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**NOVEMBER EXAMINATION**

**PROGRAMME** : HUMAN MOVEMENT STUDIES

**MODULE NAME** : KINESIOLOGY

**MODULE CODE** : KIN 01B1 / HMS 1BA1 / HMS 2BB1 / MBK 1B01 / MBK 1B02 / BIK 01Y1

**DATE** : 30 NOVEMBER 2016

**DURATION** : TWO (2) HOURS

**TOTAL MARKS** : 100 MARKS

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MR D. KWONG

**MODERATOR** : PROF Y. COOPOO  
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**NUMBER OF PAGES** : SEVEN (7) PAGES

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**INSTRUCTIONS TO CANDIDATES:**

**ANSWER ALL THE QUESTIONS.**

**SECTION A IS WELLNESS AND SPORT INJURIES.**

**SECTION B IS MEASUREMENT AND EVALUATION.**

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**SECTION A: WELLNESS AND SPORT INJURIES (50 MARKS)**

**QUESTION 1 (22 MARKS)**

1.1 Identify three (3) main reasons injuries occur. [3]

1.2 Identify six (6) signs and symptoms of overtraining. [6]

1.3 List (5 marks) and explain (5 marks) the general recommended treatment for common injuries. [10]

1.4 Identify the types of fractures from the following x-rays: [3]

a.



[24]

b.



c.



## **QUESTION 2 (10 MARKS)**

2.1 List five (5) strategies for using alcohol responsibly. [5]

2.2 List five (5) strategies for quitting tobacco. [5]

## **QUESTION 3 (9 MARKS)**

3.1 Look at the Pretzels food label below and a.) Identify the largest ingredient (1), b.) Calculate the calories that come from fat (1), c.) Calculate the calories that come from carbohydrate (1), and d.) Calculate the calories that come from protein (1). [4]

# **Pretzels**

Nutrition Facts			
Serving Size 17 pieces (26g)			
Servings Per Container 10			
Amount Per Serving			
Calories 110	Calories from fat 15		
% Daily Value*			
Total Fat 1.5g	2%		
Saturated Fat 0g	0%		
Cholesterol 0mg	0%		
Sodium 600mg	25%		
Total Carbohydrate 21g	7%		
Dietary Fiber less than 1 g	3%		
Sugars 1g			
Protein 3g			
Vitamin A 0%	Vitamin C 0%		
Calcium 0%	Iron 6%		
*Percent daily values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:			
Calories	2,000	2,500	
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g
Calories per gram:			
Fat 9 • Carbohydrate 4 • Protein 4			

INGREDIENTS: ENRICHED WHEAT FLOUR (CONTAINS IRON AS FERROUS SULFATE, NIACIN, THIAMINE MONONITRATE, RIBOFLAVIN), SALT, VEGETABLE OIL (COTTONSEED AND/OR PARTIALLY HYDROGENATED SOYBEAN) CORN SYRUP SOLIDS, CORN SYRUP, CARAMEL COLORING, YEAST, SODIUM BICARBONATE AND SODIUM CARBONATE.

3.2 Look at the Potato Chips food label below and a.) Identify the largest ingredient (1), b.) Calculate the calories that come from fat (1), c.) Calculate the calories that come from carbohydrate (1), and d.) Calculate the calories that come from protein (1). [4]

# Potato Chips

Nutrition Facts	
Serving Size 1 oz. (28g/about 18 chips)	
Servings Per Container 6	
Amount Per Serving	
Calories 150	Calories from fat 90
% Daily Value*	
Total Fat 10g	10%
Saturated Fat 2.5g	14%
Cholesterol 0mg	0%
Sodium 120mg	5%
Total Carbohydrate 15g	5%
Dietary Fiber less than 1 g	4%
Sugars 0g	
Protein 2g	
Vitamin A 0%	Vitamin C 10%
Calcium 0%	Iron 2%
*Percent daily values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories 2,000 2,500
Total Fat	Less than 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

INGREDIENTS: POTATOES, VEGETABLE OIL (CONTAINS ONE OR MORE OF THE FOLLOWING: CANOLA, CORN, COTTONSEED, OR PARTIALLY HYDROGENATED [CANOLA, SOYBEAN OR SUNFLOWER] OIL), AND SALT

NO PRESERVATIVES

3.3 Comparing the two food labels, which product would you recommend is the better option for consumers? [1]

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Total Fat 1.5g	2%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 600mg	25%
Total Carbohydrate 21g	7%
Dietary Fiber less than 1 g	3%
Sugars 1g	
Protein 3g	
Vitamin A 0%	Vitamin C 0%
Calcium 0%	Iron 6%
*Percent daily values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories 2,000 2,500
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NO PRESERVATIVES

### **QUESTION 4 (9 MARKS)**

4.1 Discuss five ways exercise helps in weight management. [5]

4.2 List four (4) health-related components of fitness. [4]

**[50]**

### **SECTION B: MEASUREMENT AND EVALUATION**

#### **QUESTION 1 (10 MARKS)**

1.1 List the stages of a pre-participation health screening. [3]

1.2 Provide seven (7) signs and symptoms suggestive of cardiovascular, pulmonary and metabolic disease. [7]

#### **QUESTION 2 (10 MARKS)**

State whether the following is true or false.

2.1 Exercise testing of individuals at **moderate-high risk** can be supervised by **Non-physician** health care professionals if the professional is specially trained in clinical exercise testing with a physician immediately available if needed.

2.2 Physicians responsible for supervising exercise testing should refer to minimum competencies established by the American Heart Association.

2.3 All exercise testing facilities with or without a physician's supervision should practice their medical emergency response every 2 years.

2.4 Individuals at high risk with symptoms or diagnosed disease are able to continue with exercise in the absence of their physician's consent.

2.5 Individuals at moderate risk require a medical exam before exercise.

2.6 A BMI value within the range of 18.5-24.9 is considered overweight.

2.7 Equipment should be organized so that tests can follow in sequence without stressing the same muscle group repeatedly.

2.8 The room temperature when conducting a physical test should be maintained between 26° C and 28°C.

2.9 Freedom of consent is an important constituent of a successful informed consent form.

2.10 An extremely obese person may contribute to a measurement error while taking skinfolds.

**QUESTION 3 (7 MARKS)**

Complete the table below regarding single joint range of motion movements in degrees.

[7]

Joint Movement	Degrees (normal ranges)
Shoulder Flexion	a.)
Shoulder Extension	b.)
Hip Flexion	c.)
Hip Extension	d.)
Knee Flexion	e.)
Ankle Plantarflexion	f.)
Ankle Dorsiflexion	g.)

**QUESTION 4 (8 MARKS)**

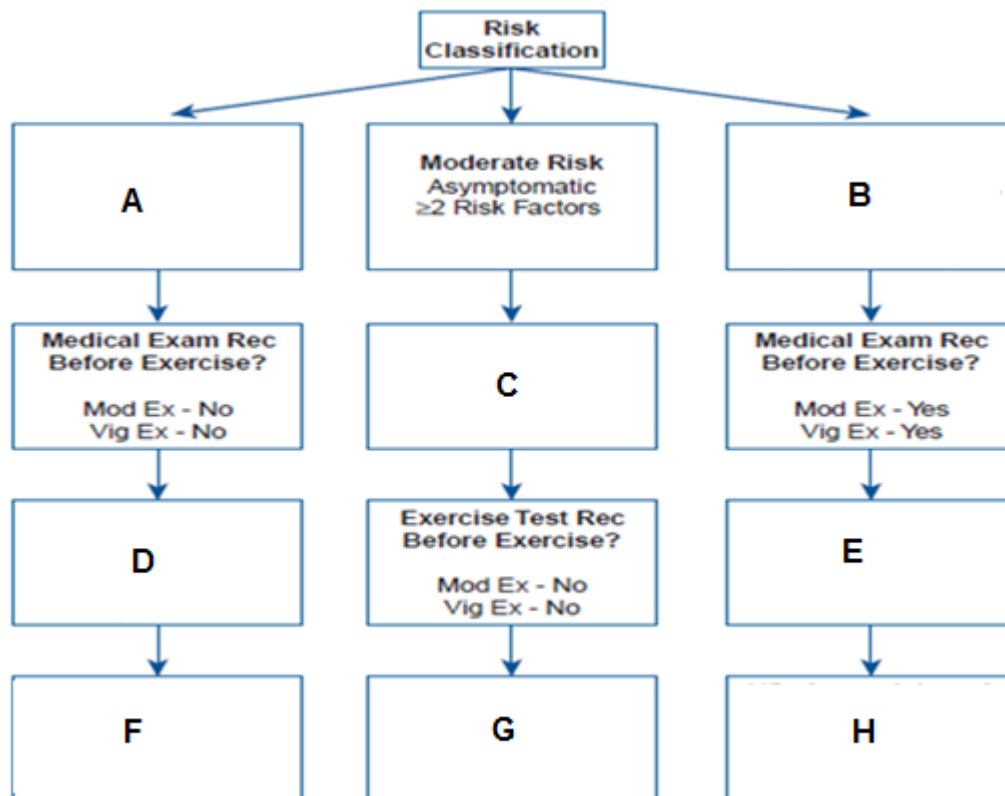
Name and discuss four (4) components of a comprehensive health-fitness evaluation.

[8]

**QUESTION 5 (8 MARKS)**

Please fill in the appropriate blocks from A TO H.

[8]



**QUESTION 6 (7 MARKS)**

5.1. Provide the basic steps that must be followed in order to conduct a 1 repetition maximum test for strength. [5]

5.2. Define the term syncope. [1]

5.3. Provide a single benefit to completing a self-guided health screening. [1]  
**[50]**

**TOTAL: 100 MARKS**