

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

**MD (TRANSFUSION MEDICINE) EXAMINATION – MARCH 2012**

**Date :-** 12<sup>th</sup> March 2012

**Time :-** 1.00 p.m. – 4.00 p.m.

**PAPER I**

**Answer any five (05) questions.**

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

1. A 15 year old boy presented with severe bone pain and fever. He has a family history of sickle cell anaemia. Clinician suspects a painful crisis.
  - 1.1. Briefly state the investigations you would do to arrive at a diagnosis and for the management of this patient. (40 marks)
  - 1.2. Give an account of transfusion management of sickle cell anaemia. (60 marks)
  
2. Write short notes on :-
  - 2.1. The value of Nucleic Amplification Technology (NAT) (40 marks)
  - 2.2. Cold agglutinins (30 marks)
  - 2.3. West-Nile virus (30 marks)

Contd.../2-

3.

3.1. What methods are available for preparation of platelet concentrates ?  
(20 marks)

3.2. Describe the advantages and disadvantages of each method.(40 marks)

3.3. Draft a protocol for hospital clinicians giving the indications and trigger levels for platelet transfusion.  
(40 marks)

4.

4.1. Discuss post exposure management of a needle stick injury incurred during withdrawal of a donor needle.  
(50 marks)

4.2. Write measures which should be adopted to minimize this hazard in a busy blood donation campaign.  
(50 marks)

5. Discuss the pathophysiology of complications of massive transfusion.  
How would you minimize these complications ?  
(100 marks)

6. A 72 year old female diagnosed with myelodysplastic syndrome is on a regular transfusion regime.

Discuss the transfusion complications and measures that can minimize those complications.  
(100 marks)

Maska copy  
→

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

**MD (TRANSFUSION MEDICINE) EXAMINATION – MARCH 2012**

**Date :- 13<sup>th</sup> March 2012**

**Time :- 9.00 a.m. – 12.00 noon**

**PAPER II**

**Answer any five (05) questions.**

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

1.
  - 1.1. Give an account on antenatal assessment of severity of haemolytic disease of foetus. (60 marks)
  - 1.2. Critically evaluate the different methods available to quantitate anti D in an antenatal mother. (40 marks)
2. You are called to see a patient who has developed a temperature of 39°C, with tachycardia of 110/minute during a transfusion of red cells.
  - 2.1. What would you look for during the first 15 minutes of your assessment of the patient which might help you to determine the cause of the reaction? (40 marks)
  - 2.2. Discuss your subsequent clinical management of the patient, including investigations. (60 marks)

Contd...../2-

3. As the Medical Officer in charge of a blood bank, you have noticed that the usage of irradiated blood products have increased in your hospital.
  - 3.1. How do you assess whether the irradiated blood products have been used appropriately ? (40 marks)
  - 3.2. What measures should follow such an assessment ? (40 marks)
  - 3.3. How do you prepare and store irradiated blood products ?(20 marks)
  
4. A 45 year old female is awaiting abdominal hysterectomy. She is found to have positive direct antiglobulin test (DAT).

How do you serologically investigate this patient ? What investigations would you undertake pretransfusion ? What blood would you select for transfusion ? (100 marks)
  
5.
  - 5.1. What factors would you take into account when establishing a panel of apheresis donors to provide HLA matched platelets ? (50 marks)
  - 5.2. What are the advantages and disadvantages for both donor and patient, of using allogenic progenitor cells derived from peripheral blood versus bone marrow ? (50 marks)
  
6. Write short notes on :-
  - 6.1. intraoperative red cell salvage. (35 marks)
  - 6.2. recognition and management of neurological complications following blood donation. (35 marks)
  - 6.3. discrepancies encountered in ABO grouping. (30 marks)