[KS 189] **Sub. Code : 2083**

M.D. DEGREE EXAMINATION.

Branch XXI — Immunohaematology and Blood Transfusion

(For candidates admitted from 2004–05 onwards)

Paper III — BLOOD DONOR ORGANISATION. TECHNOLOGY OF COMPONENTS, CLINICAL HAEMOTHERAPY

Q.P. Code : 202083

Time : Three hours Maximum : 100 marks

Answer ALL questions.

Draw suitable diagram's wherever necessary.

I. Long Essay : ($2 \times 20 = 40$)

1. Describe in detail the preparation and utilization of blood components.
2. Describe in detail the donor selection criteria.

II. Write short notes on : ($10 \times 6 = 60$)

1. Massive transfusion.
2. Plasmapheresis.
3. Investigation of a transfusion reaction.
4. Irradiated blood products.
5. Use of filters in transfusion medicine.
6. Hospital Transfusion committee.
7. Use of washed cells in transfusion practice.
8. Transfusion related acute lung injury.
9. Adverse effects of apheresis.
10. Neonatal transfusion practice.

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March 2009

M.D. DEGREE EXAMINATION

[KU 189] **Sub. Code: 2083**

Branch XXI – IMMUNOHAEMATOLOGY AND BLOOD TRANSFUSION

(For candidates admitted upto 2007-2008)

Paper III – BLOOD DONOR ORGANISATION TECHNOLOGY OF COMPONENTS CLINICAL HAEMOTHERAPY

Q.P. Code : 202083

Time : Three hours **Maximum : 100 marks**

Draw suitable diagram wherever necessary.
Answer ALL questions.

I. Essay questions: **(2 x 20 = 40)**

1. Discuss Hospital transfusion committee. You have been asked by your hospital transfusion committee (HTC) to set up a programme for effective use of blood. How would you do this?
2. Discuss various measures that can be taken to minimize the use of allogeneic blood transfusion for elective cardiac surgery.

II. Write short notes on : **(10 x 6 = 60)**

1. Discuss indications and quality control issues of irradiated blood products.
2. Appropriate uses of intravenous immunoglobulin.
3. Blood donor notification.
4. Critically analyse factors affecting quality of cryoprecipitate.
5. Cryo-preservation of peripheral blood stem cells.
6. Advantages and disadvantages of blood components collected by apheresis as compared to those prepared from whole blood donations.
7. Plasma products for management of hemophilia A.
8. Management of neonatal alloimmune thrombocytopenic purpura.
9. Strategies for blood donor motivation.
10. Acute normo-volemic hemodilution.

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February 2010

M.D. DEGREE EXAMINATION

[KW 189] **Sub. Code: 2083**

Branch XXI – IMMUNOHAEMATOLOGY AND BLOOD TRANSFUSION

Paper III – (for candidates admitted upto 2007-2008) and
Part II / Paper III – (for candidates admitted from 2008-2009 onwards)

Paper III – BLOOD DONOR ORGANISATION TECHNOLOGY OF COMPONENTS CLINICAL HAEMOTHERAPY
Q.P. Code : 202083

Time : Three hours **Maximum : 100 marks**

Draw suitable diagram wherever necessary.
Answer ALL questions.

I. Essay questions: **(2 x 20 = 40)**

1. Discuss hemo-vigilance program as applied to transfusion medicine.
2. Discuss the role of leukodepletion in blood banking and transfusion medicine practice.

II. Write short notes on : **(10 x 6 = 60)**

1. Enlist the donor selection criteria.
2. Cryoprecipitate preparation and its applicability.
3. Indications for therapeutic apheresis.
4. Platelet concentrate preparation and applicability.
5. Plasma concentration, biological half life and hemostasis levels of various coagulation factors.
6. Advantages and disadvantages of blood components collected by apheresis as compared to those prepared from whole blood donations.
7. Plasma products for management of hemophilia A.
8. Management of neonatal alloimmune thrombocytopenic purpura.
9. Strategies for blood donor motivation.
10. Acute normo-volemic hemodilution.

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MAY 2011

[KY 189] **Sub. Code: 2083**

M.D. DEGREE EXAMINATION

BRANCH XXI – IMMUNOHAEMATOLOGY AND BLOOD TRASFUSION

BLOOD DONOR ORGANISATION TECHNOLOGY OF

COMPONENTS CLINICAL HAEMOTHERAPY

Q.P. Code : 202083

Time : 3 hours **Maximum : 100 marks**

(180 Min)

Answer ALL questions in the same order.

I. Elaborate on :	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. A patient after a road traffic accident is transfused 12 units of blood within eight hours. Describe the transfusion support in this patient. What complications would you expect and what measures would you adopt to prevent them.	11	35	15
2. Discuss the reason for incorrect blood transfusion? What measures can be taken to minimize such events?	11	35	15
II. Write notes on :			
1. Factors affecting quality of cryoprecipitate.	4	10	7
2. Coagulation derangement in chronic liver disease and its management.	4	10	7
3. Quantification of fetomaternal hemorrhage.	4	10	7
4. Blood donor notification.	4	10	7
5. Thromboelastography.	4	10	7
6. Diagnosis of platelet function defects.	4	10	7
7. GMP in blood component laboratory.	4	10	7
8. Pre storage leukofiltration.	4	10	7
9. Transfusion support in ABO mismatched bone marrow transplantation.	4	10	7
10. Exchange transfusion.	4	10	7

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April 2012

[LA 189] **Sub. Code: 2083**

M.D. DEGREE EXAMINATION
BRANCH XXI – IMMUNOHAEMATOLOGY AND BLOOD TRANSFUSION

BLOOD DONOR ORGANISATION TECHNOLOGY OF COMPONENTS CLINICAL HAEMOTHERAPY
Q.P. Code : 202083

Time : 3 hours **Maximum : 100 marks**
(180 Min)

Answer ALL questions in the same order.

I. Elaborate on :	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. Describe the new concepts of providing ideally matched Blood for multiply transfused Thalassemics to prevent Alloimmunisation.	16	35	15
2. Discuss about Accreditation of Blood Banks. List in brief logarithmic approach. What are the Quality Control requirements for accreditation in respect of Blood and Blood components.	16	35	15

II. Write notes on :

1. Discuss Investigation and Evaluation of Transfusion Reaction.	4	10	7
2. "Directed Donation should be discouraged". Comment on this statement with reasons.	4	10	7
3. Discuss guidelines for Stem Cell research in India.	4	10	7
4. Discuss Transfusion support in a Neonate undergoing corrective surgery for a congenital heart disease.	4	10	7
5. Describe stealth RBC's.	4	10	7
6. Discuss the process to improve the efficiency and Quality assurance of component laboratories.	4	10	7
7. Discuss strategies for Blood Donor motivation.	4	10	7
8. Enumerate the complications of factor replacement in a patient of Haemophilia A. How will you diagnose and overcome the same.	4	10	7

(PTO)

9. Describe the investigations performed in Platelet Function Defects.	4	10	7
10. Discuss the various Viral Inactivation methods used for Blood Products.	4	10	7

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(LC 189) APRIL 2013 Sub. Code: 2083

M.D. DEGREE EXAMINATION

BRANCH XXI – IMMUNOHAEMATOLOGY AND BLOOD TRANSFUSION

BLOOD DONOR ORGANIZATION TECHNOLOGY OF COMPONENTS CLINICAL HAEMOTHERAPY

Q.P. Code: 202083

Time: Three Hours **Maximum: 100 marks**

I. Elaborate on: **(2x15=30)**

1. Design the setting of a Blood Bank for a 500 bedded multispeciality hospital.
2. What are the measures which should be undertaken to ensure a successful & sustained Voluntary Blood Donor Programme in India.

II. Write Notes on: **(10x7=70)**

1. Accreditation of Blood Banks
2. Blood transfusion practices in Neonates
3. Platelet refractoriness
4. Computerization in Blood Banks
5. Problems in patients receiving multiple transfusion
6. How will you proceed in a suspected blood transfusion reaction
7. Hemovigilance
8. Informed consent in Transfusion Medicine
9. Transfusion Associated Graft Versus Host Disease (TA- GVHD)
10. Blood Donor Counselling.

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(LE 189) **APRIL 2014** **Sub. Code:2083**

M.D. DEGREE EXAMINATION

BRANCH XXI – IMMUNOHAEMATOLOGY AND BLOOD TRANSFUSION

BLOOD DONOR ORGANIZATION TECHNOLOGY OF COMPONENTS CLINICAL HAEMOTHERAPY

Q.P.Code: 202083

Time: Three Hours **Maximum: 100 marks**

I. Elaborate on: **(2X15=30)**

1. Leukodepletion – methods and their merits / demerits.

2. A patient has a road traffic accident and is transfused 13 units of blood within 7 hours. Discuss the transfusion related problems you anticipate, their laboratory evaluation and management.

II. Write notes on: **(10X7=70)**

1. Passenger lymphocyte syndrome.
2. Critically analysed factors affecting quality of cryoprecipitate.
3. Intra- uterine transfusion.
4. Draw a process flow of your component laboratory and discuss importance of process flow mapping.
5. Merits and demerits of directed blood donations.
6. Donor hemovigilance.
7. Cold chain maintenance and its importance.
8. Design a blood centre for a tertiary care 500 bedded hospital.
9. Audit in transfusion practice and its utility.
10. Therapeutic plasma exchange – principle and indications.

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