

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 1123]

NOVEMBER 2023

Sub. Code: 5018

B.Sc. MEDICAL LABORATORY TECHNOLOGY
SECOND YEAR (Regulations 2010-2011& 2018-2019 onwards)
PAPER III – CLINICAL PATHOLOGY AND BASIC HEMATOLOGY
Q.P. Code: 725018

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Describe the procedure of Urinary Sedimentation. Give a detailed note on Organized and Non-organized elements in Urine with suitable diagrams.
2. Define Iron Absorption and Storage in Body Cells. Discuss in detail about lab diagnosis of Microcytic Hypochromic Anemia.
3. Discuss in detail about Special and Routine stains used in Hematology.

II. Write notes on:

(8 x 5 = 40)

1. Role of Urine Examination in case of Jaundice.
2. Investigation and cause of Haemoglobinuria and Haematuria in Urine.
3. Discuss Pathogenesis and Lab diagnosis of Neutrophil Disorders.
4. Importance of Microenvironment in Hematopoiesis.
5. Sickle Cell Anaemia.
6. Examination of Inborn errors Amino acid in Urine.
7. Polycythemia and types.
8. Kleihauer Preparation.

III. Short answers on:

(10 x 3 = 30)

1. Microalbuminuria.
2. RBC Inclusions.
3. G6PD Deficiency.
4. Megaloblastic Anaemia.
5. Molecular diagnostic methods in Hematology.
6. Types of collection of urine specimen.
7. Methemoglobinemia.
8. Function and Structure of Platelet.
9. Carbohydrate disorders detected in Urine.
10. Write about supravital stains with examples.
