THE OPEN UNIVERSITY OF SRI LANKA
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF MEDICAL LABORATORY SCIENCES
ACADEMIC YEAR 2020/2021 – SEMESTER I

BACHELOR OF MEDICAL LABORATORY SCIENCES HONOURS
MDU6451 – TRANSFUSION AND TRANSPLANTATION SCIENCE
FINAL EXAMINATION DURATION: THREE HOURS

DATE: 18TH MARCH 2022 TIME: 02.00 PM – 05.00 PM

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Part B: Structured Essay Questions (40 marks)

Q-1

1.1. What type of blood bags are used to prepare platelets? (2 marks)

I) .....

II) .....

1.2 Write three (03) methods of platelet preparation. (3 marks)

I).....

II).....

III).....

1.3 Write four (04) parameters used for quality monitoring of a platelet unit? (4 marks)

I).....

II).....

III).....

IV).....

1.4 What is the storage recommendation for platelets? (1 mark)

.....

(Total 10 marks)

Q-2

2.1 What are the mandatory screening tests for Transfusion Transmissible Infections? (5 marks)

I).....

II) .....

III) .....

IV) .....

V).....

2.2 Write two (02) types of immunoassays are been used for donor blood screening. (2 marks)

I) .....

II) .....

2.3 What are the disadvantages of Rapid Tests? (2 marks)

I).....

II) .....

2.4 What are the serological markers currently using at the NBTS for screening of HIV?

(1 mark)

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(Total 10 marks)

INDEX NO: .....

Q-3

3.1 What transfusion laboratory tests are indicated before a red cell transfusion? (2 marks)

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3.2 How do you perform ABO blood group on a sample; list the steps of the procedure.

(6 marks)

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3.3 Interpret the following test result. (2 marks)

Anti A	Anti AB	Anti B	Anti D	A cells	B cells	O cells
0	+4	+4	0	+4	0	0

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(Total 10 marks)

Q-4

4.1 Explain briefly Human Leukocyte Antigens (HLA). (2 marks)

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4.2 What are the available test techniques to identify HLA antigens on a sample? (4 marks)

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4.3 What is the suitable sample for HLA testing? (1 mark)

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4.4 Name three (03) importance of HLA system. (3 marks)

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(Total 10 marks)

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Part C: Essay Question (30 marks)

1. Briefly explain the immune assays used for screening of blood for transfusion transmissible infections. (15 marks)

2. Discuss on acute haemolytic transfusion reactions explaining the mechanisms. (15 marks)

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