



**AAG-003-038401** Seat No. \_\_\_\_\_

**B. Voc. (MLMDT) (Sem. IV) (CBCS) Examination**  
**April / May - 2016**

**MLMDT-4.1 : Immunohematology & Blood Banking**

**Faculty Code : 003**  
**Subject Code : 038401**

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

[Total Marks : 70

**1 Multiple Choice Questions : 20**

- (1) What is full form of ID-NAT?
  - (A) Individual Donor Nucleic acid Amplification Technique
  - (B) Individual Nucleic acid Amendment Technique
  - (C) Individual Nucleic acid Abstract Technique
  - (D) Isolated Nucleic acid Isolation Technique
- (2) Full form of AHG is.....
  - (A) Anti H Globulin
  - (B) Anti Host Globulin
  - (C) Anti Human Globulin
  - (D) Anti Histamine Globulin
- (3) Universal color coding for AHG is...

(A) Blue	(B) Green
(C) Colorless	(D) Yellow
- (4) Vaccine preventable disease...

(A) HIV	(B) Syphilis
(C) HBV	(D) Malaria
- (5) Expired / infected blood should be discarded after...
  - (A) Autoclaving
  - (B) Hot air oven sterilization
  - (C) Shredding
  - (D) Chemical treatment

- (6) Basic chemical used for disinfection in blood bank?  
 (A) Sodium Hypochlorite (B) Sodium Nitrite  
 (C) Sodium Hypochloride (D) Sodium Chloride
- (7) Mandatory license required to operate blood bank is from...  
 (A) ISO (B) GPCB  
 (C) NABH (D) FDCA
- (8) To check the collected amount of donated blood from donor \_\_\_\_\_ is used.  
 (A) Blood Weighing Scale  
 (B) Blood Component Separator  
 (C) Blood Collection Monitor  
 (D) Blood Collecting Device
- (9) Crossmatching can be performed by...  
 (A) Tube method (B) SPRCA method  
 (C) CAT method (D) All of above
- (10) What is full form of TTI?  
 (A) Transfusion Transmitted Disease  
 (B) Transfusion Transcribed Disease  
 (C) Transfusion Transfer Disease  
 (D) Transfusion Travel Disease
- (11) Full form of SDP is...  
 (A) Single Donor Product  
 (B) Single Donor Plasma  
 (C) Simple Donor Platelet  
 (D) Single Donor Platelet
- (12) Full form of BSA is...  
 (A) Bovine serum area  
 (B) Bovine serum albumin  
 (C) Bright saturated area  
 (D) Bovine serum alpha
- (13) Blood donation interval between two platelet pheresis is...  
 (A) 90 days (B)  $\geq$  48 days  
 (C)  $\geq$  48 hours (D)  $\geq$  90 hours

- (14) For whole blood donation pulse of donor must be between...
- (A) 50 – 90 beats                      (B) 50 – 120 beats  
 (C) 50 – 100 beats                      (D) 80 – 100 beats
- (15) Storage temperature for FFP is...
- (A) 2 - 8 °C                              (B)  $\leq -35$  °C  
 (C) 22 – 25 °C                          (D)  $\leq -80$  °C
- (16) Cryoprecipitate is reached in...
- (A) Factor VII                              (B) Factor V  
 (C) Factor VI                                (D) Factor VIII
- (17) ABO antibodies are of which class?
- (A) Ig G                                      (B) Ig A  
 (C) Ig M                                      (D) Ig E
- (18) Full form of DCT is...
- (A) Direct Agglutination Test  
 (B) Direct Clotting Test  
 (C) Direct Coomb's Test  
 (D) Direct Control Test
- (19) Pooled cell contains at least how many samples...
- (A) Three                                      (B) Two  
 (C) Five                                        (D) Six
- (20) Volume of normal Fresh Frozen Plasma is...
- (A) 200 - 220 ml                          (B) 40 – 80 ml  
 (C) 50 – 90 ml                              (D)  $\geq 200$  ml

- 2** (a) Answer in brief : (any 3) **3×2=6**
- (1) What is adverse donor reaction?
- (2) What is CAT method?
- (3) What is exchange blood transfusion?
- (4) What is reverse grouping?
- (5) Describe gradation of reporting of ABO blood group by tube method.
- (6) What is window period?

- (b) Answer in brief : (any 3) **3×3=9**
- (1) Cross matching
  - (2) Biomedical waste management in blood bank.
  - (3) Basic details filled in Blood Donation Form
  - (4) Antisera used in blood bank.
  - (5) Basic activities of Transfusion Transmitted Infection (TTI) testing laboratory.
  - (6) Importance of counselling of blood donor.
- (c) Write short notes : (Any 2) **2×5=10**
- (1) Importance of NAT in blood bank
  - (2) HLA genes
  - (3) HDN caused by Rh incompatibility.
  - (4) Basic set up for blood donation camp.
  - (5) SDP Apheresis procedure with basic screening criteria
- 3** (a) Answer in brief : (any 3) **3×2=6**
- (1) Methods for HIV detection.
  - (2) Blood components prepared from Plasma.
  - (3) Methods for syphilis detection.
  - (4) Blood spillage management.
  - (5) What is SPRCA method?
  - (6) Mandatory tests of donated blood.
- (b) Answer in brief : (any 3) **3×3=9**
- (1) What is D<sup>u</sup> ?
  - (2) Post donation care.
  - (3) Temperature monitoring systems used in blood bank.
  - (4) Lab diagnosis of HDN.
  - (5) Describe uses of Platelet products.
  - (6) Types of blood bags used in blood bank.
- (c) Write short notes : (Any 2) **2×5=10**
- (1) Quality control of copper sulphate solution.
  - (2) Automation in blood bank.
  - (3) Transportation of whole blood and blood components.
  - (4) Investigations in case of blood transfusion reactions.
  - (5) ABO blood group.