

## **WARNING**

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Family Name	
Given Names	
Student Number	
Teaching Period	Semester 1, 2017

FINAL EXAMINATION	DURATION
<b>MLS100 – Medical Laboratory Science</b>	Reading Time: 10 minutes
	Writing Time: 120 minutes

**INSTRUCTIONS TO CANDIDATES**

**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 place in the completed answer Booklet. Marks for each question are indicated. Suggested Time allocation for Section A: 60 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: 60 mins

**EXAM CONDITIONS**

You may begin writing from the commencement of the examination session. 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 8 Page Book 1 x Scrap Paper Faculty/School Multiple Choice Answer Sheet

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

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## 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: 60 mins

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#### Question 1

Name three Anticoagulants with their corresponding laboratory tests which are commonly used in diagnostic laboratories?

(Marks: 6)

#### Question 2

Name and explain the three areas that mandate a safe work practice.

(Marks: 6)

#### Question 3

Briefly explain how you would dispose the following waste?

1. A bacterial suspension
2. A broken blood slide
3. Used gloves

(Marks: 6)

#### Question 4

You need to prepare 400 ml of 1.0 M sulfuric acid solutions, explain what is your procedure, what laboratory equipment would you use and what type of container will you store your solution in?

**H<sub>2</sub>SO<sub>4</sub> MW: 98.0 g/mol**  
Specific gravity= **1.85 g/ml**

(Marks: 10)

#### Question 5

Name three items that need to be monitored for water quality control and explain what each measurement is about.

(Marks: 6)

#### Question 6

Briefly describe the principle of measurement in spectrophotometer and explain different types of this system

(Marks: 6)

#### Question 7

Briefly describe two principles utilized in automated cell counting of haematology analyzers.

(Marks: 6)

### Question 8

Describe the following terms:

- (a) Haemolysis
- (b) Lipemic serum
- (c) Icteric serum
- (d) Normochromic RBC

(Marks: 4)

.....**END OF THE EXAM**.....