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2112H020

**BACHELOR OF VOCATION**  
**Medical Laboratory Technology**  
**Subject: Basics of Clinical Hematology-II**  
**Subject Code: MLT601**  
**Semester: Third**  
**December 2021**  
**Theory (External): 35 Marks**  
**Time: 03 Hours**

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**Instructions to the Students**

1. This Question paper consists of two Sections. All sections are compulsory.
2. Section A comprises 10 questions of short answers type in nature. Attempt any 5 questions. Each question carries 1 mark.
3. Section B comprises 8 essay type questions. Attempt any 5 questions. Each question carries 5 marks.
4. Read the questions carefully and write the answers in the answer sheets provided.
5. Do not write anything in the question paper.
6. Wherever necessary, the diagram drawn should be neat and properly labelled

Roll Number									

**SECTION -A (SHORT/OBJECTIVE TYPE QUESTIONS)**  
(10 x 1 = 10 Marks)

- A. What is the relationship between PCV and ESR?
- B. What is erythrocyte aggregation?
- C. What is the difference between capillary and venous blood?
- D. Do reticulocytes have hemoglobin?
- E. What causes homeostasis?
- F. Why is protamine given slowly?
- G. What is the minimum you should weigh to donate blood?
- H. Why is Donor selection so important?
- I. What are the advantages of automation over manual procedures in CBC?
- J. What is automated urine analysis?

**SECTION -B (ESSAY TYPE QUESTIONS)**  
(5 x 5 = 25 Marks)

1. Explain Erythrocyte sedimentation rate in detail and explain the factors affecting ESR?
2. What are red blood indices, explain? What are physiological and pathological variations in value?
3. What is a Reticulocyte count and what does the reticulocyte count tell you? What is the normal range of reticulocytes?
4. Explain the importance and procedures of sputum and stool examination.
5. Explain the mechanism of coagulation and what are coagulation factors?
6. Explain in detail immuno hematology and blood bank technology. Is immuno haematology same as blood banking?
7. Which are the various blood groups and what do you mean by their incompatibility? Explain in detail.
8. What is the principle of Coulter counter? How do you use, care and maintain it? What is point of care testing?

==END OF PAPER==