**1. Rh antigens are   
(a) Glycolipids  
(b) Proteins   
(c) Lipoprotein   
(d) Carbohyderate**

**2. In according to grade of agglutination of red cells, 3+ mean  
(a) One solid aggregates   
(b) All cells are free  
(c) Tiny aggregates  
(d) Several large aggregates**

**3. The normal frequency of donation is  
(a) Four times a year  
(b) Two or three times a year  
(c) Five times a year  
(d) 1 times a year**

**4. …………. Means sensitized cells come into contact each other  
(a) Immunity  
(b) Agglutination   
(c) Immune reaction  
(d) Hemolysis**

**5. The acceptable minimum concentration of Hb for donation is  
(a) 12.5 g\dl  
(b) 10 g\dl  
(c) 4 g\dl  
(d) 5 g\dl**

**6. Platelets become non functioning after ………..of storage  
(a) 24 h  
(b) 48 h  
(c) 4 days  
(d) 3 days**

**7. The following are mandatory tests for safing blood transfusion except   
(a) HBsAg   
(b) Anti HCV  
(c) Serum Urea  
(d) VDRL**

**8. CPDA-1 store blood for   
(a) 35 days  
(b) Year  
(c) 42 days  
(d) 6 days**

**9. Which of the following component is stored at -30 for 1 yea  
(a) WBC  
(b) FFP  
(c) Platelets  
(d) Whole blood**

**10. The following are indication of Cryoprecipitate transfusion except   
(a) Hemophilia A  
(b) Von Willebrand disease  
(c) Aquired FVIII deficiency  
(d) Hemophilia B**

**11. FFP is collected and frozen with in …………. of collection at -70c  
(a) 8 h   
(b) 4 h  
(c) 3 days  
(d) 24 h**

**12. Store Plasma can be used for the treatment of   
(a) Factor VIII deficiency  
(b) Protein deficiency  
(c) Stable coagulation factors deficiency  
(d) F VII deficiency**

**13. Which of the following is advers reactions   
(a) Hemolytic reactions  
(b) Febrile reaction  
(c) Allergic reaction  
(d) All of the above**

**14. Which of the following is transfusion- associated infectious risks  
(a) Bacterial contamination  
(b) Cancer   
(c) Gardia   
(d) All of the above**

**15. Which of the following factor is cryoprecipitate  
(a) F VIII  
(b) FV  
(c) F IX  
(d) F X**

**16. Which of the the following is used as long -term storage of RBCs  
(a) Glycerol   
(b) Plasma   
(c) Alcohol   
(d) Saline**

**17. Frozen- thawed red blood cell indicates for the following except  
(a) To minimize allergic transfusio reaction   
(b) Patient with rare blood group   
(c) To minimize sensitization to leukocyte and platelet Ags  
(d) Patient with Heamophilia**

**18. Cryoprecipitate stored up to 12 month at  
(a) Room temperature   
(b) -18 to -30 C  
(c) 37C  
(d) -170C**

**19. ………………Is the cold insoluble portion of Fresh-frozen Plasma  
(a) Cryosupernatant   
(b) Frozen thawed RBCs   
(c) Cryoprecipitate  
(d) Platelet concentrates**

**20. Which of the following blood group system was discovered firstly   
(a) ABO   
(b) Rh   
(c) MNS  
(d) Duffy**

**• The following are mandatory test for screening blood except  
• HIV  
• HCV antibody  
• HBsAg  
• Rubbela**

**22. The contraindications of autologous blood transfusion are  
• active bacterial infection  
• hemoglobin less than 11gm\dl  
• A&B  
• Non of the above**

**23. Fresh frozen plasma is used for treatment of patient   
• with congenital or acquired coagulation factor deficiency   
• on warfarin anticoagulant that has active bleeding  
• A&B  
• non of the above**

**24. The type of transfusion reaction include**

**• haemolytic transfusuon reaction  
• Immediately advers effect   
• Delayed adverse effect  
• All the above**

**25. Haemolytic transfusuon reaction (HTR) technical error are due to  
• error of blood grouping of patient recipient sample  
• error in the cross matching   
• inadequate cross matching  
• all the above   
26. Naturally occurring antibodies are found regularly in which system  
• ABO  
• Rh  
• Kell  
• Kidd**

**27. The characteristic of slide cross matching method are  
• less sensitive  
• not capable of detecting weak antigen  
• use in cases of emergency   
• all of the above**

**28. In serum grouping (reverse grouping) the serum donor/patient is tested against known cell of  
• Group A  
• Group B  
• Group O  
• all above**

**29. The clinical significant sub group which are detected in lab are  
• A1, A2  
• A1 B  
• A2 B  
• all above  
  
  
30. Blood group A has  
• A antigen on the red cell  
• B antigen on the red cell  
• AB antigen on the red cell  
• Non of the above**

**31. Blood group B has  
• B antigen on the red cell  
• D antigen on the red cell  
• AB antigen on the red cell  
• Non of the above**

**32. Antibody that directed against the individual's own red cells are called  
• infectious antibody   
• autoantibody  
• HLA antibody  
• ABO antibody**

**33. The routine antigen for Rh which carried out in the most blood banking is  
• D antigen  
• E antigen  
• d antigen  
• C antigen**

**34. Blood group O has  
• anti A on the serum  
• anti B on the serum  
• anti A anti B on the serum  
• Non of the above**

**35. The major histocombatibility system in the human is called  
• ABO system  
• hunan leukocyte antigen  
• Kell blood group system  
• Kidd blood group system**

**36. In major cross matching we mixed  
• doner's cell + patient serum  
• patient's cells +doner's serum  
• patent's plasma+doner's serum  
• Non of the above  
37. The universal donor is  
• group O  
• group B  
• group AB  
• group A**

**38. The anti sera A color is  
• colorless  
• Blue  
• yellow   
• red**

**39. The anti sera AB color is  
• blue  
• red  
• yellow  
• colorless**

**40. The anti sera used in DU test must be contain  
• IgM monoclonal   
• IgM polyclonal  
• IgG either monoclonal or polyclonal  
• A&B**

**41. Antibodies are   
(a) Immunoglobulin   
(b) Enzyme   
(c) Alpha-1 acid glycoproteins  
(d) Hormone**

**42. ABH antigens are   
(a) Glycolipids  
(b) Proteins   
(c) Lipoprotein   
(d) Glycoprotein**

**43. Specificity of blood group antibodies is determined by  
(a) 2- mercaptomethanol treatment  
(b) Autoimmune diseases  
(c) Chromatography  
(d) A&C**

**44. Immune Surveillance means  
(a) Inflamation  
(b) Resistance and distruction of cancer  
(c) Immune response  
(d) Antiginicity**

**45. …………. Means sensitized cells come into contact each other  
(a) Immunity  
(b) Agglutination   
(c) Immune reaction  
(d) Hemolysis**

**46. WBCs become non functioning after ………..of storage  
(a) 24 h  
(b) 48 h  
(c) 4 days  
(d) 5 days**

**47. Platelets become non functioning after ………..of storage  
(a) 24 h  
(b) 48 h  
(c) 4 days  
(d) 5days**

**48. The coagulation factors V and VIII lose their activity with in   
(a) 24 h  
(b) 48 h  
(c) 72 h  
(d) 5 days**

**49. ACD store blood for   
(a) 21 days  
(b) Year  
(c) 50 days  
(d) 6 days**

**50. FFP is stored at -30c for about  
(a) 3 years  
(b) 1 year  
(c) 5 years  
(d) 2 year**

**51. The following are indication of fresh blood transfusion   
(a) Exchange blood transfusion  
(b) Requirement of platelets  
(c) A&b  
(d) Chronic anemia**

**52. FFP is collected and frozen with in …………. of collection at -70c  
(a) 8 h   
(b) 4 h  
(c) 3 days  
(d) 1 h**

**53. Store Plasma can be used for the treatment of   
(a) Factor VIII deficiency  
(b) Protein deficiency  
(c) Stable coagulation factors deficiency  
(d) Platelet disorders**

**54. Which of the following is advers reactions   
(a) Hemolytic reactions  
(b) Febrile reaction  
(c) Chemical reaction  
(d) A&b**

**55. Which of the following is transfusion- associated infectious risks  
(a) Hypertention   
(b) Viral infections  
(c) Thalassemia   
(d) Thyrodism**

**56. Which of the following factor(s) is or are cryoprecipitate  
(a) F VIII  
(b) Fibrinogen  
(c) Platelets  
(d) A&B**

**57. To prepare Frozen- thawed red blood cell, RBCs frozed in   
(a) Glycerol   
(b) Plasma   
(c) Alcohol   
(d) Citrate**

**58. Frozen- thawed red blood cell indicates for the following except  
(a) To minimize allergic transfusio reaction   
(b) Patient with rare blood group   
(c) To minimize sensitization to leukocyte and platelet Ags  
(d) Patient with Heamophilia**

**59. Cryoprecipitate stored at -18 to -30 up to  
(a) 2 years   
(b) 12 month   
(c) 3 years  
(d) 5 years**

**60. ………………Is the cold insoluble portion of Fresh-frozen Plasma  
(a) Cryosupernatant   
(b) Frozen thawed RBCs   
(c) Cryoprecipitate  
(d) Platelet concentrates**

**61. Which of the following blood group system was discovered firstly   
(a) ABO   
(b) Rh   
(c) MNS  
(d) Duffy**

**62. ABO blood group was inherited in Chromosome number  
(a) 3   
(b) 5   
(c) 9  
(d) 1**

**63. ABO antibodies are   
(a) IgM  
(b) IgG  
(c) IgA  
(d) IgE**

**64. ………… Blood group contain anti-B in the serum   
(a) B   
(b) A   
(c) O   
(d) AB**

**65. The A red cell which react with anti-A and A1 is designated as   
(a) A1  
(b) A  
(c) A2  
(d) A &B**

**66. A2 blood group represent about………of Ablood group  
(a) 80%  
(b) 30%  
(c) 20%  
(d) 10%**

**67. Which of the following is weak expression of D antigen  
(a) D x  
(b) Du  
(c) A  
(d) B**

**68. HLA antigens are foun on chromosome  
(a) 6  
(b) 5  
(c) 9  
(d) 1**

**69. HLA antigens are devided into  
(a) HLA-A, HLA-B&HLA-C  
(b) HLA-B,HLA-D& HLA-E  
(c) HLA-C&HLA-A  
(d) HLA-B,HLA-D& HLA-E**

**70. AIHA may be secondary to  
(a) Lymphomas  
(b) Anemia   
(c) SLE  
(d) A&C**

**71. The antibodies contain kappa or lambda light chains known as:  
• Monoclonal antibodies  
• Polyclonal antibodies  
• All of the above  
• None of the above**

**72.Binding of antigen and antibody, in vitro or in vivo with or without agglutination called:  
• Hemolysis  
• Sensitization  
• Neutralization  
• None of the above**

**73. The serum contains anti-IgG and anti-C3d:  
• Polyspecific-1  
• Polyspecific-2  
• Monospecific  
• None of the above**

**74. AHG is used for detection of:-  
• Complete Abs  
• Incomplete Abs   
• All of the above  
• None of the above**

**75. Poly specific-2 coomb`s reagent contain:-   
• Anti-IgG  
• Anti C3d  
• Anti C3b  
• All of the above**

**76. Direct antiglobulin test is used to diagnose:  
• Hemolytic transfusion reaction  
• Drug induced sensitization  
• Autoimmunhemolytic anemia  
• All of the above**

**77. The donor is deferred if gives a positive history of:  
• Allergic disorders  
• Epilepsy  
• TB  
• All of the above**

**78. Febrile reaction is  
(a) Hemolytic reactions  
(b) Chemical reaction  
(c) Advers reactions  
(d) Reverse reaction**

**79. Which of the following is not a transfusion- associated infectious risks  
(a) Bacterial contamination  
(b) Viral infections  
(c) Malaria   
(d) Gardia**

**80. IgG antibodies are  
(a) Immunoglobulin   
(b) complete antibodies  
(c) React at 37c  
(d) a& c**

**81. The Rh negative patient should received blood from  
• Rh – positive donor   
• Rh – negative donor  
• Rh – positive patient  
• D)Non of the above  
82. The anti D sera used are  
• polyclonal anti D sera  
• monoclonal anti D sera  
• A&B  
• non of the above**

**83. The ABO antigen expressed on  
• erythrocytes  
• leukocytes  
• platelets  
• all the above**

**84. The complications of transfusion reaction are …………except  
• Sweating   
• dizziness  
• low blood pressure  
• diarrhea**

**85. The applications of HLA antigen typing are   
• transplantation  
• transfusion  
• A&B  
• Non of the above**

**86. In the ABO system blood groups were divided in to  
• A  
• B  
• AB  
• All the above**

**87. Fresh frozen plasma (FFP) is  
• collect from single donor  
• collect by plasma apheresis  
• Frozen within 4 hr at -70  
• All the above**

**88. The most important biochemical change in the storaged blood is  
• loss of potassium from red cell  
• loss of intake of sodium from plasma  
• A&B  
• non above**

**89. Which blood group system was discovered first?  
• ABO  
• MNS  
• P  
• Rh**

**90. Autologous blood transfusion is  
• transfusion of patient own blood  
• done with Bombay group  
• used to minimized risk of transfusion disease.  
• all above**

**91. The indicate for whole blood transfusion are  
• active bleeding  
• packed cell not available  
• A &B  
• D)Non above**

**92. The following are screening tests in blood banking except  
• Hb  
• Blood grouping  
• Anti HCV  
• glucose**

**93. Hb estimated before donation by used   
• copper sulphate  
• flamphotometer  
• autoclave  
• non above**

**94. The indication for long term storage in frozen state included are  
• Bombay group  
• Autologous blood transfusion  
• A &b  
• Non of the above**

**95. The following component can be separated from a single unit 450 ml blood packed red cell  
• platelet concentrated  
• fresh frozen plasma  
• all the above  
• Non of the above**

**96. The indication for exchange transfusion are hemolytic disease of newborn HDN  
• Sickle cell anaemia   
• hyperglycemia   
• a&b  
• all of the above**

**97. Autologous blood transfusion is  
• transfusion of patient own blood  
• done with Bombay group  
• used to minimized risk of transfusion disease  
• all above**

**98. The plasma component is  
• fresh frozen plasma  
• storage liquid plasma  
• packed red cell  
• A&B**

**99. Cryoprecipitate are consist of  
• fibrinogen  
• serum  
• white blood cells  
• RBCs**

**100. Bleeding room should be equipped with the following  
• emergency kid  
• anti emetic   
• A&B  
• non above**