



**GCE A LEVEL**

1550U30-1



**THURSDAY, 26 MAY 2022 – AFTERNOON**

**PHYSICAL EDUCATION – A2 unit 3**

**Evaluating Physical Education**

2 hours

1550U301  
01

### **ADDITIONAL MATERIALS**

A WJEC pink 16-page answer booklet.

In addition to this paper you may require a calculator and a ruler.

### **INSTRUCTIONS TO CANDIDATES**

Use black ink or black ball-point pen.

Answer **all** questions.

### **INFORMATION FOR CANDIDATES**

The number of marks is given in brackets at the end of each question or part-question.

You are reminded of the necessity for good English and orderly presentation in your answers.

Diagrams, charts and graphs can be used to support answers when they are appropriate.

Answer **all** questions.

1. (a) Identify the potential risks of the use of performance enhancing drugs on health. [3]
- (b) Outline how chemoreceptors influence heart rate during exercise. [3]
- (c) Describe how the heart works as a dual-action pump when circulating blood during exercise. [6]
  
2. (a) Explain, using examples, the causes of Learned Helplessness. [3]
- (b) Explain why a coach would use attribution retraining to improve sporting performance. [4]
- (c) Improving reaction time in sport can have positive effects on performance.
  - (i) Outline, using relevant examples, how anticipation can influence reaction time. [3]
  - (ii) Explain how the Psychological Refractory Period (PRP) can affect reaction time. [4]
- (d) Describe the strategies a coach could use to ensure information is stored in a performer's long-term memory. [6]

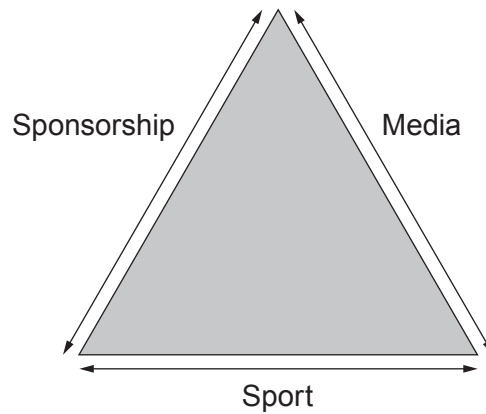
3. Jamaican sprinters have dominated World and Olympic athletics in recent years. Preparing for competition at the very highest level requires detailed understanding and application of physiological and biomechanical principles.



**Figure 1 – Sprint start**

- (a) Explain how an understanding of Newton's third law of motion could aid the sprinter at the start of a race (**Figure 1**). [2]
- (b) (i) Identify **three** long term physiological adaptations of anaerobic training on the muscular system of a sprinter. [3]
- (ii) Explain the effects of these adaptations on a sprinter's performance. [3]
- (c) Explain, using examples, how a performer's understanding of stability could develop performance. [9]

4.



**Figure 2 – The Golden Triangle**

- (a) Explain, using examples, the relationship of the elements within the Golden Triangle (**Figure 2**). [3]
- (b) Describe the phases of a ‘talent identification process’ to develop elite performance. [4]
- (c) Analyse how government bodies such as Sport Wales have promoted sport for all and lifelong participation. [4]
- (d) “Fair play has been eroded in modern day sport.” Discuss this statement using appropriate examples. [10]

5.



**Figure 3 – Psychological Factors**

Discuss how psychological factors could impact your performance (**Figure 3**).

[20]

**END OF PAPER**

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