

Surname	Centre Number	Candidate Number
Other Names		0



**GCSE – NEW**

3555U10-1



**PHYSICAL EDUCATION (Short Course)**  
**Unit 1: Introduction to Physical Education**

WEDNESDAY, 16 MAY 2018 – MORNING

1 hour

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1a	7	
1b	2	
1c	4	
1d	2	
2a	6	
2b	7	
2c	6	
3a	4	
3b	4	
3c	2	
3d	6	
<b>Total</b>	<b>50</b>	

3555U101  
01

**INSTRUCTIONS TO CANDIDATES**

Use black ink or black ball-point pen.

Write your name, centre number and candidate number in the spaces at the top of this page.

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

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

**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.

Answer all questions.

1. The following is a still photograph of a weightlifter at the end of a successful lift.



(a) (i) Name **two** components of fitness needed by the weightlifter shown in the image. [2]

- .....
- .....

(ii) Justify your reasons for choosing the **two** fitness components in 1(a)(i) above. [2]

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(iii) Explain why an understanding of the principle of specificity is important for weightlifters when training and competing. [3]

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(b) (i) Identify the type of muscle contraction taking place when the weightlifter holds the bar still above his head at the end of the lift. [1]

Tick (✓) **one** box only.

- ISOMETRIC
- ECCENTRIC
- CONCENTRIC
- ISOKINETIC

(ii) Identify the type of muscle fibres that have been used to lift the weight. [1]

Tick (✓) **one** box only.

- VOLUNTARY TWITCH
- FAST TWITCH
- SLOW TWITCH
- CARDIAC TWITCH

- (c) (i) Explain why the weightlifter shown in the image would need to cool down at the end of the competition. [2]



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- (ii) The *One Repetition Maximum Test* could be an appropriate test for a weightlifter.

Give **two** reasons to justify **why** this could be a suitable test for the weightlifter to use. [2]

- .....
- .....

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- (b) (i) Identify **two** short-term effects that might take place as a result of taking part in a period of intense physical activity. [2]

- .....

- .....

- (ii) Long-term training can result in physiological adaptations.

Identify **two** of these adaptations and analyse how these could improve sporting performance. [5]

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3. (a) Explain how taking part in regular physical activity can help a person’s mental and social well-being. [4]

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- (b) Explain how the use of modern technology devices, such as activity trackers and mobile phone apps, could **motivate** an individual to take part in regular physical activity. [4]

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- (c)
- The 2016 **State of the UK Fitness Industry** report indicated that for the first time, gym member numbers had exceeded 9 million
  - 1 in every 7 people in the UK were members of a gym
  - 224 new public and private fitness facilities had been opened in the last 12 months

Give **two** reasons for the increase in gym membership. [2]

- .....
- .....
- .....
- .....

Read the following testing data recorded by a 16-year-old male during a 12-week training programme to improve muscular endurance.

Body Part	Exercise	REPS WK1	REPS WK6	REPS WK12
Total Body	Skipping	36	42	47
Upper Body	Press Ups	19	23	28
Upper Body	Bicep Curls	24	28	36
Lower Body	Forward Lunge	13	19	26
Lower Body	Squats	18	22	30

(d) Using your knowledge of principles of training and methods of training, evaluate why the improvements in performance took place over the course of the programme. [6]

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**END OF PAPER**

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**For continuation only.**

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