

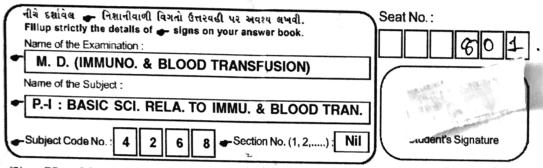
M. D. (Immunohaematology & Blood Transfusion) Examination

April / May - 2017

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

Time: 3 Hours] [Total Marks: 100 Instructions:

(1)



- (2) Use blue/black pen only.
- (3) Do not write anything on the blank portion of the question paper.
- (4) The number to the right indicates full marks.
- (5) Draw diagrams wherever necessary.
- Describe morphological and biochemical changes occurring during storage of red blood cells in blood banking conditions.
 Discuss clinical consequences of red cell storage lesions.
- 2 Describe pathways in coagulation cascade and discuss the role of naturally occurring coagulation inhibitors.
- 3 Write short notes on any five of the followings: $10 \times 5 = 50$
 - (a) Zeta potential and its applied aspects
 - (b) Biochemical markers for laboratory diagnosis of iron deficiency
 - (c) Human platelet antigens: Classification and methods of detection
 - (d) Pro inflammatory cytokines and its applied aspects
 - (e) Secondary immune response and its significance in transfusion medicine
 - (f) Mixed lymphocyte culture test.

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M. D. (Immunohaematology & Blood Transfusion) Examination

April / May - 2017

Paper - II : Immunohematology, Immunogenetics & Applied Serology

Time: 3 Hours]
Instructions:

[Total Marks: 100

(1)

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Fillup strictly the details of signs on your answer book. Name of the Examination:	801
M. D. (IMMUNO. & BLOOD TRANSFUSION)	7
Name of the Subject :	The second second
P II : IMMUN., IMMUNO. & APPL. SEROLOGY	I THEN THE PARTY OF THE PARTY O
Subject Code No.: 4 2 6 9 - Section No. (1, 2,): Nil	Student's Signature

- (2) Use blue/black pen only.
- (3) Do not write anything on the blank portion of the question paper.
- (4) The number to the right indicates full marks.
- (5) Draw diagrams wherever necessary.
- Describe various types of cross matching methods.

 Discuss feasibility of implementing Type and Screen procedure as compared to Conventional Cross Matching in India.
- 2 Describe laboratory diagnosis and transfusion management 25 in a case of Warm Autoimmune Hemolytic Anemia.
- 3 Write short notes on any five of the followings: 10×5=50
 - (a) Role of blood groups in paternity testing
 - (b) Titration of anti-A and anti-B and its clinical significance
 - (c) Discuss quality essential elements in Immunohematology
 Lab
 - (d) Compare and contrast Major Histocompatibility Complex (MHC) class I and class II proteins
 - (e) Passenger lymphocyte syndrome
 - (f) Molecular basis of partial D.

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M. D. (Immunohaematology & Blood Transfusion) Examination

April / May - 2017

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

[Total Marks: 100 Time: 3 Hours] **Instructions: (1)** Seat No.: નીચે દર્શાવેલ 🖝 નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fillup strictly the details of - signs on your answer book. Name of the Examination: M. D. (IMMUNO. & BLOOD TRANSFUSION) Name of the Subject: BLOOD BANK OPER., BLO. DON. ORGA.... P. - III Student's Signature Section No. (1, 2,....): Subject Code No.: Use blue/black pen only. (2)Do not write anything on the blank portion of the question paper. (3) The number to the right indicates full marks. **(4)** Draw diagrams wherever necessary. Discuss the factors that need to be considered for 25 1 the optimal transfusion therapy in long-term transfusion dependent patient. Discuss bacterial contamination of red cells and platelets. 25 2 Describe the strategies for minimizing this risk of bacterial contamination. Write short notes on any five of the followings: $10 \times 5 = 50$ 3 GMP in blood component laboratory (a) Strategies for blood donor motivation **(b)** Factors affecting the quality of fresh frozen plasma (c) (d) Plasma Policy of India. Indications for gamma irradiated blood components (e) Compare and contrast pooled random donor platelets **(f)** and single donor platelets.



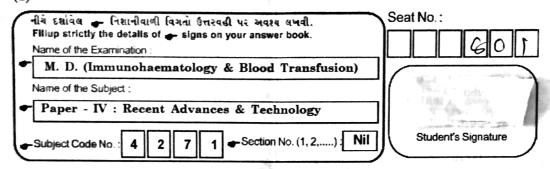
M. D. (Immunohaematology & Blood Transfusion) Examination

April / May - 2017

Paper - IV: Recent Advances & Technology

Time: 3 Hours]	[Total Marks: 100
Instruction:	

(1)



- (2) Use blue/black pen only.
- (3) Do not write anything on the blank portion of the question paper.
- (4) The number to the right indicates full marks.
- (5) Draw diagrams wherever necessary.
- Describe the principle of "Patient Blood Management" 25 (PBM). How would you apply the concept of PBM in a 60 years old male patient undergoing elective open heart surgery?
- Discuss key laboratory aspects of quality assurance in
 Transfusion transmitted infection screening in blood banks.
- 3 Write short notes on any five of the following: $10 \times 5 = 50$
 - (a) Microarray and its applications in Transfusion Medicine
 - (b) Compare and contrast peripheral blood and cord blood as a source of stem cells for transplantation.
 - (c) Cascade plasmapheresis
 - (d) Induced pluripotent stem cell
 - (e) Wrong Blood In Tube (WBIT): discuss causes and prevention
 - (f) Recombinant human erythropoietin