

## **WARNING**

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

<b>FINAL EXAMINATION</b>	<b>DURATION</b>				
<b>MLS300 – Cell Pathology</b>	<table border="1"> <tr> <td>Reading Time:</td> <td><b>10</b> minutes</td> </tr> <tr> <td>Writing Time:</td> <td><b>180</b> minutes</td> </tr> </table>	Reading Time:	<b>10</b> minutes	Writing Time:	<b>180</b> minutes
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**INSTRUCTIONS TO CANDIDATES**

The examination has A & B sections  
 Section A: Suggested Time: 30 minutes  
 Answer ALL 20 questions on the answer booklet provided. Marks:20

Section B: Suggested Time: 150 minutes  
 Answer ALL 20 questions in the booklets provided. Marks: 80

Section A must be answered on the Multiple Choice Answer booklet. Please ensure that your name and student number are clearly indicated on your Answer Sheet and at the top of this examination paper. Section B must be answered in separate booklets.

Note that questions ARE NOT of equal value.  
 Read ALL questions carefully.

**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

No calculators are permitted

No handwritten notes are permitted

No dictionaries are permitted

<b>ADDITIONAL AUTHORISED MATERIALS</b>	<b>EXAMINATION MATERIALS TO BE SUPPLIED</b>
No additional printed material is permitted	1 x 16 Page Book 1 x 20 Page Book 1 x 4-Multiple Choice Answer Sheet 1 x Scrap Paper

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

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BLANK.**

**Section B**  
**Short Answer Questions**  
**Total No of Marks for this section: 80**

Answer **ALL** questions in this section should be answered in the Answer Booklet provided.

Marks for each question are indicated.

Suggested Time allocation for Section B: 150 mins

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**Question 1**

Compare and contrast the pathological features of the different forms of Tuberculosis. You may include diagrams to support your answer.

(Marks: 10)

**Question 2**

Compare and contrast the pathological features of Crohn's disease and Ulcerative Colitis. You may include diagrams to support your answer.

(Marks: 10)

**Question 3**

Compare and contrast the pathological features of Hashimoto's and Grave's disease.

(Marks: 10)

**Question 4**

Describe the stages of lobar pneumonia, relating the gross findings to the acute inflammatory process.

(Marks: 10)

### Question 5

A 40 year old woman returns home after a 19 hour flight. She has been smoking since she was 15 years old. She has also been on a high oestrogen oral contraceptive pill for the past 17 years. She has presented to the local hospital with deep vein thrombosis in the right calf.

- (a) State the three elements of Virchow's triad. (Marks: 3)
- (b) Identify the elements of the patient's history that have placed her at risk of thrombosis. (Marks: 3)
- (c) What is the pathophysiological basis of each (Marks: 4)

### Question 6

Describe the difference between necrosis and apoptosis.

(Marks: 5)

### Question 7

Explain what metaplasia is; give two (2) relevant examples of metaplastic change.

(Marks: 5)

### Question 8

Describe granulomatous inflammation and list three (3) conditions associated with granulomatous inflammation.

(Marks: 5)

### Question 9

The pathology report from a cervical punch biopsy states "cervical intraepithelial neoplasia I".

Explain what is meant by cervical intraepithelial neoplasia. You may use a diagram to support

your answer.

(Marks: 5)

### **Question 10**

Write short notes on proto-oncogenes and oncogenes, giving examples.

(Marks: 5)

### **Question 11**

Explain the difference between the staging and grading of tumours.

(Marks: 5)

# **END OF SECTION B**

# **END OF EXAM**