



GCSE

3550U10-1

TUESDAY, 24 MAY 2022 – AFTERNOON

PHYSICAL EDUCATION – FULL COURSE

Unit 1: Introduction to Physical Education

2 hours plus your additional time allowance

Surname _____

First name(s) _____

Centre Number _____

Candidate Number 0 _____

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1	20	
2	19	
3	17	
4	27	
5	17	
Total	100	

INSTRUCTIONS TO CANDIDATES

Use black ink, black ball-point pen or your usual method.

Write your name, centre number and candidate number in the spaces provided on the front cover.

Answer ALL questions.

Write your answers in the spaces provided in this booklet. If you run out of space, use the additional page(s) at the back of the booklet, taking care to number the question(s) correctly.

INFORMATION FOR CANDIDATES

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

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

(Turn over)

You will be shown two video clips.

The clips for Question 1 and Question 2 will each be shown three times, during which time you may answer the questions and make notes.

Firstly the two clips will be shown.

The clip for Question 1 will be shown a second time. There will be five minutes after the clip to answer the question.

The clip for Question 2 will be shown a second time. There will be five minutes after the clip to answer the question.

Both clips will then be shown for a third and final time.

You will then have the rest of the examination time to complete Questions 1 and 2 and the remaining questions.

Answer ALL questions.

- 1 (a) Analyse clip 1 to provide an example of commercialisation in sport, technology and reaction time. [3 marks]**

	EXAMPLE
Commercialisation in sport	
Technology	
Reaction time	

(Turn over)

1 (c) (i)

Identify **THREE** possible health screening methods an individual might undertake prior to starting a training programme for a half marathon.

[3 marks]

• _____

• _____

• _____

(Turn over)

1 (c) (iii)

Crowd encouragement is an important form of motivation to the participants. [1 mark]

Identify this type of motivation.

TICK (✓) the correct box.

	TICK (✓)
Intrinsic	
Cognitive	
Complex	
Extrinsic	

(Turn over)

1 (d) Assess where power is demonstrated in the race.

[2 marks]

1 (e) (i)

Outline the difference in the anaerobic threshold of an elite athlete compared with a fun runner.

[1 mark]

1 (e) (ii)

Identify TWO ways a marathon runner could overload their training programme to improve their anaerobic threshold. [2 marks]

- _____

- _____

2 (a) (i)

Using clip 2, analyse how many people took part in sport in the last 4 weeks in Wales.

TICK (✓) the correct box. [1 mark]

	TICK (✓)
1.5 million	
2 million	
3 million	
1 million	

(Turn over)

2 (a) (ii)

Using clip 2, analyse what percentage of individuals with a disability or long-term illness participate in sports 3 times a week.

TICK (✓) the correct box. [1 mark]

	TICK (✓)
21%	
22%	
24%	
20%	

(Turn over)

2 (c) (i)

Identify an environmental factor that might affect the performance of the climber seen in the video clip. [1 mark]

(ii) Explain the importance of feedback to the climber seen in the video clip. [2 marks]

2 (e) Explain TWO long term effects of exercise on health. [4 marks]

ADAPTATION	EFFECT ON HEALTH
<hr/> <hr/>	<hr/> <hr/> <hr/> <hr/>
<hr/> <hr/>	<hr/> <hr/> <hr/> <hr/>

FIGURE 1



3. Nigel Owens is regarded as one of the best rugby referees in the world.
- (a) Analyse FIGURE 1 opposite to provide the relevant examples to complete the table below. [3 marks]

		EXAMPLE
A. Neck	Classification of lever	
B. Elbow	Type of movement	
C. Hip	Type of joint	

(Turn over)

- 3 (c) Tendons and ligaments play an important role in maintaining stability and allowing mobility in a joint.**

Describe the functions of tendons and ligaments.

[2 marks]

STRUCTURE	FUNCTION
Tendon	
Ligament	

(Turn over)

3 (e) Describe how an official might use verbal and visual guidance during a sporting event. [2 marks]

FIGURE 2



4 (a) (ii)

Identify an appropriate test to measure cardiovascular endurance. [1 mark]

4 (d) Using the data below, analyse why Cardiac Output has increased during exercise. [3 marks]

Cardiac Output = Q

ml = millilitres

Stroke Volume = SV

l = litres

Heart Rate = HR

Q at rest = SV × HR	Q during exercise = SV × HR
Q at rest = 70 × 80	Q during exercise = 120 × 200
Q at rest = 5600 ml	Q during exercise = 24000 ml
Q at rest = 5.6l	Q during exercise = 24l

(Turn over)

FIGURE 3



5. Gareth Evans won gold in the men's 69 kg category at the 2018 Gold Coast Commonwealth Games.

(a) Using FIGURE 3 opposite, identify TWO components of fitness demonstrated by the athlete. [2 marks]

• _____

• _____

(b) Compare the body composition of a weightlifter and an obese individual. [2 marks]

(Turn over)

5 (c) Identify TWO appropriate recovery methods that can be used by athletes. [2 marks]

(d) Identify why weightlifting is classified as predominantly internally paced. [1 mark]

5 (e) Justify why fixed practice is the most effective for a weightlifter. [2 marks]

5 (f) Identify TWO mental preparation techniques the weightlifter could use prior to performance.

[2 marks]

• _____

• _____

5 (g) (ii)

Identify TWO negative physical consequences of being a sedentary individual. [2 marks]

- _____

- _____

END OF PAPER

