

## **WARNING**

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Family Name					
Given Name/s					
Student Number					
Teaching Period	Semester 1, 2018				

<b>SPE210 – Motor Control and Development</b>	<b>DURATION</b>	
	Reading Time:	<b>10 minutes</b>
	Writing Time:	<b>120 minutes</b>
<b>INSTRUCTIONS TO CANDIDATES</b>		
<p>The examination is divided into three (3) sections. Attempt all questions.</p> <p>Section A. Multiple Choice. 40 Marks. Answer on examination.</p> <p>Section B. Short Answers. 20 marks. Answer on examination.</p> <p>Section C. Short Essays. 40 Marks. Answer on 8 page booklet provided and indicate which questions are answered.</p> <p>Total marks equal 100 marks.</p>		
<b>EXAM CONDITIONS</b>		
<p><b><u>You may begin writing from the commencement of the examination session.</u></b> The reading time indicated above is provided as a guide only.</p>		
This is a CLOSED BOOK examination		
Any calculator is 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 8 Page Book	

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

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LEFT BLANK.**

SECTION A

Name \_\_\_\_\_

Student Number \_\_\_\_\_

SECTION B

Short Answer Questions

Total Marks for this section: 20

Marks for each question are indicated. Suggested time allocation for Section B: 40 minutes

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Question 41

Explain the difference between motor learning, motor behaviour and motor control.

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(Marks: 2)

Question 42

Experiment 7.1 evaluated static and dynamic human balance. Did the results support or refute the concept of general motor ability?

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(Marks: 2)

**Question 43**

Explain the major difference between the concept of a motor program and a central pattern generator. Provide examples of each concept to support your answer.

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(Marks: 2)

**Question 44**

Explain the major concepts associated with transfer of motor skill learning from one motor skill to another. What factors would improve the transfer of learning in this context.

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(Marks: 2)

**Question 45**

Explain the differences between motor ability and motor skill.

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(Marks: 2)

**Question 46**

Explain Fitt's Law as it relates to speed-accuracy trade-offs. Include a graph showing the relationship and the formula/algorithm describing the relationship.

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(Marks: 2)

**Question 47**

Explain the difference between open, closed and serial skills.

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(Marks: 2)

**Question 48**

Describe the characteristics of the fixation/associative and autonomous stages of learning.

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(Marks: 2)

**Question 49**

Explain the differences between knowledge of results and knowledge of performance and support your answer with examples from sport.

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(Marks: 2)

Question 50

Explain why the random practice approach to skill learning is so effective.

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(Marks: 2)

This is the end of section B. Total 20 marks

Please ensure that you have written your name and student number on your exam booklet.



## SECTION C

### Short Essay Questions

Total Marks for this section: 40

This section should be answered in the Answer Booklet provided.

You may use diagrams to help answer the questions.

Marks for each question are indicated. Suggested time allocation for Section C: 40 minutes

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#### Question 51

List and describe the **four (4)** main factors that influence reaction time and provide examples of each factor.

(Marks: 10)

#### Question 52

Plan an effective training session for someone in the Fitts and Posner cognitive stage in motor learning. You should consider the scheduling of the practice, the appropriate type of feedback, instructions and motivation, and also the type of skill being practised. Provide specific examples to illustrate each concept in your answer.

(Marks: 10)

#### Question 53

Explain the differences between closed loop and open loop models that describe human motor behaviour and provide examples from sport to support your answers. Include diagrams of each model to explain your answer.

(Marks: 10)

#### Question 54

Explain the following concepts, which are whole versus part learning, massed versus distributed practice and off-practice considerations. Provide examples from sport and exercise to support your answers.

(Marks: 10)

This is the end of section C. Total 40 marks

Please ensure that you have written your name and student number on your exam paper and answer booklet.