B.Sc. MEDICAL LABORATORY TECHNOLOGY

SECOND YEAR

PAPER III – CLINICAL PATHOLOGY AND BASIC HEMATOLOGY

Q.P. Code: 725018

Time: Three Hours Maximum: 100 Marks

Answer all questions

I. Elaborate on: $(3 \times 10 = 30)$

1. Discuss Cerebro Spinal Fluid (CSF) analysis in detail.

- 2. Classify anemia. Discuss about the laboratory diagnosis of Iron deficiency.
- 3. Describe in detail about the development of white blood cells (WBCs) with suitable diagrams.

II. Write notes on: $(8 \times 5 = 40)$

- 1. Coulter Principle and its applications in haematology.
- 2. Haemoglobin electrophoresis.
- 3. Peripheral blood picture of chronic myeloid leukemia.
- 4. Preservatives used in urine examination.
- 5. Tests done for ketone bodies in urine.
- 6. Thrombocytopenia.
- 7. Synovial fluid examination.
- 8. Absolute eosinophil count.

III. Short answers on:

 $(10 \times 3 = 30)$

- 1. Define quality control.
- 2. Name three parasites found in peripheral blood.
- 3. Name any three stains used in bone marrow smear examination.
- 4. Crystals found in urine.
- 5. Supravital stains.
- 6. Define polycythemia and name any two causes.
- 7. Name any three molecular diagnostic techniques in haematology.
- 8. Target cell.
- 9. Thick blood smear.
- 10. Name any four tests used in the investigation of haemolytic anemia.