

**M.Sc. Medical Laboratory Technology (M.Sc. MLT)  
Second Year Semester-III, February – 2017 Examination**

**Time: 3.00 Hrs.**

**[Max. Marks: 100]**

**Paper-I**

**CLINICAL HEMATOLOGY**

**Q.P Code : MMLT-111**

*Your answers should be specific to the questions asked.*

*Draw neat labelled diagrams wherever necessary.*

**LONG ESSAY**

**2 X 10 = 20 Marks**

1. Define anemia. Enumerate the causes of hemolytic anemia. Discuss lab investigation of hemolytic anemia in general.
2. Define leukemia. Write the FAB classification of acute leukemia with a note on cytochemistry.

**SHORT ESSAY**

**10X 5 = 50 Marks**

3. Philadelphia chromosome.
4. Peripheral smear and bone marrow findings in iron deficiency anemia.
5. Indications and contra-indications for bone marrow study.
6. Peripheral smear and bone marrow findings in refractory anemia (MDS)
7. Poikilocytes.
8. Write the morphologic classification of anemia with relevant examples.
9. Enumerate differences between leukemoid reaction and CML.
10. Hemoglobin electrophoresis.
11. Reticulocyte.
12. Anemia in renal disorders.

**SHORT NOTE**

**10 X 3 = 30 Marks**

13. Bence Jones protein.
14. Target cell.
15. Contents of normal adult bone marrow.
16. Three causes of macrocytosis.
17. Kleihauer acid elution test.
18. Pancytopenia.
19. Hypersegmented neutrophil.
20. Ferritin.
21. Tests for G6PD deficiency.
22. Three causes of leucopenia.

**SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH**  
(A DEEMED TO BE UNIVERSITY)

**M.Sc. Medical Laboratory Technology (M.Sc. MLT)**  
**Second Year Semester-III, February-2017 Examination**

**Time : 3.00 Hrs.**

**[Max. Marks : 100]**

**Paper-II**

**BLOOD TRANSFUSION**

**Q.P. Code : MMLT-112**

*Your answers should be specific to the questions asked.  
Draw neat labelled diagrams wherever necessary.*

**LONG ESSAY**

**2 X 10 = 20 Marks**

1. Discuss the pre-requisites, preparation and storage of blood components.
2. Discuss different blood group systems and their genetics.

**SHORT ESSAY**

**10X 5 = 50 Marks**

3. Post donation care.
4. Direct Coom's test.
5. Discuss anticoagulants used in blood bank.
6. Compatibility testing.
7. Plasmapheresis.
8. History of transfusion medicine.
9. Explain transfusion transmitted diseases.
10. Autologous transfusion.
11. What is multiple transfusion? List the conditions and general guidelines for multiple transfusion.
12. Bombay blood group.

**SHORT NOTE**

**10 X 3 = 30 Marks**

13. Reverse grouping.
14. Cold antibody titration.
15. Quality control in blood bank.
16. Uses of fresh frozen plasma (FFP).
17. Disposal of waste in blood bank.
18. Indications for blood transfusion.
19. List three acute blood transfusion reactions.
20. List three conditions for donor deferral and rejection.
21. What is neocytapheresis.
22. List three adverse donor reactions.