

**DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY**  
**SECOND YEAR**  
**PAPER I – CLINICAL BIOCHEMISTRY, PATHOLOGY AND**  
**HISTOPATHOLOGY**

*Q.P. Code: 842611*

**Time: Three Hours**

**Maximum : 100 Marks**

**Answer All questions**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Write a detailed note on chromatography and the types and principle involved of chromatography.
2. Discuss in detail about the metabolic disorders of carbohydrates.
3. Write a detailed note on chemical and microscopic examination of urine.

**II. Write notes on:**

**(10 x 5 = 50)**

1. GTT.
2. Preservatives used in urine sample.
3. H and E staining.
4. Microscopic examination of stool.
5. Blood smear and its importance.
6. Estimation of serum HDL cholesterol.
7. PAGE (Polyacrylamide Gel Electrophoresis).
8. PTAM.
9. Hematuria.
10. Preparation of mounting medium.

**III. Short answers on:**

**(10 x 2 = 20)**

1. PAGE.
2. Beta lactam antibiotics.
3. Beer's law.
4. Name the four electrolytes tested in blood.
5. Clinical application of alkaline phosphatase and creatinine kinase.
6. Hematocrit.
7. Cryostat.
8. Use of Xylene in tissue processing,
9. Lesch Nyhan syndrome.
10. Deficiency of glucose 6 phosphate dehydrogenase.

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