



BRAINWARE UNIVERSITY

Term End Examination 2023-2024 Programme – B.Sc.(MLT)-2020/B.Sc.(MLT)-2021 Course Name – Blood Banking & Blood Transfusion Course Code - BMLT601 (Semester VI)

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Fuli	Marks: 60	Sampline Time: 2:30 Hours
	he figure in the margin indicates full marks. Cand	didates are required to give their answers in their as practicable.]
	their period such and a west could be	any and it is nothern model and the fee of sels)
	Grou	p-A The 3 and beat beast yetteen sected the
		Type Question) and and domestion that 1 x 15=15
1.	Choose the correct alternative from the following	g: no.tos- material providence is a Lui A (2
	e than all a low the act of the en-	(xv) Which of the kinnwing is a set as a complemit
(i)	Haemoglobin measurement in blood donation	camp is done by?
	a) Copper Sulphate soln.	b) Cyanmethemoglobin
	c) Sahli's Method	d) none of these
(ii)	Which of the following diseases can't be transn	nitted through transfusion of blood?
	a) Hepatitis B	b) AIDS
	c) Cancer	d) malaria
(iii)	Which of the following is true about minor cros	(中位)的(2) [4] 第一年[4] [4] [4] [4] [4] [4] [4] [4] [4] [4]
	a) Recipient's serum is mixed with donor's serum	 b) Recipient's red cells are mixed with donor's red cells
	c) Recipient's red cells are mixed with donor's serum.	d) Recipient's serum is mixed with donor's red cells
(iv)	What is the lowest acceptable hematocrit for fe	emale donor
	a) 36% soi books storing a programmer of the cold storing and the cold storing are cold storing and the cold storing are cold storing and cold storing are cold st	P. JOO.
(v)	A man is rushed to casualty, nearly dying after:	
	There is not much time to match blood groups, one of the following blood groups. Which one	so the physician decides to order for
	physician choose?	
	a) O negetive (another Supplementation of the contract of the	d) AB negative
(vi)	Platelets can be stored at	" White the main inertions of a niced bank?"
	a) 20-24°C for 5 days as ac midalgome and will be	b) 2-8°C for 5 days we asylams way bluew with
	c) -20°C for 8 days and and and positive aims	d) -80°C for 12 days
(vii)	Cryoprecipitate is a rich source of	fethers of the results?
	(a) Thromboplasting the property of a super second c) Factor X	(th) Factor VIII see nottenucky smooth a steer) (od) Factor VIII s nottentucky smooth a lo sargeb

(VIII)	Which size of the needle is used for blood dona	.1011:		
	a) 21g	b) 10g		
	c) 16g	d) 23 g		
(ix)	How long can blood be stored with CPD?			
	a) 12 days	b) 21 days		
	c) 28 days	d) 48 days		
(x)	If a mother is Rh (-) Negative, at the time of 2nd detect	pregnancy ICT is used to		
	a) Autoantibody in Serum	b) IgM antibody		
(xi)	c) Sensitized RBCs in mother blood Which blood cells secrets antibodies ?	d) Anti-D antibodies in mother serum		
	a) Eosinophils	b) Monocytes		
	c) Lymphocytes	d) Neutrophils		
(xii) Direct Coombs test is performed on which of the following sample?				
	a) Red cells	b) Serum		
	c) Whole blood	d) All of these		
(xiii) Which test is used to detect irregular antibodies in the recipients serum that may cause transfusion reactions?				
	a) Coombs test	b) Direct antiglobulin test (DAT)		
	c) Indirect antiglobulin test (IAT)	d) Flow cytometry		
(xiv	In which transfusion reaction does hemolysis of			
	antibodies targeting transfused RBC antigens?			
	a) Febrile non-hemolytic transfusion reaction	b) Delayed hemolytic transfusion reaction	on	
	c) Acute hemolytic transfusion reaction	d) Allergic transfusion reaction		
(xv	Which of the following is a delayed complication			
	fever, jaundice, and hemolytic anemia occurring			
	a) Transfusion-related acute lung injury (TRALI)	b) Transfusion-associated circulatory over (TACO)	erload	
	c) Delayed hemolytic transfusion reaction (DHTR)	d) Acute hemolytic transfusion reaction (AHTR)		
	Grou	p-B		
	(Short Answer Ty	•	3 x 5=15	
	ompile the long term reactions of transfusion mi		(3)	
3. Write the composition of CPDA with their function.			(3)	
4. Write the difference between Major and Minor cross matching.		(3) (3)		
	5. Write a short note on Hemolytic disease of the fetus and newborn (HDFN).6. Assess the advantages of employing blood components versus whole blood for			
	issess the advantages of employing blood compo ransfusions.	nents versus whole blood for	(3)	
·	OI	3		
ŀ	low can you differentiate between weak D and Pa		(2)	
•			(3)	
	Grou	p-C		
	(Long Answer Ty	· · · · · · · · · · · · · · · · · · ·	E v 6-20	
	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		5 x 6=30	
7.	What are the main functions of a blood bank?		(5)	
	How would you analyze the process of examining the haemoglobin parentage of donors at			
	a blood donation camp, detailing the requirements, outlining the procedure, and			
	interpreting the results?			
9.	Create a Haemagglutination Reaction Observation Table by which you can report the degree of a haemagglutination reaction in blood bank. (5)			
	5	warm.		

10. Describe the step-by-step procedures involved in conducting Weak D testing, emphasizing the critical techniques and considerations for accurate and reliable results in blood typing.
11. Match the criteria of selection of a good donor. (5)
12. Explain the comprehensive process involved in preparing the different blood components for transfusion within a blood bank.
OR
Explain the concept of Coombs control cells and outline the procedures involved in their preparation for use in the laboratory. (5)
