B-4268

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)

Fillup strictly the details of signs on your answer book.
Name of the Examination :
M. D. (IMMUNO. & BLOOD TRANSFUSION)
Name of the Subject :
P-I : BASIC SCI. RELA. TO IMMU. & BLOOD TRAN.
Subject Code No. : 4 2 6 8 Section No. (1,2,.....) : Nil

(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.

1 Describe morphological and biochemical changes occurring during storage of red blood cells in blood banking conditions. Discuss clinical consequences of red cell storage lesions. 25

2 Describe pathways in coagulation cascade and discuss the role of naturally occurring coagulation inhibitors. 25

3 Write short notes on any five of the followings : 10×5=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.

B-4268] [ 50 ]
M. D. (Immunohaematology & Blood Transfusion)  
Examination  
April / May - 2017  
Paper - II : Immunohematology, Immunogenetics  
& Applied Serology

Time : 3 Hours] [Total Marks : 100

Instructions:

(1)  
Fill up strictly the details of signs on your answer book.

Name of the Examination:

M. D. (IMMUNO. & BLOOD TRANSFUSION)

Name of the Subject:

P. - II : IMMUN., IMMUNO. & APPL. SEROLOGY

Subject Code No. : 4 2 6 9  
Section No. (1, 2,.....) : Nil

(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.

1 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 in a case of Warm Autoimmune Hemolytic Anemia.

3 Write short notes on any five of the followings :  
10x5=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.

B-4269] [ 50 ]
B-4270

M. D. (Immunohaematology & Blood Transfusion) Examination
April / May - 2017


Time : 3 Hours] [Total Marks : 100

Instructions:

(1) Fill up 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

Subject Code No.: 4 2 7 0 8 Section No. (1, 2,...) Nil

Seat No.:

(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.

1 Discuss the factors that need to be considered for the optimal transfusion therapy in long-term transfusion dependent patient. 25

2 Discuss bacterial contamination of red cells and platelets. Describe the strategies for minimizing this risk of bacterial contamination. 25

3 Write short notes on any five of the followings: 10 × 5 = 50
   (a) GMP in blood component laboratory
   (b) Strategies for blood donor motivation
   (c) Factors affecting the quality of fresh frozen plasma
   (d) Plasma Policy of India.
   (e) Indications for gamma irradiated blood components
   (f) Compare and contrast pooled random donor platelets and single donor platelets.
B-4271

M. D. (Immunohaematology & Blood Transfusion)
Examination
April / May - 2017
Paper - IV : Recent Advances & Technology

Time : 3 Hours] [Total Marks : 100

Instruction :
(1) 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.

1. Describe the principle of "Patient Blood Management" (PBM). How would you apply the concept of PBM in a 60 years old male patient undergoing elective open heart surgery?

2. 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 : 10×5=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