



UNIVERSITY OF JAFFNA
FACULTY OF ALLIED HEALTH SCIENCES
THIRD YEAR SECOND SEMESTER EXAMINATION IN BScHons (MLS)- 2023
MLSTM 3234 TRANSFUSION MEDICINE

PAPER-II

Date- 06/06/2025

Time- 02 Hours

Answer all the questions in separate answer books.

1.
 - 1.1 List the types of hemolytic anemia, giving examples for each type. (15 marks)
 - 1.2 Define the clinical condition of “autoimmune hemolytic anemia” (AIHA) (15 marks)
 - 1.3 Explain the mechanism of extravascular hemolysis. (40 marks)
 - 1.4 Outline the clinical features of hemolysis. (15 marks)
 - 1.5 What is hemolytic screening? (15 marks)
2. Write short notes on,
 - 2.1 Wash red cell concentrates. (30 marks)
 - 2.2 Hematopoietic Stem Cell Transplantation. (30 marks)
 - 2.3 Pre-transfusion compatibility testing in special situations. (40 marks)
3.
 - 3.1 Describe the importance of antenatal serological screening in pregnancy. (20 marks)
 - 3.2 Describe the laboratory tests used in antenatal serological investigations and explain how each test contributes to identifying the risk of HDFN. (30 marks)
 - 3.3 Explain the pathophysiology of HDFN and mention the common blood group systems involved. (40 marks)
 - 3.4 Anti-D antibody was identified in the serum of a 28-year-old O Rh D negative woman at 32 weeks of gestation. There were no records of administering anti-D Ig during this pregnancy. What are the investigations that need to be performed on the baby’s cord blood in this situation? (10 marks)

4.

- 4.1 Define massive transfusion. (05 marks)
- 4.2 What is the lethal triad? (10 marks)
- 4.3 What are the goals to be maintained during massive blood loss? (25 marks)
- 4.4 List ten (10) complications that occur following massive blood loss. (20 marks)
- 4.5 Briefly outline the locally adapted massive transfusion protocol practiced in Sri Lanka. (40 marks)

5.

- 5.1 What is autologous blood transfusion? (05 marks)
- 5.2 What are the types of autologous blood transfusion? (10 marks)
- 5.3 What are the indications for perioperative autologous donation (PAD)? (20 marks)
- 5.4 List the contraindications for PAD. (25 marks)
- 5.5 Briefly explain the PAD procedure, including storage and labeling of the units. (25 marks)
- 5.6 What are the donor (patient) criteria for PAD? (15 marks)

6.

- 6.1 Define acute and delayed transfusion reactions, giving examples for each. (30 marks)
- 6.2 What are the samples required and the investigations to be performed in the blood bank following a transfusion reaction? (30 marks)
- 6.3 What are the causes of an acute haemolytic transfusion reaction? (15 marks)
- 6.4 What measures can be taken to prevent acute haemolytic transfusion reactions? (25 marks)