

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
FEBRUARY , 1990

Date: 5th February 1990

Time: 2.00p.m. -5.00p.m.

PAPER I

Answer four questions only.

Answer each question in a separate book.

1. What are macroglobulins? Explain their occurrence and significance in hematological disorders.
2. What do you understand by the term myelodysplasia? How would you classify it? Describe the clinical and morphological features of this condition and outline its management.
3. A boy aged 14 years was seen with a history of epistaxis and a petechial rash. A diagnosis of I.T.P. was made. Discuss the etiology and the management of this case.
4. Discuss the classification, manifestations, laboratory findings and treatment of non-Hodgkin's lymphoma.
5. What are cold agglutinins? Discuss their clinical significance. Discuss the management of a case with cold agglutinins and indicate the laboratory investigations that you could do in such a case.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
FEBRUARY , 1990

Date: 6th February 1990

Time: 9.00a.m. - 12.00noon

PAPER II

Answer four questions only.

Answer each question in a separate book.

1.
 - 1.1 A man with internal bleeding following a road traffic accident was admitted to hospital. Discuss the problems associated with transfusion of 6 to 8 units of 30-day-old compatible whole blood to this patient.
 - 1.2. What are the optimal conditions for the storage of blood? What changes occur in whole blood on storage?
2. A 20-year-old man was bitten by a Viper. His blood was found to be incoagulable. Discuss the laboratory tests and treatment you would carry out in the management of this case.
3. A woman of 50 years presented with hemoglobin of 8.9g/dl and an MCV of 104 cubic microns. Discuss the differential diagnosis and the laboratory tests that would help in the diagnosis.
4. What are the molecular changes that occur in thalassaemia? Discuss the diagnosis and treatment of such a case and the long-term effects of therapy.
5. A 60-year-old man on routine examination had a total WBC of $75 \times 10^9/l$ with a differential count of 80% lymphocytes. What are the investigations you would do to arrive at a diagnosis? Discuss the criteria you would use in treatment of this patient.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
NOVEMBER , 1991

Date: 11th November 1991

Time: 2.00 p.m.- 5.00 p.m.

PAPER I

Answer four questions only.
Answer each question in a separate book.

1. Discuss the aetiology and the classification of acute leukaemia.
2.
 - 2.1 List the infections that may be transmitted by a blood transfusion.
 - 2.2 How would you prevent such infections?
 - 2.3 How would you investigate a patient with transfusion induced hepatitis and what measures would you expect the blood transfusion laboratory to take when such a case is diagnosed?
3. Briefly discuss the molecular biology of
 - 3.1 alpha thalassaemia
 - 3.2 chronic myeloid leukemia
 - 3.3 Hemophilia A.
4.
 - 4.1 What is the aetiology of hemolytic disease of the newborn?
 - 4.2 Discuss the role of the laboratory in the diagnosis.
5.
 - 5.1 What are the causes of thrombocytopenia?
 - 5.2 How would you investigate an adult who presents with an ecchymosis and isolated thrombocytopenia?

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
NOVEMBER , 1991

Date: 12th November 1991

Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer four questions only.
Answer each question in a separate book.

1. Give an account of the causes, clinical manifestations and laboratory diagnosis of vitamin B 12 deficiency.
2. Describe the fibrinolytic system and the naturally occurring inhibitors of blood coagulation.
3. Write notes on ,
 - 3.1 interferon
 - 3.2 blood changes following splenectomy
 - 3.3 glucose-6-phosphate dehydrogenase deficiency
4.
 - 4.1 Define primary and secondary erythrocytosis (polycythaemia).
 - 4.2 Discuss the criteria you would use in deciding what treatment to offer patients with these conditions.
3. Give an account of the aetiology, diagnosis and complications of infectious mononucleosis.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
JANUARY , 1993

Date: 18th January 1993

Time: 1.30 p.m. - 4.30 p.m.

PAPER I

Answer Question 1 and Three others.

1. How would you set up a blood transfusion centre in a Provincial Hospital? Indicate your proposals and priorities regard to blood transfusion and disorders of haemostasis.
2. Give on account of iron absorption, transport and storage. How may these be affected by disease?
3. Discuss the diagnosis and treatment of chronic lymphocytic leukemia.
4. Discuss the diagnosis and management of anemia in pregnancy. How can it be prevented?
5. Write short notes on
 - 5.1 Desmopressin
 - 5.2 Interleukins
 - 5.3 Molecular defect in Hb H disease.
 - 5.4 Platelet transfusion therapy.

POSTGRADUTE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
JANUARY , 1993

Date: 19th January 1993

Time: 9.00 a.m. -12.00 noon

PAPER II

Answer four questions only.

Answer each question in a separate book.

1. Discuss the laboratory diagnosis of thalassaemia.
2. Discuss the hematological effects of alcohol abuse.
3. Discuss the investigation and management of unexpected post-operative bleeding.
4. What criteria are used in the diagnosis of myeloma? Discuss the recent advances in the management of this condition.
5. Describe the method of preparation, storage, administration and clinical indications for each of the following blood components: -
 - 5.1. Fresh Frozen Plasma
 - 5.2. Cryoprecipitate
 - 5.3. Platelet concentrates
 - 5.4. Frozen Red Cells

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
FEBRUARY ,1994

Date: 21st February 1994

Time: 2.00 p.m. - 5.00 p.m.

PAPER I

Answer questions 1 and Three others.

1. Discuss pretransfusion compatibility testing.
What could be the problems encountered in ABO Blood Grouping?
2. What do you understand by the term Anemia of Chronic Diseases?
Discuss the Diagnosis and Management of this condition.
3. You have been appointed as a Hematologist in a Provincial Hospital. Discuss how you would set up a quality assurance program in your hospital in regard to Hematology.
4. Discuss the molecular Genetics, Pathophysiology, Laboratory investigations and the Treatment of Sickle Cell Disease.
5. Write short notes on:
 - 5.1. Prognostic indicators in Multiple Myeloma
 - 5.2. Haemopoietic malignancies presenting with a mediastinal mass
 - 5.3. Technical factors affecting the measurement of the Erythrocyte Sedimentation Rate
 - 5.4. Carrier detection of Hemophilia A

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
FEBRUARY , 1994

Date: 22nd February 1994

Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer four questions only.

1. Discuss the aetiology chemical and Laboratory features of Aplastic Anemia. How would you manage such a case?
2. Discuss how Morphological, Immunological and Cytogenetic studies would be helpful in the study of Chronic Leukemia.
3. A male patient aged 18-years developed sudden anemia following the use of penicillin for an endocarditis.
Discuss the possible diagnoses, laboratory investigations complications and treatment of the patient.
4. Discuss the preservation, storage and transport of platelet concentrates. In your answer discuss the platelet storage lesion and how you would assess the quality of platelet concentrates.
5. Discuss the causes of Folate Deficiency.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
JANUARY, 1995

Date: 2nd January 1995

Time: 2.00p.m. - 5.00 p.m.

PAPER I

Answer Question 1 and Three others.

1. Discuss the "Hypercoagulable State" in relation to the pathophysiology, clinical features, laboratory evaluation and management.
2. Write an essay on the neutrophil granulocyte.
3. Discuss the value of trephine marrow biopsy in the diagnosis and management of hematological disorders.
4. Write an essay on the absorption, transport, cellular uptake and biochemical functions of vitamin B 12 and folate. How may the absorption of vitamin B12 be investigated in a patient?
5. Write short notes on ,
 - 5.1. Erythropoietin
 - 5.2. Molecular defect in Hemoglobin H disease
 - 5.3. Laboratory tests in the diagnosis of Lupus anticoagulant
 - 5.4. Inherited red cell membrane defects

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
JANUARY, 1995

Date: 3rd January 1995

Time: 9.00 a.m.-12.00 noon

PAPER II

Answer four questions only.

1. What diseases can be transmitted by transfusion of blood and blood products?
What measures are taken to minimize the risk of disease transmission?
2. What are the diagnostic criteria of acute promyelocytic leukemia (FAB M3)?
What is known about the molecular biology of this condition and how may it be treated?
3. Describe the laboratory features of dyserythropoiesi-s. Discuss the causes of congenital and acquired dyserythropoiesis.
4. Discuss the causes of polycythaemia and the diagnosis and management of polycythaemia rubra vera.
5. Discuss the pathogenesis, diagnosis, management and prevention of hemolytic disease of the newborn due to anti-D.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
NOVEMBER, 1996

Date: 4th November 1996

Time: 2.00 p.m. - 5.00 p.m.

PAPER I

Answer Question 1 and Three others.

1. Outline the criteria for the acceptance of a blood donor.
Indicate the Laboratory investigations that should be carried out before the donated blood is available for therapeutic use.
2. You are responsible for providing a Laboratory service for monitoring anticoagulant therapy in your hospital.
 - 2.1. How would you provide such a service?
 - 2.2. What quality control and quality assurance measures would you establish?
3. Give an account of structure and functions of the red cell membrane.
 - 3.1. Outline the molecular basis of one congenital hemolytic anemia in which there is an abnormality of the membrane cytoskeleton.
 - 3.2. List the investigations that would be helpful in the diagnosis of this abnormality.
4. Write short notes on ,
 - 4.1. Paroxysmal Cold Haemoglobinuria (PCH)
 - 4.2. Cryoprecipitate
 - 4.3. Congenital Dysplastic Anemia (CDA)
 - 4.4. Megakaryoblastic Leukemia (M7)
5. Write short notes on
 - 5.1. Polymerase Chain Reaction (PCR)
 - 5.2. Alpha Interferon
 - 5.3. Investigation of aft erythrocytes sedimentation rate (ESR) of over 100 mm in the first hour
 - 5.4. Laboratory test for intravascular haemolysis

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
NOVEMBER, 1996

Date: 5th November 1996

Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer four questions only

1. Discuss the pathophysiology, diagnosis, laboratory investigations and management of Idiopathic Thrombocytopenic Purpura.
2. You are consulted about a patient who has just developed rigors, fever (temperature 38.5°C) following re cell transfusion.
Discuss your approach to this problem.
3. A Sri Lankan woman is found to have a microcytic hypochromic anemia at 15 weeks during her first pregnancy.
What advice would you give to the obstetrician on further investigation and management of this abnormality?
4. Write short notes on:
 - 4.1. Haemopoietic growth factors
 - 4.2. Apoptosis
 - 4.3. Mucosal Associated Lymphoid Tissue (MALT)
 - 4.4. Role of Protein C
5. Write short notes on:
 - 5.1. Antiphospholipid syndrome
 - 5.2. The FAB classification
 - 5.3. Solitary plasmacytoma
 - 5.4. Iron chelators

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
JANUARY, 1999

Date: 4th January 1999

Time: 2.00 p.m. - 5.00 p.m.

PAPER I

Answer Question 1 and Three others.

1. What are the hazards associated with transfusion of the neonate?
How may they be minimized?
2. Discuss the relevance of cytogenetic abnormalities in acute leukemia, including their influence on treatment strategies.
3. Outline the factors predisposing to thromboembolism and recent advances in understanding the Thrombophilic State.
4. Describe the blood and bone marrow abnormalities that may be seen in HIV infection.
5. Write short notes on ,
 - 5.1. Hematological manifestations of parvovirus B19 infection.
 - 5.2. Anemia of P.falciparum malaria.
 - 5.3. Fluorescent in-situ hybridization
 - 5.4. Hypereosinophilia

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
JANUARY, 1999

Date: 5th January 1999

Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer four questions only.

1. Discuss the prevention of Rhesus hemolytic disease of the newborn.
2. What do you understand by the term alpha-thalassaemia?
3. Discuss the genetics and hematology of this condition.
4. Give an account of the haemophagocytic syndrome
5. Write short notes on ,
 - 5.1 ineffective erythropoiesis
 - 5.2 HTLV-1 virus
 - 5.3 D-dimer
 - 5.4 5q minus syndrome
6. Discuss the pathogenesis, investigations and management of anemia in chronic renal failure.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
NOVEMBER, 1999

Date: 15th November 1999

Time: 2.00 p.m. - 5.00 p.m.

PAPER I

Answer questions 1 and Three others.
Answer each question in a separate Book.

1. Outline your protocol for blood grouping and red cell antibody monitoring during pregnancy. Discuss the significance of adopting this protocol.
2. Discuss the diagnosis and classification of myelodysplastic syndromes and outline the principles of treatment.
3. Describe how you would set up services within a University Hospital in South East Asia, for the diagnosis, prevention and treatment of thalassaemia.
4. Discuss the actions of non-transfusional haemostatic drugs and their use in clinical practice.
5. Write short notes on
 - 5.1. HbH disease
 - 5.2. Carrier detection of hemophilia A
 - 5.3. Use of erythropoietin
 - 5.4. Treatment of autoimmune hemolytic anemia

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
NOVEMBER, 1999

Date: 16th November 1999

Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer four questions only.

Answer each question in a separate Book.

1. “Transfusion of incompatible blood components is preventable”.
Outline the measures you would adopt to ensure this in your hospital.

2. Discuss the pathophysiology of Dengue Haemorrhagic Fever. What is your role as a laboratory based hematologist in Sri Lanka management.

3. Describe in detail the diagnosis of acute lymphoblastic leukemia and outline the principles of treatment of this condition.

4. How do the results of laboratory investigations in a new case of aplastic anemia relate to treatment and prognosis?

5. Write short notes on ,
 - 5.1 Transfusion related acute lung injury(TRALI)
 - 5.2 Treatment of iron deficiency anemia
 - 5.3 Pathogenesis of thrombotic thrombocytopenic Purpura
 - 5.4 Absorption of vitamin B12

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
NOVEMBER, 2000

Date: 15th November 2000

Time: 2.00 p.m. - 5.00 p.m.

PAPER I

Answer questions 1 and Three others.
Answer each question in a separate book.

1. Discuss the deleterious changes that occur in whole blood and blood component during storage. Comment on the effects of different storage media and different storage conditions in modifying these changes.
2. Describe the pathophysiology of Antiphospholipid syndrome. Discuss the investigations and treatment options.
3. Describe the functions of the spleen, the indications for splenectomy and your approach to preventing the consequences of hyposplenism.
4. Outline the molecular pathogenesis of chronic granulocytic leukemia. Discuss the currently available treatment options.
5. Write short notes on
 - (a) Laboratory diagnosis of hereditary spherocytosis
 - (b) Iron chelation therapy
 - (c) The chromosome abnormality (15:17) (q22: ql2)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
NOVEMBER, 2000

Date: 16th November 2000

Time: 9.00 a.m.-12.00 noon

PAPER II

Answer four questions only.

Answer each question in a separate book.

1. Discuss the indications for the use of blood components in the prophylaxis and treatment of bleeding disorders. Outline the principal hazards associated with their use.

2. Describe the pathophysiology and clinical manifestations of glucose 6 phosphate dehydrogenase deficiency.
Discuss the important aspects of management of this condition.

3. Give an account of indications for and potential complications of heparin therapy.
Describe how you would monitor heparin therapy.

4. Describe the laboratory investigations that would help in classifying non-Hodgkin's lymphoma (N.H.L). Outline the treatment options for indolent N.H.L.

5. Discuss how you would set up a quality assurance program for the Hematology service in a Provincial Hospital in Sri Lanka.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
NOVEMBER, 2001

Date :- 28th November, 2001

Time :- 1.30 p.m. - 4.30 p.m.

PAPER I

Answer Question one and three others.

Answer each question in a separate book.

1. Write a critical account on autologous blood transfusion

2. Write short notes on :-
 - 2.1. Thrombotic thrombocytopenic purpura
 - 2.2. Essential thrombocythaemia

3. Outline the diagnosis and management of multiple myeloma.

4. Discuss the treatment strategies for haemophilia and haemophilia with inhibitors.

5. As a Consultant Haematologist how do you ensure satisfactory quality assurance in your haematology laboratory.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
NOVEMBER, 2001

Date :- 29th November, 2001

Time :- 9.00 a.m.-12.00 noon

PAPER II

Answer four questions only.

Answer each question in a separate book.

1. Discuss the indications for transfusing platelets.
What adverse effects might occur ?
How should they be managed and how could they be avoided ?

2. Discuss new insights into the pathophysiology of iron metabolism and the iron regulatory proteins.

3. Write short notes on **three** of the following
 - 3.1. Antifibrinolytic agents
 - 3.2. Neonatal alloimmune thrombocytopenia
 - 3.3. Use of flow cytometry in Haematology
 - 3.4. Congenital dyserythropoietic anaemia type II

4. Discuss the management of chronic lymphocytic leukaemia.

5. What advice would you give regarding a patient on warfarin who requires surgery ?

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
JANUARY, 2004

Date: 26th January, 2004

Time: 1.30 p.m. - 4.30 p.m.

PAPER I

Answer question one and three others.
Answer each question in a separate book.

1. What strategies would you recommend to reduce the use/of allogeneic blood in the perioperative period ?
2. Discuss the emerging new therapies in haematology using antibodies, drugs and other developments. Give the basic reasons underlying their development.
3. Write short notes on
 - i. Congenital Thrombotic Thrombocytopenic purpura
 - ii. Hypochromic red cells
 - iii. Physiological variations of the neutrophil count,
4. Discuss the relationship between the myelodysplastic syndromes and the myeloproliferative disorders.
5.
 - 5.1 Describe the coagulation changes in pregnancy
 - 5.2 List the pregnancy related coagulation disorders
 - 5.3 Discuss the pathophysiology, diagnosis and management of **one** of the conditions mentioned in 5.2

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
JANUARY, 2004

Date: 27th January 2004

Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer four questions only.

Answer each question in a separate. book.

1. How would bacterial contamination of blood components arise ?
How can it be prevented ? .
Discuss the investigations and management of a patient undergoing an immediate transfusion reaction in which bacterial contamination is suspected.

2. Discuss the pathophysiology of **acquired** pure red cell aplasia and relate principles of management to its pathophysiology.

3. Write short notes on
 - i. Pathophysiology of Dengue Haemorrhagic Fever.
 - ii. Diagnosis and treatment of anaemia of chronic disease.
 - iii. Methods of assessing the reticulocyte response.

4. Discuss the diagnosis and management of hairy cell leukaemia.

5. Write a critical analysis of the value of cytochemistry in the diagnosis of acute leukaemia.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
JANUARY, 2006

Date: 2nd January, 2006

Time: 1.30 p.m. - 4.30 p.m.

PAPER I

Answer question one and three others.
Answer each question in a separate book.

1. Discuss the factors which should be taken into account when neonates in a neonatal unit are transfused with blood and blood components. (100 marks)

2. A 13 year old boy from Hambantota was diagnosed as sickle cell disease by quantitative Hb electrophoresis of the patient and his family. He was admitted with an incomplete central paralysis of right facial nerve, weakness of right arm and shoulder, with coordinatory deficits and a motor aphasia. MRI showed an extensive partial ischaemic stroke of left middle cerebral artery.
 - (a) Describe the pathophysiology of the above event. (40 marks)
 - (b) Discuss the acute haematological management and subsequent follow up of this patient. (60 marks)

3. "Hereditary thrombophilia is a multigenic problem"
 - (a) Discuss this statement. (60 marks)
 - (b) Outline the circumstances in which thrombophilia screening is useful in venous thrombosis. (40 marks)

4. Write short notes on
 - (a) Langerhan cell histiocytosis (30 marks)
 - (b) Peripheral neuropathy in haematological practice. (30 marks)
 - (c) Tumour lysis syndrome (40 marks)

5. Describe the haematological abnormalities found in association with human immune deficiency virus (HIV) and the management of these abnormalities (excluding malignancies). (100 marks)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
JANUARY, 2006

Date: 3rd January 2006

Time: 9.00 a.m. - 12.00 noon

PAPER II

Answer four questions only.
Answer each question in a separate book.

1. Write short notes on :-
 - (a) Significance of a positive Direct Antiglobulin Test (DAT) (30 marks)
 - (b) Transfusion Related Acute Lung Injury (TRALI) (40 marks)
 - (c) Significance of human platelet antigen (HPA) (30 marks)

2.
 - (a) Describe how you would start an internal quality control procedure for haemoglobin. (30 marks)
 - (b) Indicate the Westgard rules (30 marks)
 - (c) Describe how you would identify and solve the different problems using quality control charts. (40 marks)

3.
 - (a) Discuss the pathophysiology of paroxysmal nocturnal haemoglobinuria (PNH) and its relationship to the clinical manifestations. (60 marks)
 - (b) Outline the laboratory diagnosis of PNH. (40 marks)

4. Discuss the pathology, laboratory diagnosis and management of von Willebrand's disease. (100 marks)

5. Discuss your approach to the investigation and management of patients

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
JANUARY 2008

Date : 7th January 2008

Time : 1.00 p.m. - 4.00 p.m.

Answer question one and three others.
Answer each question in a separate book.

PAPER I

1. (a) Give an account on granulocyte transfusions. (60 marks)
- (b) What are the different methods available for collection of granulocyte concentrates ? (40 marks)
2. Discuss aetiology, pathophysiology, diagnosis and therapeutic strategies of aplastic anaemia. (100 marks)
3. Write an essay on acquired platelet function defects. (100 marks)
4. Describe how you would organize a Thalassaemia prevention programme in the North Western province of Sri Lanka. Critically evaluate the laboratory tests available for population screening of Thalassaemia. (100 marks)
5. (a) Give an account on diagnosis of antiphospholipid syndrome. (50 marks)
- (b) A 32 year old female with past history of deep vein thrombosis diagnosed as having antiphospholipid antibodies, presented with a POA of eight weeks.
Outline the management of this patient. (50 marks)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
JANUARY 2008

Date : 8th January 2008

Time : 9.00 a.m.-12.00 noon

Answer four questions only.

Answer each question in a separate book.

PAPER II

1. (a) Give an account on genetics and pathophysiology of haemophilia A. (60 marks)
(b) Discuss the management of a 12 year old haemophilia A patient with factor VIII level of < 1 % presenting with recurrent haemarthrosis. (40 marks)
2. Discuss clinical applications of cytogenetics in diagnosis and management of acute leukaemia. (100 marks)
3. (a) Discuss the place of splenectomy in haematological disorders. (50 marks)
(b) Outline short term and long term sequelae of splenectomy. (50 marks)
4. (a) Describe the pathophysiology of disseminated intravascular coagulopathy (DIC). (50 marks)
(b) Mention the investigations and acute management of DIC. (50 marks)
5. Write short notes on :
 - (a) ABO haemolytic disease of the newborn (HDN) (30 marks)
 - (b) JAK 2 mutation (30 marks)
 - (c) HIV associated lymphoma (40 marks)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
JANUARY 2010

Date: 4th January 2010

Time : 1.00 p.m.-4.00 p.m.

Answer question one and three others.

Answer each -question in a separate book.

All questions carry equal marks.

PAPER I

1. There is concern regarding inadequate platelet increment following adequate dosage of transfusion of platelet concentrates.
As the Haematologist how do you investigate and manage this problem?
(100 marks)
2.
 - 2.1. What are the genetic lesions which produce thalassaemia Intermedia ? (20 marks)
 - 2.2. Discuss the management of thalassaemia intermedia. (80 marks)
3. Write short notes on :
 - 3.1. Myeloid proliferations related to Down's syndrome (30 marks)
 - 3.2. Prognostic factors in B chronic lymphocytic leukaemia (B-CLL) (40 marks)
 - 3.3. Prognostic genetic abnormalities of precursor B acute lymphoblastic Leukaemia. (30 marks)
4. Describe the measures necessary to assure quality of laboratory tests and reports in coagulation. (100 marks)
5.
 - 5.1. What are the causes of megaloblastic anaemia in different age groups ? (40 marks)
 - 5.2. Discuss the different laboratory tests applicable for the confirmation of the entities you mention. (60 marks)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGV) HAEMATOLOGY EXAMINATION
JANUARY 2010

Date: 5th January 2010

Time : 9.00 a.m.-12.00 noon

Answer four questions only.

Answer each question in a separate book.

All questions carry equal marks.

PAPER II

1.
 - 1.1. Discuss the investigation and management of warm autoimmune haemolytic anaemia (warm AIHA). (60 marks)
 - 1.2. Give an account on provision of blood in warm AIHA. (40 marks)
2. Write short notes on :
 - 2.1. Significance of positive direct antiglobulin test (DAT). (30 marks)
 - 2.2. Indications for intravenous immunoglobulin. (30 marks)
 - 2.3. Transfusion associated graft versus host disease. (40 marks)
3.
 - 3.1. Discuss the mechanisms which may give rise to an isolated erythrocytosis in an adult. (50 marks)
 - 3.2. Describe how you would investigate an adult with isolated erythrocytosis. (50 marks)
4.
 - 4.1. Give an account of the key components of comprehensive care of patients with haemophilia. (40 marks)
 - 4.2. How would you manage your patients with congenital bleeding disorders in a setting of limited resources? (60 marks)
5. Discuss how you would investigate a 48 year old male with persistent severe eosinophilia for more than 6 months. (100 marks)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
JANUARY 2011

Date: 17th January 2011

Time : 1.00 p.m.-4.00 p.m.

Answer question one and three others.

Answer each question in a separate book.

All questions carry equal marks.

PAPER I

1. A 48 year old man was brought to the Accident and Emergency Unit, four hours following a road traffic accident. he was found to be pale and cold. Blood pressure 70/50 mmHg, even after 5 units of red cell transfusion. At laparotomy the surgeon finds liver lacerations with uncontrollable bleeding. What advice would you give as the Haematologist. (100 marks)

2.
 - 2.1. Discuss the role of chronic viral infections in the pathogenesis of haematological malignancies. (40 marks)
 - 2.2. Pick one of these disorders and discuss the clinical and laboratory features and options for treatment. (60 marks)

3. A 42 year old woman with sero-negative rheumatoid arthritis presents with features of anaemia.
Her blood counts were as follows :
Hb 7.2 g/dl, WBC 2,500 x 10⁹/L, Platelets count 325 x 10⁹/L
She was on methotrexate for the past eight months.
 - 3.1 Discuss the pathogenesis of her anaemia (50 marks)
 - 3.2. How would you manage her haematologically ? (50 marks)

4. Discuss your approach to pre-operative assessment of bleeding risk (100 marks)

5. Write notes on :
 - 5.1. management of acute chest syndrome in sickle cell disease. (30 marks)
 - 5.2. factors leading to underdiagnosis of G6PD deficiency. (40 marks)
 - 5.3. the role of tyrosine kinase inhibitors in the management of chronic myeloid leukaemia. (30 marks)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (PATHOLOGY) HAEMATOLOGY EXAMINATION
JANUARY 2011

Date: 18th January 2011

Time : 9.00 a.m.-12.00 noon.

Answer **four** questions only.

Answer each question in a separate book.

All questions carry equal marks.

PAPER II

1.
 - 1.1. Discuss the aetiology of aplastic anaemia. (30 marks)
 - 1.2. Outline the clinical features of the disease. (30 marks)
 - 1.3. Write notes on investigation and treatment of a 26 year old female with severe aplastic anaemia. (40 marks)

2. Discuss the provision of blood products in allogenic bone marrow transplantation.
Include in your answer, the management of ABO incompatibility between donor and recipient. (100 marks)

3. A 40 year old man presented with numbness of fingers with a platelet count of $600 \times 10^9/L$.
 - 3.1. What clinical and laboratory features suggest a diagnosis of Essential Thrombocythaemia ? (50 marks)
 - 3.2. Discuss the management of this patient. (50 marks)

4. Discuss the quality control procedures required in a haematology laboratory. (100 marks)

5.
 - 5.1. Write notes on the clinical and laboratory features of Acute promyelocytic leukaemia. (50 marks)
 - 5.2. Discuss the approach to the management of this disorder and its complications. (50 marks)