

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

**MD (TRANSFUSION MEDICINE) EXAMINATION – MARCH 2013**

**Date :** 18<sup>th</sup> March 2013

**Time :** 1.00 p.m. – 4.00 p.m.

**PAPER I**

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

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

1. Discuss the key elements involved in pre-transfusion testing in the hospital blood bank.  
What are the requirements to implement electronic cross-matching and what are the potential benefits and risks of this approach? (100 marks)
2. Describe the pathogenesis, diagnosis and transfusion management of  $\beta$  Thalassaemia major. (100 marks)
3. Briefly discuss the HLA system with particular reference to renal, liver and bone marrow transplantation. (100 marks)
4.
  - 4.1 Define the meaning of emerging infection.  
Mention the features of an emerging infection that offers risk to blood safety. (10 marks)
  - 4.2 Outline the general measures that can be taken to reduce the risk of blood safety by emerging infections. (50 marks)
  - 4.3 Give four examples of emerging infection that could risk the blood safety, for each example give specific measures. (40 marks)

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5.1 Define anaphylaxis and indicate its frequency as a transfusion reaction. (5 marks)

5.2 Describe the clinical features. (5 marks)

5.3 Outline the pathogenesis of allergic transfusion reaction. (30 marks)

5.4 Describe the laboratory tests required to diagnose and monitor allergic transfusion reaction. (30 marks)

5.5 Give an account of preventive measures and treatment of allergic transfusion reaction. (30 marks)

6 Describe the haemostatic changes that can cause excessive bleeding during Coronary Artery Bypass Graft (CABG) surgery and during the post operative period. (100 marks)

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**MD (TRANSFUSION MEDICINE) EXAMINATION – MARCH 2013**

**Date :** 19<sup>th</sup> March 2013

**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 What is Haemovigilance and what is the value of Haemovigilance schemes? (20 marks)
  - 1.2 Describe how you would set up and monitor a Haemovigilance scheme in an area where there are 50 hospitals with blood banks. \* (80 marks)
2. Give an account of management of anaemia with red cell transfusions in critically ill patients. (100 marks)
3. Fainting or feeling faint are common side effects of blood donation.
  - 3.1 What are the factors which may predispose a donor to feeling faint or fainting? (20 marks)
  - 3.2 What measures can be taken to reduce the risk of donors' feeling faint or fainting? (30 marks)
  - 3.3 How would you manage a severe faint with fitting, vomiting and incontinence? (25 marks)
  - 3.4 What is a 'late faint'? Describe the aetiology and management. (25 marks)

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4. As a consultant in transfusion medicine, outline your actions in the following situations.
- 4.1 A unit of red cells has been found to be partially frozen in a hospital stock fridge. (50 marks)
- 4.2 Clinician complain that the Fresh Frozen Plasma is no longer clinically effective. (50 marks)
- 5.
- 5.1 Describe the pharmacology of recombinant factor VIIa. (30 marks)
- 5.2 Critically discuss the statement "Recombinant factor VIIa is a Universal Haemostatic Agent" (70 marks)
- 6.
- 6.1 What is a Hospital Transfusion Committee (HTC)? Briefly describe the membership and key activities of Hospital Transfusion Committee. (20 marks)
- 6.2 What measures can be taken to ensure effective performance of the Hospital Transfusion Committee? (40 marks)
- 6.3 What parameters can be used to monitor the operational effectiveness of a blood bank? (40 marks)