

**POSTGRADUATE INSTITUTE OF MEDICINE**  
**UNIVERSITY OF COLOMBO**

**SELECTION EXAMINATION FOR ENROLMENT TO THE IN-SERVICE**  
**TRAINING PROGRAMME IN POSTGRADUATE DIPLOMA IN**  
**TRANSFUSION MEDICINE – OCTOBER 2015**

**Date :-** 19<sup>th</sup> October 2015

**Time :-** 1.00 p.m. – 4.00 p.m.

**Answer six questions only.**

**Answer each question in a separate book.**

1. Do you accept/defer the below mentioned persons as blood donors:  
Explain briefly the reasons for acceptance or deferral. (10 marks each)
  - 1.1. A 32 year old female with a child of 2 years of age and taking oral contraceptives.
  - 1.2. A 40 year old male with a lipid profile report of hypercholesterolemia.
  - 1.3. A 62 year old male, who was a regular blood donor in Sri Lanka, had been in UK for last two years and has returned to Sri Lanka six months back.
  - 1.4. A 25 year old male who had an atrial septal defect (ASD). Surgical procedure for correction was done 2 years ago.
  - 1.5. A soldier who lost both forearms three inches below the elbow joint 7 years back. Several blood units were transfused during the surgery.
  - 1.6. A 19 year old boy who had a dental procedure 5 days ago.
  - 1.7. A veterinary surgeon who had prophylactic anti rabies vaccination 4 months back.
  - 1.8. Young male who had donated a kidney 1 ½ years back.
  - 1.9. A multiparous female who had an abortion 8 months back.
  - 1.10. An 18 year old lady who had taken paracetamol previous night for menstrual pain.

Contd...../2-

2.
  - 2.1. What are the elements of pre transfusion testing? (40 marks)
  - 2.2. As a blood bank medical officer, how would you supply blood to a patient in an emergency situation? (60 marks)
  
3.
  - 3.1. What are the objectives of routine serological tests done in a blood bank for a pregnant woman? (30 marks)
  - 3.2. Draw a flow chart for blood grouping and antibody testing during pregnancy. (70 marks)
  
4.
  - 4.1. List the clinical indications for the use of fresh frozen plasma (FFP) and cryoprecipitate. (50 marks)
  - 4.2. What are the coagulation factors present in cryoprecipitate? (20 marks)
  - 4.3. Mention the adverse effects of FFP transfusion. (30 marks)
  
5.
  - 5.1. What are the considerations for selection of blood for a neonatal exchange transfusion? (50 marks)
  - 5.2. Briefly mention the special hazards of transfusion in the neonatal period. (50 marks)
  
6.
  - 6.1. A red cell pack has been brought to the ward for a patient. As a medical officer in the ward what steps would you follow before commencing the transfusion? (40 marks)
  - 6.2. How would you monitor this patient during the transfusion? (20 marks)
  - 6.3. Patient has developed fever, chills and rigors during transfusion. How would you manage this patient? (40 marks)

7.

- 7.1. What are the different types of platelet preparations available? (30 marks)
- 7.2. What are the advantages of using apheresis platelets over random donor platelets? (30 marks)
- 7.3. Mention three (03) situations for which platelets transfusion is relatively contraindicated. (40 marks)

8.

- 8.1. List five (05) non infectious, non haemolytic complications of blood transfusion. (20 marks)
- 8.2. What actions can you take to reduce allogenic blood exposure in a patient who is awaiting routine orthopaedic surgery? (80 marks)