

UNIVERSITY OF JAFFNA, SRI LANKA
BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCES
THIRD YEAR SECOND SEMESTER EXAMINATION - FEBRUARY 2014
MLSTM 3202 TRANSFUSION MEDICINE
PAPER II

DATE:11.03.2014

TIME: 2½ Hours

ANSWER ALL EIGHT QUESTIONS.

1. 1.1. Briefly describe the procedure of component preparation from the whole blood collected in a double bag. (40marks)
- 1.2. List 5 indications for washed red blood cells. (15 marks)
- 1.3. List 3 blood components which should be kept below -30°C. (15marks)
- 1.4. Write 2 indications for each component you mentioned in 1.3. (30marks)

2. Write short notes on
 - 2.1. Irradiation of blood components. (40 marks)
 - 2.2. Preservatives in the blood bags (40 marks)
 - 2.3. Temporary deferral of donors. (20 marks)

3. 3.1. List 4 possible errors that can cause ABO incompatibility. (20marks)
- 3.2. Write the methods to prevent the errors you mentioned in 3.1. (30 marks)
- 3.3. List 5 symptoms, occur in a patient after ABO incompatible blood transfusion. (10 marks)
- 3.4.1. List the investigations that should be done after a suspected acute hemolytic transfusion reaction. (20 marks)
- 3.4.2. Mention the appropriate samples for the investigations mentioned in 3.4.1 (20 marks)

4. 4.1. List 4 situations in which antibody screening is done. (20marks)
- 4.2. Briefly describe how you would perform antibody screening test. (40 marks)
- 4.3. List 2 tests that will be done if you get a positive result for antibody screening. (20 marks)
- 4.4. List 4 clinically significant red cells antibodies (20 marks)

5. Write short notes on.
 - 5.1. Cryoprecipitate. (30 marks)
 - 5.2. Apheresis platelets. (40 marks)
 - 5.3. Voluntary blood donation (30 marks)

6. 6.1. Define massive blood transfusion. (20marks)
- 6.2. List 4 complications of massive blood transfusion. (20marks)
- 6.3. List 2 indications for autologous blood transfusion. (15marks)
- 6.4. Briefly describe the pre operative autologous donation procedure (45marks)

7. 7.1. List 5 causes for fetomaternal haemorrhage. (25marks)
- 7.2. List 5 investigations carried out by blood transfusion service for an Rh Negative mother during antenatal period. (25marks)
- 7.3. Write 4 investigations which are done routinely in the cord blood sample of a baby of Rh D Negative mother . (20marks)
- 7.4. Briefly describe the steps for blood grouping of the cord blood sample. (30marks)

8. 8.1. List the transfusion transmissible infections tested in SriLanka. (25marks)
- 8.2. Describe the procedure for particle agglutination test for HIV 1& 2 (45marks)
- 8.3. Briefly describe the safety precautions in the blood bank laboratory. (30marks)