[LE 0212]

### B.Sc. MEDICAL LABORATORY TECHNOLOGY SECOND YEAR PAPER III – CLINICAL PATHOLOGY & BASIC HAEMATOLOGY

FEBRUARY 2014

#### Q.P. Code: 725018

# Time : Three hours

#### Answer ALL questions.

### I. Elaborate on:

- 1. The development of thrombocytes and mechanism of stoppage of bleeding by thrombocytes.
- 2. The microscopic appearance of erythrocytes in deficiency anemia's and diagnostic tests required to confirm the deficiency.
- 3. Classifications of Acute Leukemia's and describe the diagnostic cell (with diagrams) in each type of leukemia.

#### **II** .Write Notes on:

- 1. Specimen collection for blood cell counting and possible artifacts
- 2. Advantages & Defects of Automatic Blood Cell Counters
- 3. Foetal Hb (HbF) in adult blood.
- 4. Principle of Romanosky's Stains and mention the various different types of Romanowsky's Stains
- 5. Quality Control of platelet count
- 6. Difference between exudate and transudate
- 7. Oligo and Asthenozoospermia
- 8. Mean Platelet volume and its importance

## III. Short Answers on:

- 1. Toxic granules in polymorphs appearance and clinical importance.
- 2. Atypical Lymphocytes appearance and clinical importance.
- 3. Causes of Macrocytic anemia.
- 4. Anisocytosis definition and clinical importance
- 5. Meaning of Asthenozoospermia
- 6. Megaloblast appearance and causes
- 7. Define Thrombocytosis and mention two clinical conditions in which it occurs
- 8. Peripheral blood appearance in Chronic Myeloid Leukemia.
- 9. Microcyte appearance and causes
- 10. Crystals in Urine- Method of examination and microscopic appearance of any four crystals.

(8x5 = 40)

(10x3 = 30)

(3x10 = 30)

Maximum: 100 marks

Sub. Code: 5018