(1x10=10)

- AB blood group is commonly known as the Universal recipient.
- Anticoagulants used for blood banking are CPD, CPDA
- Major cross-matching is done using serum of the recipient.
- Tests done for demonstration of hemoglobinuria is Benzidine.
- ~~Cyanometh~~ <sup>hemoglobin</sup> is the ideal method of hemoglobin estimation.
- Example of supravital stain is Crypton Violet
- Cryoprecipitate is rich in VIII factor.
- Two causes of eosinophilia are allergy & asthma.
- Erythropoietin hormone stimulates erythropoiesis [RBC formation].
- Bone marrow aspiration is done using SALAH 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  | Red cell Distribution Width |
| b. MCV  | Mean corpuscular volume     |
| c. MCH  | Mean " hemoglobin           |
| d. PCV  | Packed cell volume          |
| e. MCHC | mean " " concentration.     |

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