

Surname	Centre Number	Candidate Number
First name(s)		0



GCSE

C555U10-1



TUESDAY, 24 MAY 2022 – AFTERNOON

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

1 hour

ADDITIONAL MATERIALS

You may use a calculator in this examination.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen. Do not use gel pen or correction fluid.

You may use a pencil for graphs and diagrams only.

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

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.

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.

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1.a (i)	2	
1.a (ii)	1	
1.a (iii)	2	
1.a (iv)	1	
1.a (v)	3	
1.b	2	
1.c	7	
2.a (i)	1	
2.a (ii)	3	
2.a (iii)	4	
2.b (i)	3	
2.b (ii)	2	
2.c	3	
3.a	8	
3.b	3	
3.c	4	
4.a (i)	2	
4.a (ii)	2	
4.b (i)	2	
4.b (ii)	3	
4.c	2	
Total	60	



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Answer **all** questions.

1. **Figure 1** – A badminton player in action.



- (a) (i) Identify the **two** bones labelled **A** and **B** in **Figure 1**. [2]

Place letter **A** or **B** alongside the correct bone.

Bone	Letter
Radius	
Tibia	
Ulna	
Femur	
Humerus	

- (ii) Identify the component of fitness defined below. [1]

“The ability to carry out a series of movements smoothly and effectively.”

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(iii) Explain why the badminton player needs the component of fitness defined in 1(a)(ii). [2]

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(iv) Define agility. [1]

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(v) Explain why badminton players include agility exercises in their training programme. [3]

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(b) Identify **two** functions of the human skeletal system. [2]

1.

2.



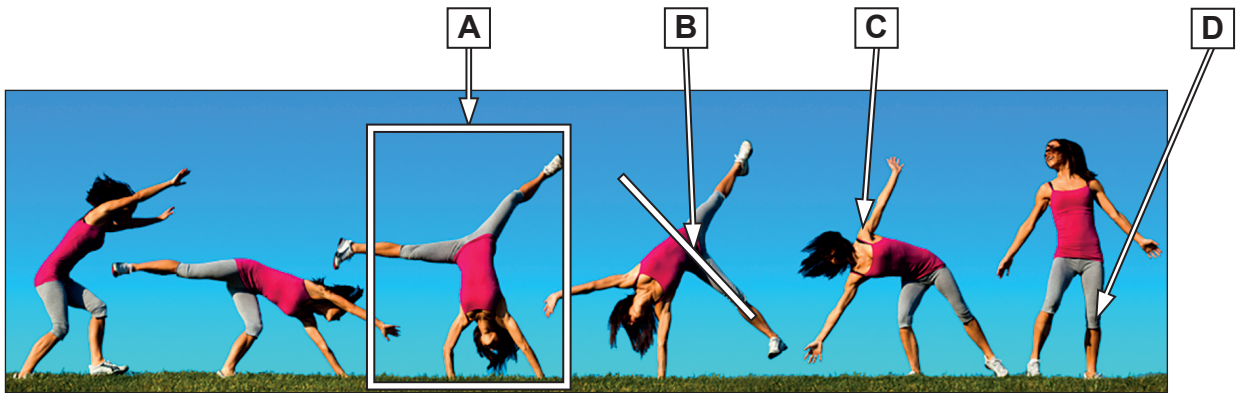
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2. **Figure 2** – A gymnast performing a cartwheel.



(a) (i) Identify the main component of fitness being demonstrated by the gymnast in **Figure 2**. [1]

Fitness component	Tick (✓) one box only
Endurance	
Body composition	
Balance	
Muscular endurance	

(ii) Explain why the component of fitness demonstrated in the cartwheel is important for the gymnast. [3]

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- (iii) Analyse the gymnast performing the cartwheel in **Figure 2** and identify the correct movement in each of the tables below. [4]

Plane of movement (A)

Plane	Tick (✓) one box only
Posterior	
Frontal	
Sagittal	
Rotational	

Axis of movement (B)

Axis	Tick (✓) one box only
Posterior	
Frontal	
Sagittal	
Rotational	

Movement at the shoulder (C)

Movement	Tick (✓) one box only
Flexion	
Extension	
Rotation	
Abduction	

Movement at the knee (D)

Movement	Tick (✓) one box only
Flexion	
Extension	
Rotation	
Abduction	



Muscles contract in different ways.

- (b) (i) Compare the muscular contractions of a concentric movement to an eccentric movement. [3]

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- (ii) Describe the function of ligaments and tendons. [2]

Ligaments

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Tendons

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- (c) Identify **three** social benefits of taking part in sport and physical activities. [3]

1.

2.

3.



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3. **Figure 3** – Children participating in beach activities.



The information below is taken from a survey of health in England. The figures shown relate to young people aged 8 to 15.

- The number of young people who have smoked fell between 1997 (19%) and 2017 (5%).
- The number of young people who had drunk alcohol fell between 2003 (45%) and 2017 (14%).
- The number of young people who were overweight increased.
- The most common unhealthy lifestyle trend indicated very few young people were eating the correct daily amount of fresh fruit and vegetables.

(a) Evaluate the information provided and suggest how young people could lead a more healthy lifestyle. [8]

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(b) Identify the functions of water, vitamins and minerals in a healthy diet. [3]

Water

Vitamins

Minerals



(c) Explain the possible mental health benefits of taking part in sport and physical activities. [4]

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4. Figure 4 – A marathon runner.



(a) (i) Outline **two** functions of the respiratory system. [2]

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(ii) Identify **two** changes to the breathing of a sportsperson when they exercise. [2]

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(b) (i) Explain how an improved vital capacity could benefit a sportsperson involved in sport and physical activities. [2]

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(ii) Explain the term 'oxygen debt'. [3]

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(c) Identify **two** waste products which are removed from the body during exercise. [2]

1.

2.

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11



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