



NATIONAL SENIOR CERTIFICATE EXAMINATION
NOVEMBER 2010

SPORT AND EXERCISE SCIENCE: PAPER 1

EXAMINATION NUMBER

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Time: 2 hours

150 marks

ANSWER BOOKLET

There are 4 pages (i – iv) in this Answer Booklet.

QUESTION 1 MULTIPLE CHOICE

Ten multiple choice questions are given below. Choose the most correct option in each question and write its letter in the space provided in the table.

1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10

1.1 The energy system which supports high intense activity is known as ...

- A Glycolytic
- B Creatine Phosphate
- C Hydronium Ions
- D Adenosine Triphosphate
- E Lactic Acid

(1)

1.2 The 'thick' protein in voluntary skeletal muscle is known as ...

- A Perimysium
- B Myofibril
- C Actin
- D Myosin
- E Sarcolemma

(1)

1.3 Of this list which one is a performance enhancing substance that is banned?

- A Caffeine
- B Stanozolol
- C Creatine
- D Antioxidant
- E Disprin

(1)

1.4 On the new food pyramid, which food group should we limit consumption of the most?

- A Grains
- B Oils
- C Fruits
- D Vegetables
- E Milk

(1)

1.5 ATP is a high-energy phosphate compound made up of ...

- A Adenosine diphosphate
- B One molecule of adenosine and three phosphates
- C Energy
- D Phosphocreatine
- E Three molecules of adenosine and one phosphate

(1)

1.6 Training heart rate can be estimated using the following ...

- A The principle of variance
 - B The Karvonen method
 - C The Anaerobic threshold
 - D Vealey's model
 - E The Spirometer
- (1)

1.7 This organ provides the central nervous system with information concerning the amount of tension in a muscle ...

- A Muscle Spindle
 - B Multipennate
 - C Golgi Tendon
 - D Fusiform
 - E Mitochondria
- (1)

1.8 Another word for KINAESTHESIS is also known as ...

- A Proprioception
 - B Dexterity
 - C Psychomotor ability
 - D Continuous skill
 - E Attentional wastage
- (1)

1.9 Who founded the Special Olympics?

- A Susan Mary Logan
 - B Catherine-Anne Jordan
 - C Eunice Kennedy Shriver
 - D Angela Alison Morgan
 - E Frances Betty Kennedy
- (1)

1.10 EPOC (also known as oxygen debt) occurs during recovery. Oxygen debt is made up of 2 main components ...

- A Lactacid component and ATP
 - B Oxygen and Alactacid
 - C Glycogen and Alactacid component
 - D Alactacid component and Lactacid component
 - E Alactacid component and Phosphocreatine
- (1)

[10]

QUESTION 2

As part of the preparation and lead-up to an athletic event, certain food groups are often chosen as the major component of a meal prior to an athletic event. Consider the different energy requirements of the following four athletic events and identify the food group that would best equip the athlete to perform at optimum levels. Explain the reason(s) for your choice.

Athletic Event	Body stores that provide main source of energy	Reason for the choice of food group for the event
2.1 Tour de France		
2.2 5 minute jog		
2.3 Comrades Marathon		
2.4 1 000 m swim or Midmar Mile		

[8]**QUESTION 4**

4.1.1

(Title): _____

