



BB-2106100701010001

M. D. Examination

April - 2022

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

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दशांश देव निशानीवाणी विगतो उत्तरवही पर अवश्य लम्बी. 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"/>
Basic Sci. Related to Immunohematology & Blood Transfusion : Paper-I	<input type="text"/>
Subject Code No. :	<input type="text"/>
2 1 0 6 1 0 0 7 0 1 0 1 0 0 0 1	<input type="text"/>
Section No. (1, 2,.....) : NIL	<input type="text"/>
	Student's Signature

- (2) Answer all questions.
(3) Draw diagrams wherever necessary.

- 1 Describe various subtypes of lymphocytes and their functions in immune response. Discuss the role of T lymphocytes in Transfusion Medicine. **25**
- 2 Discuss coagulation cascade. Discuss etiology, pathogenesis and management of Hemophilia. **25**
- 3 Write short notes on any five of the following : **5×10=50**
- (a) Molecular basis of Sickle cell disease and its pathophysiology.
- (b) Fresh whole blood : definition and indications for transfusion.
- (c) Single Unit Transfusion.
- (d) Microscope: principle, types and its uses.
- (e) TACO
- (f) Membrane attack complex of complement system.



BB-2106100701020001

M. D. Examination

April - 2022

Immunoematology, Immunogenetics & Applied
Serology : Paper - II

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दशांशवेल निशानीवाणी विगतो उत्तरवही पर अवश्य लपवी. 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"/>
Immunoematology, Immunogenetics & Applied Serology : Paper - 2	<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) Answer all questions.
(3) Draw diagrams wherever necessary.

- 1 Discuss the immune thrombocytopenic purpura and its management. 25
- 2 Describe serological complications in multi transfused patients and describe strategies for their prevention. 25
- 3 Write short notes on any five of the following : 5×10=50
- (a) ABO discrepancies : types and its resolutions
- (b) Write the SOP of compatibility testing
- (c) Donor counselling for abnormal test results
- (d) Passenger lymphocyte syndrome
- (e) Blood unit selection for emergency transfusion
- (f) Solid phase red cell adherence test



BB-2106100701030001

M. D. Examination

April - 2022

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

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दृष्टावेक निशानीवाणी विगतो उत्तरवही पर अवश्य लखनी. Fillup strictly the details of signs on your answer book.	Seat No.:
Name of the Examination :	<input type="text"/>
<input type="checkbox"/> M. D.	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="checkbox"/> Blood Bank Operation, Blood Donor Org., Tech. of Components & Clinical Hemotherapy : Paper-3	<input type="text"/>
Subject Code No. :	<input type="text"/>
<input type="checkbox"/> Section No. (1, 2,.....):	<input type="text"/>
<input type="checkbox"/> NIL	<input type="text"/>
<input type="checkbox"/> 2 1 0 6 1 0 0 7 0 1 0 3 0 0 0 1	<input type="text"/>
	Student's Signature

(2) Answer all questions.

(3) Draw diagrams wherever necessary.

1 Discuss the various leucodepletion techniques and its role 25
in transfusion medicine.

2 Quality control for various blood components along with 25
its desired criteria. Do the root cause analysis in case of
not fulfilling FFP as per the standards.

3 Write short notes on any five of the following : 5×10=50

(a) Informed consent in transfusion medicine

(b) Audits in the blood bank and importance of management
review meeting

(c) Design the setting of blood bank for 300 bedded multi-
speciality hospital

(d) Look back policy

(e) Donor hemovigilance

(f) Therapeutic Aphaeresis.



BB-2106100701040001

M. D. Examination

April - 2022

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

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे हस्तावेद निशाानीवाणी विगतो उतरवडी पर अवरध लभवी. Fillup strictly the details of signs on your answer book. Name of the Examination :	Seat No. :
<input type="text" value="M. D."/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Name of the Subject :	<input type="text" value="Student's Signature"/>
<input type="text" value="Recent Advances & Technology : Paper - IV"/>	
Subject Code No. : <input type="text" value="2 1 0 6 1 0 0 7 0 1 0 4 0 0 0 1"/> Section No. (1, 2,.....) : <input type="text" value="NIL"/>	

- (2) Answer all questions.
(3) Draw diagrams wherever necessary.

- 1 Write specifications for designing blood bank management software for blood bank with component facilities. 25
- 2 Automation in component preparation along with its quality control. 25
- 3 Write short notes on any five of the following : 5×10=10
- (a) Plasma fractionation
 - (b) Universal and stealth RBCs
 - (c) Role of PRP in regenerative medicine
 - (d) Use of social media as donor recruitment techniques
 - (e) HLA typing
 - (f) EQAS.