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Family Name					
Given Name/s					
Student Number					
Teaching Period	Semester 2, 2018				

SPE330 – Exercise and Health	DURATION	
	Reading Time:	10 minutes
	Writing Time:	180 minutes
INSTRUCTIONS TO CANDIDATES		
<p>There are three sections to the exam:</p> <ol style="list-style-type: none"> 1. Multiple Choice Questions (40 marks) 2. Short Answer Questions (40 marks) 3. Long Answer Questions (40 marks) <p>NOTE: not all questions in Section B are of equal value Total marks = 120</p>		
EXAM CONDITIONS		
<p><u>You may begin writing from the commencement of the examination session.</u> The reading time indicated above is provided as a guide only.</p>		
This is a CLOSED BOOK examination		
No calculators are 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 20 Page Book 1 x Scrap Paper College Multiple Choice Answer Sheet	

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

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LEFT BLANK.**

SECTION B

Short Answer Questions

Total No. of Marks for this section: 40

Answer 10 of 10 questions in the spaces provided in this Exam Paper.

Marks for each question are indicated. Suggested Time allocation for Section B: **60 minutes**.

Question 41

After using the American College of Sports Medicine pre-participation screening algorithm, (circle the correct response).

- i) Is a medical clearance required before moderate exercise for an individual who does not participate in regular exercise and with no signs of cardiovascular disease?

Yes – No

- ii) Is a medical clearance recommended for someone who does not participate in exercise with known metabolic disease but no signs or symptoms of metabolic disease?

Yes – No

- iii) Is a medical clearance required for someone who does not participate in exercise with no known renal disease but has symptoms of renal disease?

Yes – No

- iv) Is a medical clearance required for someone who participates in regular exercise and shows signs or symptoms of cardiovascular disease during the exercise?

Yes – No

- v) Can a person who participates in regular exercise who has cardiovascular disease be allowed to exercise at moderate intensity without gaining a medical clearance?

Yes – No

(Marks: 5)

Question 42

If a client you are training experiences unusual shortness of breath, light-headedness, or dizziness at low levels of exertion [<5 METs] during an exercise session, what should you do?

(Marks: 4)

Question 43

In older adults, physiological changes can sometimes be different compared to adults. For the following variables, **circle** what changes, if any.

Resting blood pressure **Lower – Unchanged – Higher**

Absolute and relative maximum O_2 uptake reserve **Lower – Unchanged – Higher**

Fat free body mass **Lower – Unchanged – Higher**

Reaction time **slower – Unchanged – Faster**

Residual lung volume **Lower – Unchanged – Higher**

(Marks: 5)

Question 44

What are two (2) warning signs to stop exercise during pregnancy?

i) _____

ii) _____

(Marks: 2)

Question 45

Fill in the blank spaces for the following statements

i) Prior to a test result, the likelihood that a male aged 61 years with definite angina pectoris chest pain has ischemic heart disease is _____

ii) Prior to a test result, the likelihood that a female aged 41 years with probable angina pectoris has ischemic heart disease is _____

iii) Prior from a test result, the likelihood that a female aged 54 years who is asymptomatic has ischemic heart disease is _____

iv) Prior from a test result, the likelihood that a male aged 57 years with typical/definite angina pectoris has ischemic heart disease is _____

v) Prior from a test result, the likelihood that a female aged 57 years with typical/definite angina pectoris has ischemic heart disease is _____

vi) Prior from a test result, the likelihood that a male aged 34 years who is asymptomatic has ischemic heart disease is _____

(Marks: 6)

Question 46

a) According to the ACSM Guidelines for Exercise Testing and Prescription:

- i) What is the duration of a stretch hold for a young adult?
- ii) What is the duration of a stretch hold for an older adult?
- iii) How long should an assisted stretch last during PNF techniques?
- iv) How many days per week should flexibility exercises be performed?

i) _____

ii) _____

iii) _____

iv) _____

(Marks: 4)

Question 47

Please provide answers in the spaces available for:

- i) What are the **mental** changes associated with: three physiological markers that if two or more are present are indicators of dehydration?

A: Exertional heatstroke _____

B: Exertional heat cramps. _____

(Marks: 3)

Question 48

Indicate in the spaces available if the following statements are **TRUE or FALSE**.

- i) Moderate intensity exercise of 40 minutes duration, 3 times a week meets the defining criteria of not being a risk factor for atherosclerotic cardiovascular disease (CVD).

- ii) HDL cholesterol above 60 mg/dL (1.55 mmol/L) is a risk factor for CVD.

- iii) Myocardial infarction in a mother aged 68 year old is a risk factor for CVD.

- iv) Systolic blood pressure of 145 mm Hg is a risk factor for CVD.

(Marks: 4)

Question 49

Prior to exercise, a pre-exercise evaluation should be carried out. There are 11 components regarding medical history. List four (4) of these components.

1. _____
2. _____
3. _____
4. _____

(Marks: 4)

Question 50

Define the following health related physical fitness and skill related physical fitness components

Muscular endurance

Muscular strength

Coordination

(Marks: 3)

This is the end of Section B. Total 40 marks.

Please ensure that you have written your name and student number on the section B answer sheet.

SECTION C

Short Essay Question

Total No of Marks for this section: 40

This section should be answered in the Answer Booklet provided.

Answer 4 of 4 questions. **Note: choose only one of part (a) or (b)**

Clearly indicate what part you have chosen.

You may use diagrams to help answer the questions.

Marks for each question are indicated. Suggested Time allocation for Section C: **60 minutes**.

Question 51

EITHER

- (a) Relative to aerobic, flexibility & resistance exercise and using the FITT framework, describe current American College of Sports Medicine (ACSM) recommendations for exercise prescription for people with hypertension.

OR

- (b) Relative to aerobic, flexibility & resistance exercise and using the FITT framework, describe current American College of Sports Medicine (ACSM) recommendations for exercise prescription for people with asthma.

(Marks: 10)

Question 52

EITHER

- (a) Relative to exercise, what are the special considerations required for patients with chronic obstructive pulmonary disease (COPD).

OR

- (b) Relative to exercise, what are the exercise training and other considerations required for stroke patients?

(Marks: 10)

Question 53

EITHER

- (a) Exercise testing often includes anthropometrics. Part of which, are nine skinfold measures. Please identify five (5) sites and detail the procedure for identifying those sites.

OR

- (b) There are many benefits to regular physical activity and exercise. Of which there are (a) seven benefits directly related to improved cardiovascular and respiratory function and (b) six benefits in the reduction of cardiovascular disease risk factors. List five (5) benefits for: *a* and five (5) benefits for *b*.

(Marks: 10)

Question 54

EITHER

- (a) After someone acclimatises to high altitude, what are the four (4) special considerations to be considered to further minimise the negative effects of high altitude?

OR

- (b) Exertional heat illness can result in minor problems such as muscle cramps, through to life threatening situations such as hyperthermia. From the list of signs and symptoms provided, explain what are the prominent signs and symptoms for each condition.

- Exertional heatstroke
- Exertional heat exhaustion
- Heat syncope
- Exertional heat cramps

(Marks: 10)

This is the end of section C.

Total 40 marks