



GCE A LEVEL

A550U20-1



MONDAY, 11 OCTOBER 2021 – AFTERNOON

PHYSICAL EDUCATION – A level component 2

Evaluating Physical Education

2 hours

A550U201
01

ADDITIONAL MATERIALS

A WJEC pink 16-page answer booklet.

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. Cycling has increased in popularity as a result of Team GB's success at the Olympics and World Championships. This success could be considered to have had a significant impact on the number of recreational cyclists in the UK.

Figure 1



- (a) Identify **three** short-term responses that could occur to the respiratory system during a cycling training session. [3]
- (b)
 - (i) Identify **two** long-term anaerobic adaptations that occur as a result of a cycling training programme. [2]
 - (ii) Explain the effects of long-term anaerobic adaptations on performance. [4]

Cyclists need to consider the effect of drag in order to maximise performance.

- (c)
 - (i) Outline **two** factors that influence drag in cycling. [2]
 - (ii) Explain **two** strategies that could be used to limit the effects of drag. [4]

Soft tissue and sports injuries can occur from trauma or repetitive stress from overuse of particular muscles, especially in competitive cycling. Sports injuries can affect soft tissue (muscle, ligaments and tendons) as well as the nerves and bone structures.

- (d) Describe the procedure that should be followed for the management of minor strains and sprains. [5]
- (e) Discuss the view that developing elite performance should take priority over increasing mass participation levels. [10]

2. Many people presume dietary supplements and ergogenic aids are automatically safe to take because they are in everyday products or found naturally occurring in the body. The World Anti-Doping Agency's view is, supplement companies are not highly regulated.

- (a) Identify the potential health risks of the use of protein, creatine and caffeine supplements to a performer. [3]

Some supplements and ergogenic aids can have an impact on the functioning of the heart.

- (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]

UK Sport's World Class Performance Pathway (WCPP) is designed to ensure the most talented athletes have every chance of reaching their full potential. Approximately 1 300 athletes currently benefit from UK Sport's annual investment.

- (d) Analyse how talent identification programmes are used to recognise potential elite athletes. [4]

- (e) Explain how agencies such as Sport England have promoted the health and well-being of the nation. [5]

Performance enhancing drugs such as anabolic steroids have been linked to mood swings and increases in aggressive behaviour.

- (f) Discuss, using examples, the difference between aggression and assertion in sport. [8]

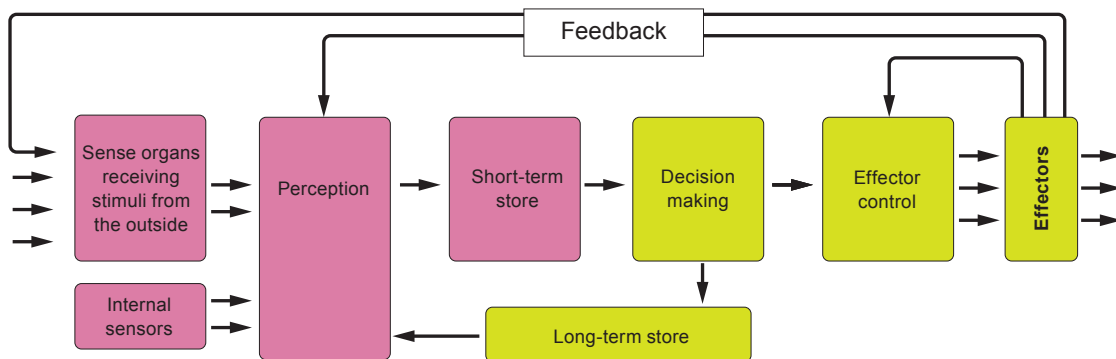
3. Elite tennis stars are able to strike the ball at speeds in excess of 90 mph but are still able to keep the ball in play by applying topspin.

Figure 2



- (a) Describe the effect of topspin on a tennis ball. [4]
- (b) Explain, using **Figure 3**, Welford's model of information processing in relation to returning the ball in tennis. [8]

Figure 3 – Welford's Information Processing model



- (c) Analyse the effectiveness of different forms of guidance that could be used by a tennis coach. [6]

When Andy Murray won the deciding match to secure Great Britain's first Davis Cup victory since 1936. He was very keen to emphasise that it was a whole team effort.

- (d) Evaluate, using examples, the importance of group cohesion and effective leadership. [8]

4. “Is big money ruining English Football?” was the question posed by *The Guardian*. An International Sportsperson stated, “stadiums and facilities are a million times better but most players who claim to play for the love of sport are lying, they play for money”.

Discuss the view that as global sport has become commercialised, levels of fair play and sportsmanship have declined. [20]

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