

# COMMONWEALTH OF AUSTRALIA

## Copyright Regulations 1969

### Warning

This material has been reproduced and communicated to you by or on behalf of *The Charles Darwin University* pursuant to Part VB of the *Copyright Act 1968* (the Act). The material in this communication may be subject to copyright under the Act. Any further reproduction or communication of this material by you may be the subject of copyright protection under the Act.

Do not remove this notice



Family Name	
Given Names	
Student Number	
Teaching Period	Semester 1, 2016

<b>FINAL EXAMINATION</b>	<b>DURATION</b>
<b>SPE309 – Exercise Physiology 2</b>	Reading Time: <b>10</b> minutes
	Writing Time: <b>120</b> minutes

**INSTRUCTIONS TO CANDIDATES**

**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	Faculty/School Multiple Choice Answer Sheet

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

**THIS PAGE HAS BEEN INTENTIONALLY LEFT  
BLANK.**

**Section A**  
**Multiple Choice Questions**  
**Total No of Marks for this section: 20**

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: 40 minutes

**Section B**  
**Short Answer Questions**  
**Total No of Marks for this section: 12**

Questions in section B should be answered in spaces provided.  
Marks for each question are indicated. Questions are NOT of equal values. Suggested Time  
allocation for Section B: 20 minutes

---

**Question 1**

What are four exercise training principles?

(Marks: 1)

**Question 2**

What are the effects of endurance training on stroke volume, heart rate, ESV and EDV?

(Marks: 2)

### **Question 3**

Explain how blood doping may improve athletic performance.

(Marks: 1)

### **Question 4**

Name all mechanisms involved in heat gain and heat loss?

(Marks: 1.5)

### **Question 5**

How would FFM and FM change as a result of exposure to zero gravity and why?

(Marks: 1)

### **Question 6**

Explain two major adaptations to exercise in hot and humid environment.

(Marks: 1.5)

### **Question 7**

What are the effects of altitude on training intensity and why?

(Marks: 1)

### **Question 8**

What is the response of cardiac output to aging and why?

(Marks: 1)

### **Question 9**

What are the effects of Epinephrine and Norepinephrine on liver, muscle and adipose tissue?

(Marks: 1)

### **Question 10**

Name two methods for monitoring training intensity.

(Marks: 1)



**Section C**  
**Short Essay Questions**  
**Total Number of Marks for this section: 18**

Questions in section C should be answered in spaces provided.  
Marks for each question are indicated. Suggested Time allocation for Section C: 60 minutes

---

**Question 1**

List and explain the three physiologic adaptations to resistance training.

(Marks: 3)

## Question 2

Describe how muscle spindles operate to reduce the risk of injury.

(Marks: 3)

### Question 3

What are short term responses of cardiovascular system to exposure to altitude hypoxia?

(Marks: 3)

#### **Question 4**

Explain the phenomenon known as “Nitrogen Narcosis” and describe potential dangers and how it should be treated.

(Marks: 3)

### **Question 5**

Explain mechanisms responsible for DOMS and explain how delayed onset muscle soreness could be prevented.

(Marks: 3)

### **Question 6**

Design one resistance training session in specific/specialised preparation for a midfield Australian Football Player who completed his general preparation.

(Marks: 3)