

DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY
SECOND YEAR
PAPER II – HAEMATOLOGY AND BLOOD BANK TECHNOLOGY
Q.P. Code: 842612

Time: Three Hours**Maximum : 100 Marks****Answer All questions****I. Elaborate on:****(3 x 10 = 30)**

1. Discuss in detail the various methods of blood grouping. Add a note on interpretation of ABO blood grouping by forward and reverse grouping.
2. Discuss in detail about automation in hematology, principle of automation, advantages and disadvantages.
3. What are blood components? Explain the process of preparation of various blood components, their storage and preservation.

II. Write notes on:**(10 x 5 = 50)**

1. What is an immune antibody? How is Rh antibody different from anti-A or anti-B antibody?
2. What is prothrombin time? How will you calculate international normalized ratio?
3. What are the pre-requisites for organizing a blood donation camp?
4. What is TRALI?
5. What is the significance of mixing studies in coagulation?
6. What are Romanowsky stains? Add a note on preparation of Leishman stain and the procedure for staining blood films.
7. What is iron deficiency anaemia? What are the peripheral smear and bone marrow findings in the same disorder?
8. Discuss in detail haemoglobin estimation by cyanmethaemoglobin method.
9. What are the various records to be maintained in the blood bank?
10. What is ESR? How will you perform ESR test? What are the stages of ESR? Add a note on factors affecting ESR.

III. Short answers on:**(10 x 2 = 20)**

1. What are the criteria for permanent deferral of a blood donor?
2. What is apheresis?
3. What are the stages of maturation of myeloid cells in the bone marrow?
4. What is Du testing?
5. Define ELISA and what are the different types of ELISA?
6. What is eosinophilia and what are the causes?
7. How will you perform the test for reticulocyte count?
8. What are the various vacutainers and corresponding anticoagulants used in clinical laboratory?
9. What is the blood picture of chronic lymphocytic leukemia?
10. How will you discard a HIV positive blood bag?
