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Family Name					
Given Name/s					
Student Number					
Teaching Period	Semester 1, 2019				

MLS301 – Transfusion Medicine	DURATION	
	Reading Time:	10 minutes
	Writing Time:	120 minutes
INSTRUCTIONS TO CANDIDATES		
Section A:	Multiple Choice Questions: Answer ALL 50 questions.	
Suggested Time: 50 mins	Marks as indicated on paper (Total marks = 50)	
Section B:	Short Answer Questions: Answer ALL 9 questions.	
Suggested Time: 70 mins	Marks as indicated on paper. (Total marks = 50)	
EXAM CONDITIONS		
<u>You may begin writing from the commencement of the examination session.</u> The reading time indicated above is provided as a guide only.		
This is a CLOSED BOOK examination		
Any non-programmable calculator is permitted		
No handwritten notes are permitted		
No dictionaries are permitted		
ADDITIONAL AUTHORISED MATERIALS	EXAMINATION MATERIALS TO BE SUPPLIED	
No additional printed material is permitted	1 x 16 Page Book 1 x 4-Multiple Choice Answer Sheet 2 x Scrap Paper	

**THIS EXAMINATION IS PRINTED
DOUBLE-SIDED.**

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LEFT BLANK.**

Section A
Multiple Choice Questions
Total No of Marks for this Section: 50

This section should be answered on the Answer Sheet provided. Please ensure that your name and student number have been written on the Answer sheet and placed in the completed Answer Booklet.

Marks for each question are indicated. Suggested time allocation for Section A: 50 mins

Section B
Short Answer Questions
Total No of Marks for this Section: 50

This section should be answered in the Answer Booklet provided.

Marks for each question are indicated. Suggested time allocation for Section B: 70 mins

Question 1

What is the Fischer-Race notation for the following Rh gene complexes:

- a) R_1 (Marks: 1)
- b) r (Marks: 1)
- c) R_z (Marks: 1)

Question 2

Explain the pathophysiology of delayed haemolytic transfusion reaction.

(Marks: 4)

Question 3

Red blood cells used as screening cells for antibody screening and antibody identification are always group O. Please explain why.

(Marks: 2)

Question 4

What is an antigram?

(Marks: 1)

Question 7

Haemolytic disease of the foetus & newborn (HDFN) is a potentially life-threatening disorder.

- a) Describe the factors that are required for HDFN to occur. (Marks: 3)
- b) List three antibodies that are associated with HDFN. (Marks: 3)

Question 8

Donor blood is processed into different components, which are then stored for blood component therapy.

- a) Name the different blood components, and briefly describe what they are. (Marks: 8)
- b) List the appropriate storage temperature and expiry for each blood component. (Marks: 4)
- c) For each blood component, list one indication for therapy. (Marks: 2)

Question 9

Quality assurance in blood banking is mandatory to ensure safe blood products for transfusion.

- a) List two Australian agencies involved in the regulation and accreditation of blood services in Australia. (Marks: 2)
- b) What is the difference between quality assurance and quality control. Give two examples for each. (Marks: 3)