# National Board of Examinations

Question Paper Name :	DNB Immunohematology and Blood
	Transfusion Paper4
Subject Name :	DNB Immunohematology and Blood
Subject Name .	Transfusion Paper4
Creation Date :	2022-12-26 16:39:15
Duration :	180
Share Answer Key With Delivery Engine :	No
Actual Answer Key :	No

# **DNB Immunohematology and Blood Transfusion Paper4**

Group Number :	1
Group Id :	3271871447
Group Maximum Duration :	0
Group Minimum Duration :	180
Show Attended Group? :	No
Edit Attended Group? :	No
Group Marks :	100
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

# **DNB Immunohematology and Blood Transfusion Paper4**

Section Id :	3271871450
Section Number :	1

Mandatory or Optional :MandatoryNumber of Questions to be attempted :10Section Marks :100Enable Mark as Answered Mark for Review and Clear Response : $\gamma_{es}$ Maximum Instruction Time :0Sub-Section Number :1Sub-Section Id :3271871454Question Shuffling Allowed :NoIs Section Default :null	Section type :	Offline
Section Marks :100Enable Mark as Answered Mark for Review and Clear Response :YesMaximum Instruction Time :0Sub-Section Number :1Sub-Section Id :3271871454Question Shuffling Allowed :No	Mandatory or Optional :	Mandatory
Enable Mark as Answered Mark for Review and Clear Response :YesMaximum Instruction Time :0Sub-Section Number :1Sub-Section Id :3271871454Question Shuffling Allowed :No	Number of Questions to be attempted :	10
Clear Response :YesMaximum Instruction Time :0Sub-Section Number :1Sub-Section Id :3271871454Question Shuffling Allowed :No	Section Marks :	100
Clear Response :0Maximum Instruction Time :0Sub-Section Number :1Sub-Section Id :3271871454Question Shuffling Allowed :No	Enable Mark as Answered Mark for Review and	Yes
Sub-Section Number :1Sub-Section Id :3271871454Question Shuffling Allowed :No	Clear Response :	105
Sub-Section Id :3271871454Question Shuffling Allowed :No	Maximum Instruction Time :	0
Question Shuffling Allowed : No	Sub-Section Number :	1
	Sub-Section Id :	3271871454
Is Section Default?: null	Question Shuffling Allowed :	No
	Is Section Default? :	null

Question Number : 1 Question Id : 32718713552 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

#### Correct Marks : 10

Please write your answers in the answer booklet within the allotted pages as follows:-

Question Number	Answer to be attempted within	Question Number	Answer to be attempted within
Q. 1	Page 1-5	Q. 6	Page 26-30
Q. 2	Page 6-10	Q. 7	Page 31-35
Q. 3	Page 11-15	Q. 8	Page 36-40
Q. 4	Page 16-20	Q. 9	Page 41-45
Q. 5	Page 21-25	Q. 10	Page 46-50

1. a) Define quality assurance. [2]

b) Describe steps to ensure quality of platelets. [8]

#### Question Number : 2 Question Id : 32718713553 Question Type : SUBJECTIVE Consider As

#### Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction

#### Time : 0

#### Correct Marks : 10

- a) Discuss pathogen reduction techniques. [5]
- b) Describe role of different technologies in pathogen reduction of various blood components. [5]

Question Number : 3 Question Id : 32718713554 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

#### Correct Marks : 10

a) Accreditation of Blood Banks. [3]

- b) Advantages of Accreditation. [3]
- c) Key performance indicators for Blood Bank services. [4]

Question Number : 4 Question Id : 32718713555 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

#### **Correct Marks : 10**

a) Define near miss event. [2]

b) Discuss strategies to prevent near miss events in a blood centre. [8]

### Question Number : 5 Question Id : 32718713556 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

#### Correct Marks : 10

a) Enumerate essential documents to be maintained as per Drug and Cosmetic Rules, 1945 and amendments thereafter. [3]

b) Design Standard Operating Procedure (SOP) for blood collection from blood donors. [7]

Question Number : 6 Question Id : 32718713557 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

#### Correct Marks : 10

- a) Define metabolomics. [3]
- b) Discuss role of metabolomics in improving red cell and platelet storage lesions. [7]

### Question Number : 7 Question Id : 32718713558 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

#### Correct Marks : 10

- a) Define patient blood management (PBM) and discuss pillars of PBM. [4]
- b) Discuss strategies for patient blood management in peri-operative testing. [6]

Question Number : 8 Question Id : 32718713559 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

#### **Correct Marks : 10**

- a) Define cellular immunotherapy and describe its types. [4]
- b) Discuss clinical application of T-cell immunotherapy. [6]

Question Number : 9 Question Id : 32718713560 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

#### **Correct Marks : 10**

- a) Principles of new technologies available for automation in blood grouping. [6]
- b) Importance of automation in transfusion service. [4]

Question Number : 10 Question Id : 32718713561 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

#### Correct Marks : 10

Discuss management of non-conforming events under following headings:

- a) Root cause analysis. [2]
- b) Statistical tools used for root cause analysis. [4]
- c) Preventive and corrective actions for quality improvement. [4]