



RX-003-038401

Seat No. _____

B. Voc. (Sem. IV) (MLMDT) (CBCS) Examination

March - 2019

MLMDT - 4.1 : Immunohematology and Blood Banking

Faculty Code : 003

Subject Code : 038401

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) All questions are compulsory.
(2) The paper is divided in two sections.
(3) Figures on right indicate marks.

SECTION - I

- 1 Answer the following MCQ : **20**
- (1) Define an antibody.
 - (2) What do you mean by agglutination reaction?
 - (3) Give one example of enzyme used in ELISA test.
 - (4) Enlist the genes responsible for ABO antigen on RBC.
 - (5) Mention the Antibody present in plasma of Bombay blood group person.
 - (6) What is the chemical nature of ABO antigens?
 - (7) Peripheral smear findings in case of HDN.
 - (8) What is exchange blood transfusion?
 - (9) What is full form of TRALI?
 - (10) Write any two anticoagulants used in blood bank.
 - (11) Describe use of blood collection monitor.
 - (12) What is adverse donor reaction?
 - (13) What is apheresis?
 - (14) Universal color coding for Antisera-D is _____
 - (15) Time - Temperature - Pressure ration for autoclave is _____

- (16) Full form of QMS.
- (17) Define cryoprecipitate.
- (18) Give example of high resolution HLA typing technique
- (19) What is the major role of HLA antigens
- (20) What is the shelf life of leucocyte poor red cell concentrate?

SECTION - II

- 2 (A) Answer in brief : (Any Three) 6**
- (1) What is SPRCA method?
 - (2) What is window period?
 - (3) Write about blood spillage management.
 - (4) What is CAT method?
 - (5) Write the mandatory tests of donated blood.
 - (6) What is reverse grouping?
- (B) Answer in brief : (Any Three) 9**
- (1) Write the importance of counselling of blood donor
 - (2) What is the shelf life of various blood components?
 - (3) Write about basic activities of Transfusion Transmitted Infection (TTI) testing laboratory.
 - (4) Which techniques are used for HLA typing?
 - (5) Discuss types of blood bags used in blood bank.
 - (6) Describe uses of Plasma products.
- (C) Answer in brief : (Any Two) 10**
- (1) Explain HDN caused by Rh incompatibility.
 - (2) Write a note on SDP Apheresis procedure with basic screening criteria
 - (3) Write a note on importance of NAT in blood bank
 - (4) Discuss Coomb's test.
 - (5) Automation in blood bank.

- 3 (A) Answer in brief : (Any Three) 6**
- (1) Write about methods for Malaria detection
 - (2) What is exchange blood transfusion?
 - (3) Describe gradation of reporting of ABO blood group by tube method.
 - (4) How will you handle sharp waste as per biomedical waste management?
 - (5) What is adverse donor reaction?
 - (6) Write about Storage temperature for platelet products?
- (B) Answer in brief : (Any Three) 9**
- (1) What is D^U ?
 - (2) Subgroups of ABO blood grouping system.
 - (3) Different temperature ranges for storage of blood products.
 - (4) Basic details filled in Blood Donation Form
 - (5) Biomedical waste management in blood bank
 - (6) Describe uses of Platelet products.
- (C) Answer in brief : (Any two) 10**
- (1) Describe Bombay blood group system
 - (2) Discuss Blood Transfusion Reaction workup
 - (3) Write a note on HLA genes
 - (4) Discuss Quality control in blood bank.
 - (5) Write a note on Transportation of whole blood & blood components.
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