



N-2106100701010001

M. D. Examination

June/July - 2021

Basic Sciences Related to Immunohematology &
Blood Transfusion : Paper - I

Time : 3 Hours]

[Total Marks : 100

Instruction :

(1)

नीचे दृशविव Fillup strictly the details of signs on your answer book. Name of the Examination :	Seat No.:
M. D.	<input type="text"/>
Name of the Subject :	<input type="text"/>
Basic Sci. Related to Immunohemato. & Blood Transfu. - I	<input type="text"/>
Subject Code No. : Section No. (1, 2,.....): Nil	<input type="text"/>
2 1 0 6 1 0 0 7 0 1 0 1 0 0 0 1	Student's Signature

- (2) All questions are compulsory.
(3) Draw diagrams wherever necessary.
(4) Figures on the right side indicate maximum marks.

- 1 Discuss Rh blood group system including its nomenclature. 25
2 Discuss role of Erythropoetin in hematology. 25
3 Discuss : 10×5=50
(a) Proteolytic enzymes in immunohematology.
(b) Soluble transferring receptors and their applied aspects in transfusion medicine.
(c) Structure of HIV and its transmission.
(d) Management of shock.
(e) Scientific landmarks in the history of transfusion medicine.



N-2106100701020001

M. D. Examination

June/July - 2021

Immunoematology, Immunogenetics &
Applied Serology : Paper - II

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दशांशके निशान्तीवाणी विगतो उत्तरवडी पर अवश्य लभवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
M. D.	<input type="text"/>
Name of the Subject :	<input type="text"/>
Immunoematolo., Immunogene. & Applied Serology - II	<input type="text"/>
Subject Code No. :	Section No. (1, 2,.....): Nil
2 1 0 6 1 0 0 7 0 1 0 2 0 0 0 1	<input type="text"/>
	Student's Signature

- (2) All questions are compulsory.
(3) Draw diagrams wherever necessary.

- 1 A 10 year old thalassemia major patient is receiving regular transfusion therapy. Physician of the patient has observed that lately there is not much improvement in post transfusion haemoglobin level of the patient. How will you investigate & manage this patient ? 25
- 2 What is transfusion related immune- modulation ? Describe the possible mechanism for its beneficial & deleterious effects & prevention of it when needed. 25
- 3 Write short notes on any five of the following : 5×10=50
- Del phenotype
 - Describe uses of various enzymes in red cell serology.
 - Discuss blood groups and diseases associations.
 - Quality standards for blood grouping antisera.
 - Note on Ig A deficiency and its implication in transfusion medicine.

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M. D. Examination

June/July - 2021

Blood Bank Operation, Blood Donor Organization,
Technology of Components & Clinical
Hemotherapy : Paper - III

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दशावेष निशानीवाणी विगतो उत्तरवही पर अवश्य लखवी. Fillup strictly the details of signs on your answer book.	Seat No.:
Name of the Examination :	<input type="text"/>
M. D.	<input type="text"/>
Name of the Subject :	<input type="text"/>
Blood Bank Oper., Blood Donor Orga., Tech. of Comp. & Clin. Hemother. - III	<input type="text"/>
Subject Code No. :	Section No. (1, 2,.....): Nil
2 1 0 6 1 0 0 7 0 1 0 3 0 0 0 1	Student's Signature

(2) All questions are compulsory.

(3) Draw diagrams wherever necessary.

- 1 Maximum Surgical Blood Order Schedule. 25
- 2 Describe principle of apheresis. Discuss Therapeutic Plasma Exchange in terms of patient preparation, indications, volume to be exchanged and adverse effects. 25
- 3 Write short notes : 5×10=50
 - (a) Measure to be taken to maintain adequate donor pool.
 - (b) Various quality indicators to monitor blood bank operation.
 - (c) Prevention of bacterial contamination of blood components.
 - (d) LJ chart in transfusion medicine.
 - (e) Autologous blood donation.

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M. D. Examination

June/July - 2021

Recent Advances & Technology : Paper - IV
(Immunohematology & Blood Transfusion)

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दृष्टविक निशानीवाणी विगतो उत्तरवडी पर अवश्य लभवी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
M. D.

Name of the Subject :
Recent Adv. & Techno. - IV (Immunohemato. & Blood Transfu.)

Subject Code No. : Section No. (1, 2,.....): Nil
2 1 0 6 1 0 0 7 0 1 0 4 0 0 0 1

Seat No.:

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Student's Signature

(2) All questions are compulsory.

(3) Draw diagrams wherever necessary.

- 1 Haemovigilance programme of India. 25
- 2 What is Nucleic acid amplication technology (NAT) ? 25
Describe in detail various types of NAT and its application in transfusion medicine.
- 3 Write short notes : 5×10=50
 - (a) Point of care tests in transfusion medicine.
 - (b) Computerization in blood banking.
 - (c) Covid-19 covalent plasma - donor selection criteria, procedure, indications and doses.
 - (d) Accreditation in blood banking.
 - (e) Extracorporeal photopheresis and immunoadsorption.