[LH 0415] **OCTOBER 2015** **Sub. Code: 1263**

M.Sc. (MEDICAL LABORATORY TECHNOLOGY) DEGREE EXAMINATION

SECOND YEAR

(From 2013-2014 Batch onwards)

PAPER III – ADVANCE HAEMATOLOGY & IMMUNO HAEMATOLOGY

Q.P. Code : 281263

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions

I. Elaborate on: **(2 x 20 = 40)**

1. Types of blood bags, its anticoagulant and preservative solution.
2. What is Leukemia? How is it classified broadly? Explain briefly the causes of leukemia.

II. Write Notes on: **(10 x 6 = 60)**

1. Peripheral smear – Preparation and Interpretation.
2. Hemophilia.
3. Criteria's for autologous transfusion.
4. Test for presence of bile in urine with its clinical significance.
5. Define Apheresis, Indication and method of Apheresis.
6. Significance of fibrinogen and D Dimer testing.
7. Types of blood donors.
8. Basics of HLA typing and HLA antibody detection.
9. Megaloblastic Anemia.
10. Protein in urine.

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[LJ 1016] OCTOBER 2016 **Sub. Code: 1263**

M.Sc. MEDICAL LABORATORY TECHNOLOGY EXAMS
SECOND YEAR
PAPER III – ADVANCE HAEMATOLOGY & IMMUNO HAEMATOLOGY

Q.P. Code: 281263

Time: Three hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Classify disorders of the platelets. Discuss the laboratory diagnosis of bleeding disorders.

2. What are the different blood components prepared in the department of Transfusion Medicine? Describe the procedure of platelet concentration preparation.

II. Write notes on: **(10 x 6 = 60)**

1. Bombay phenotype antigen.
2. Protocol for compatibility test procedure.
3. Cryo precipitate.
4. Quality control used in blood grouping.
5. Osmotic fragility.
6. INR.
7. Intra uterine transfusion.
8. Peripheral smear in CML.
9. Importance of microscopic examination of urine.
10. Reticulocyte count.

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[LL 1017] OCTOBER 2017 **Sub. Code: 1263**

M.Sc. MEDICAL LABORATORY TECHNOLOGY EXAMS
SECOND YEAR
PAPER III – ADVANCE HAEMATOLOGY & IMMUNO HAEMATOLOGY

Q.P. Code: 281263

Time: Three hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Classify disorders of platelets. Discuss the laboratory diagnosis of bleeding disorders.

2. Elaborate on complete urine analysis and microscopic examination of urine.

II. Write notes on: **(10 x 6 = 60)**

1. Megaloblastic anemia.
2. Rh blood group system.
3. Anticoagulants used in blood banking.
4. Parasites in blood.
5. PT and APTT.
6. Polycythemia.
7. Leukemia.
8. Coombs test.
9. Autologous transfusion.
10. PCR.

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[LN 1018] OCTOBER 2018 **Sub. Code: 1263**

M.Sc. MEDICAL LABORATORY TECHNOLOGY EXAMS
SECOND YEAR
PAPER III – ADVANCE HAEMATOLOGY & IMMUNO HAEMATOLOGY

Q.P. Code: 281263

Time: Three hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Discuss in detail the laboratory workup of thrombotic disorders.

2. Explain in detail about the types of blood bags, its anticoagulant and preservative solution.

II. Write notes on: **(10 x 6 = 60)**

1. Issue of blood to patients with multiple transfusion.
2. Screening of donors.
3. Reticulocyte count.
4. Iron deficiency anaemia.
5. Coomb's test.
6. Bombay phenotype antigen.
7. Test for presence of bile pigments in urine with its principle and clinical significance.
8. Plasmapharesis.
9. Importance of microscopic examination of stool.
10. Leukemoid reaction.

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[LO 0519] MAY 2019 **Sub. Code: 1263**

M.Sc. MEDICAL LABORATORY TECHNOLOGY EXAMS
SECOND YEAR
PAPER III – ADVANCE HAEMATOLOGY & IMMUNO HAEMATOLOGY

Q.P. Code: 281263

Time: Three hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Discuss in detail, about peripheral smear preparation, staining and its interpretation.

2. Explain in detail, types of donors, donor selection and post donation management of donors.

II. Write notes on: **(10 x 6 = 60)**

1. Reticulocyte count.
2. Bleeding Time.
3. Principle and clinical significance of Ketone bodies testing in urine.
4. Significance of fibrinogen and D-dimer testing.
5. Chronic Myeloid Leukemia.
6. Autologous Transfusion.
7. Define Apheresis. Indication and method of Apheresis.
8. Types and advantages of blood bags.
9. Basic principle involved in automated cell counter.
10. Microscopic examination of stool.

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[LP 1019] OCTOBER 2019 **Sub. Code: 1263**

M.Sc. MEDICAL LABORATORY TECHNOLOGY EXAMS
SECOND YEAR
PAPER III – ADVANCE HAEMATOLOGY & IMMUNO HAEMATOLOGY

Q.P. Code: 281263

Time: Three hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. What are myeloproliferative disorders? Classify them and write in detail about chronic myeloid leukemia.

2. What are the different types of blood transfusion? Explain in details about exchange transfusion and autologous transfusion.

II. Write notes on: **(10 x 6 = 60)**

1. APTT & PT.
2. Define Apheresis, indications and method of Apheresis.
3. Megaloblastic Anemia.
4. Coomb's test.
5. Test of presence of bile salts and bile pigments in Urine – name them, write the principle of one test for each and give the clinical significance.
6. Compare and contrast leukemia and leukemoid reaction.
7. ABO Blood group system.
8. Hemoparasites.
9. Western blot – How it is done and its significance?
10. Flow cytometry.

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THE TAMIL NADU Dr.M.G.R. MEDICAL UNIVERSITY

[LQ 1220] DECEMBER 2020 Sub. Code: 1263
(MAY 2020 EXAM SESSION)

M.Sc. MEDICAL LABORATORY TECHNOLOGY

SECOND YEAR – (Regulation 2011 – 2012 & 2013-2014)

PAPER III – ADVANCE HAEMATOLOGY & IMMUNO HAEMATOLOGY

Q.P. CODE: 281263

Time: Three hours **Maximum: 100 Marks**

Answer ALL Questions

I. Elaborate on: **(2 x 20 = 40)**

1. Define Anemia, give the classification of Anaemia and write in detail about Hemolytic Anaemia.

2. Write in detail about history of Blood Transfusion, type of Donors, Donor selection criteria and Transfusion mediated diseases.

II. Write notes on: **(10 x 6 = 60)**

1. Absolute Eosinophil count.
2. Principle of detection of Ketone bodies in Urine and its significance.
3. How are Platelet function disorders analysed?
4. How Haemoglobin estimation by Cyan meth Haemoglobin method done? Explain.
5. What are Romanowsky stains? Give a note on each.
6. Genetics of Blood group Antigens.
7. What is the basics of HLA typing? How it is done?
8. What are Anticoagulants? How are they classified and explain each of them briefly?
9. What is a Compatibility test and its types? Where are they applied?
10. Microscopic examination of Stool.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0321] MARCH 2021 Sub. Code: 1263

(OCTOBER 2020 EXAM SESSION)

M.Sc. MEDICAL LABORATORY TECHNOLOGY

SECOND YEAR (2011-2012 Regulation - From 2013-2014 onwards)

PAPER III – ADVANCE HAEMATOLOGY AND IMMUNO HAEMATOLOGY

Q.P. Code : 281263

Time: Three hours **Answer ALL Questions** **Maximum: 100 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Discuss in detail about blood bags, anticoagulants and preservatives used in blood banking. Discuss about types of blood donors and transfusion reaction. (10+10)
2. What is thrombocytopenia? Causes of Thrombocytopenia. Describe in detail about Disseminated intravascular coagulation and its laboratory findings. (2+6+12)

II. Write notes on: **(10 x 6 = 60)**

1. Automated cell counters in hematology
2. Peripheral smear findings in nutritional anemia
3. D dimer and its significance
4. Platelet separation in blood bank
5. Polymerase chain reaction
6. Coomb's test
7. Quality control in hematology lab
8. Rh incompatibility
9. Autologous transfusion
10. Lymphocytosis and its causes

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