



**UNIVERSITY OF JAFFNA, SRI LANKA**  
**BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCES**  
**THIRD YEAR SECOND SEMESTER EXAMINATION- JULY 2015**  
**MLSTM 3202 TRANSFUSION MEDICINE**  
**PAPER II**

**DATE: 01.08.2015**

**TIME: 2½ Hours**

**ANSWER ALL EIGHT QUESTIONS.**

1.
  - 1.1) Briefly describe the procedure of component preparation from the blood collected in a triple blood bag. (40 marks)
  - 1.2) List 4 indications for cryo poor plasma (CPP) transfusion. (20 marks)
  - 1.3) Mention the storage condition and life span of the following blood Components. (40 marks)
    - 1.3.1) Fresh frozen plasma (FFP)
    - 1.3.2) Leuco reduced red cells (LRRC)
    - 1.3.3) Cryo precipitate
    - 1.3.4) Platelets
  
2. Write short notes on
  - 2.1) Fitness of a donor for blood donation. (40 marks)
  - 2.2) Safe blood supply from the time of blood collection to completion of blood transfusion. (60 marks)
  
3.
  - 3.1) Briefly describe how you would perform indirect antiglobulin test (IAT). (40 marks)
  - 3.2) Name 5 clinically significant minor group red blood cell antibodies. (25 marks)
  - 3.3) Name 2 minor group red blood cell antibodies for which, strict 37 °C cross match compatibility is enough for red blood cell transfusion. (20 marks)
  - 3.4) Write 3 indications for performing direct Coomb's test. (15 marks)
  
4. Write short notes on
  - 4.1) Refrigerated centrifuge. (50 marks)
  - 4.2) Stem cell transplantation. (50 marks)

5.

- 5.1) List 4 transfusion transmissible infections other than mentioned in 5.2 which are screened in Sri Lanka. (20 marks)
- 5.2) Name 4 testing methods for HIV infection. (20 marks)
- 5.3) Explain the screening procedure with steps which is routinely practised in Sri Lanka for syphilis in donated blood. (60 marks)

6. A 25 year old girl was transfused with B+ve blood pack at ward. After 15 minutes she developed fever with chills. Transfusion was stopped immediately and informed to blood bank.

- 6.1) List the samples and documents to be got down from the ward to investigate. (20 marks)
- 6.2) Write down the investigations you will carry out at the blood bank to investigate the transfusion reaction (30marks)
- 6.3) From those investigations it has been found out as acute haemolytic transfusion reaction.
- 6.3.1) List 5 other lab investigations you will carry out. (25 marks)
- 6.3.2) Mention the expected results. (25 marks)

7.

- 7.1) List the antibodies that can cause haemolytic disease of newborn? (20 marks)
- 7.2) Give 5 causes of foeto maternal haemorrhage. (20 marks)
- 7.3) Give 4 criteria for selection of blood for exchange transfusion. (20 marks)
- 7.4) Regarding investigations of haemolytic disease of new born,
- 7.4.1) Write 4 investigations to be done in a new born baby suspected to have haemolytic disease of newborn. (20 marks)
- 7.4.2) Mention the expected results for the investigations you mentioned in 7.4.1 (20 marks)

8. Write short notes on

- 8.1) Autologous blood transfusion. (50 marks)
- 8.2) Cryo preservation of blood. (50 marks)