

GCE A level

PHYSICAL EDUCATION – PE4

P.M. WEDNESDAY, 20 June 2012 2 hours

ADDITIONAL MATERIALS

In addition to this examination paper, you will need a 12 page answer book.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen.

Candidates are required to answer all questions in Section A and one question in Section B.

INFORMATION FOR CANDIDATES

Mark allocations are shown in brackets. Candidates will be assessed on their quality of written communication.

SECTION A

Answer all the questions in this section.

1. (a) Explain what you understand by the term **exercise adherence** and discuss its relationship to both intrinsic and extrinsic motivation. [4]

An individual's Body Mass Index (BMI) is often used as an indicator of health.

- (b) Explain the concept of the Body Mass Index and discuss the disadvantages of solely using this measurement as an indicator of health. [3]
- (c) What procedures should be carried out prior to an individual taking part in a structured exercise programme for weight loss? [3]
- 2. Biomechanics is a specialist field within performance analysis in which the principles of physics are applied to help enhance sporting performance.
 - (a) Identify two of Newton's Laws of Motion and explain how these could be applied to improve performance in a sporting activity of your choice. [4]

Reducing drag is especially important in both cycling and swimming.

- (b) Discuss the factors that influence drag in sport and examine strategies that are employed to minimise its effects. [6]
- 3. Athletes often speak about being 'in the zone' prior to, and during performance.

Discuss the concept of being 'in the zone' and explain the strategies that can be used to help achieve and maintain this psychological state. [10]

SECTION B

Answer one question only in this section.

4. In recent years, sport has become over commercialised and consequently, levels of deviance, both on and off the field, have significantly increased.

Discuss this statement using examples to illustrate your points. [20]

5. Stereotyping has had a major impact on participation and leadership opportunities within sport.

Discuss this statement with reference to race, ethnicity and gender. [20]