

Surname	Centre Number	Candidate Number
Other Names		2

GCE AS



B550U10-1



S19-B550U10-1



PHYSICAL EDUCATION – AS component 1
Exploring Physical Education

FRIDAY, 17 MAY 2019 – MORNING

1 hour 45 minutes

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1.a	1	
1.b	2	
1.c(i)	1	
1.c(ii)	2	
1.d	4	
2.a	6	
2.b	4	
3.a	1	
3.b	4	
3.c	6	
4.a	6	
4.b	6	
5.a	1	
5.b	3	
5.c	10	
6	13	
Total	70	

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.
 Answer **all** questions.
 Write your answers in the spaces provided in this booklet.

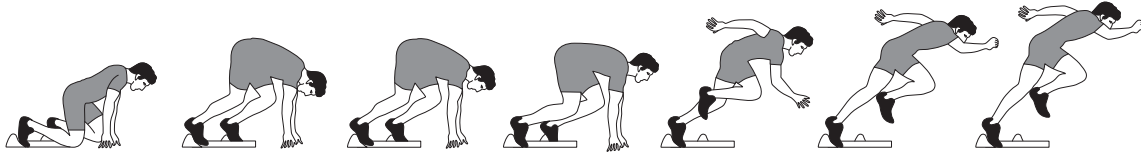
INFORMATION FOR CANDIDATES

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. The image below shows a sprinter leaving the starting blocks in a 100 m race.

Figure 1



(a) Identify the articulating bones of the knee joint.

[1]

Tick (✓) **one** box only.

A: Scapular, Humerus, Clavicle

B: Ulnar, Radius, Humerus

C: Pelvis, Femur, Ilium

D: Femur, Tibia

(b) Describe **two** short term responses that occur in the neuro-muscular system during the 100 m race.

[2]

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(c) (i) Outline Newton's third law of motion.

[1]

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(ii) Explain why Newton's third law aids the performance of the sprinter leaving the blocks and during the race. [2]

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(d) Explain how the physiological adaptations from long term anaerobic training could affect a sprinter's performance. [4]

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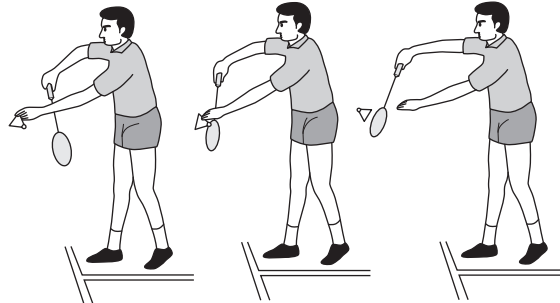
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3. The diagram below shows a badminton player preparing to serve.

Figure 2



(a) Identify the type of joint located in the wrist. [1]

Tick (✓) **one** box only.

A: Ball and socket

B: Hinge

C: Pivot

D: Ellipsoid

(b) Using **Figure 2**, classify the badminton serve on each continuum below. [4]

Discrete	Continuous
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Justify your answer

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Self-paced	Externally paced
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Justify your answer

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(c) Evaluate how the use of interval training can develop the match fitness of a badminton player. [6]

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(b) Using the information in **Figure 3**, explain the varied use of the energy systems during a 1500 m race. [6]

Examiner only

Figure 3

Energy system	Percentage
ATP-PC System	10 %
Lactic Acid System	30 %
Aerobic System	60 %

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5. For success in sport, performers are required to be both physically and mentally fit.

(a) Identify a method used to assess the psychological well-being of a performer. [1]

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(b) Outline **three** of the somatic techniques that can be used to control anxiety. [3]

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