



Cambridge International AS Level

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SPORT & PHYSICAL EDUCATION**8386/13**

Paper 1 Theory

October/November 2025**1 hour 45 minutes**

You must answer on the question paper.

No additional materials are needed.

INSTRUCTIONS

- Answer **all** questions.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.
- You may use a calculator.
- You should show all your working and use appropriate units.

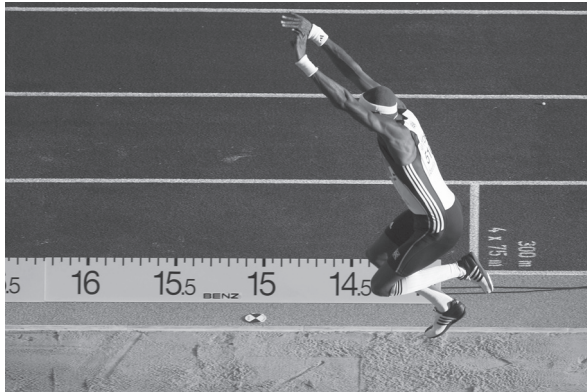
INFORMATION

- The total mark for this paper is 70.
- The number of marks for each question or part question is shown in brackets [].

This document has **12** pages.



1 The photographs show part of the flight of a triple jump performer.



A



B

(a) (i) Complete the table for the performer's movements from **A** to **B**.

joint	type of synovial joint	type of movement	main agonist	antagonist
hip				gluteus maximus
knee	hinge			

[6]

(ii) Compare the hip joint with the knee joint in terms of stability and range of movement.

..... [5]



(b) Use specific examples from the triple jump to justify its classification as:

a serial skill

.....

.....

a gross skill

.....

.....

a low-organisation skill.

.....

.....

[3]

(c) Describe how triple jumping may be learned through Bandura's observational learning theory.

.....

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.....

.....

..... [4]

(d) Triple jumpers may use prohibited performance-enhancing drugs (PEDs) to reduce their body fat.

Suggest why reducing body fat may improve performance in a triple jump.

.....

.....

.....

..... [2]





[5]

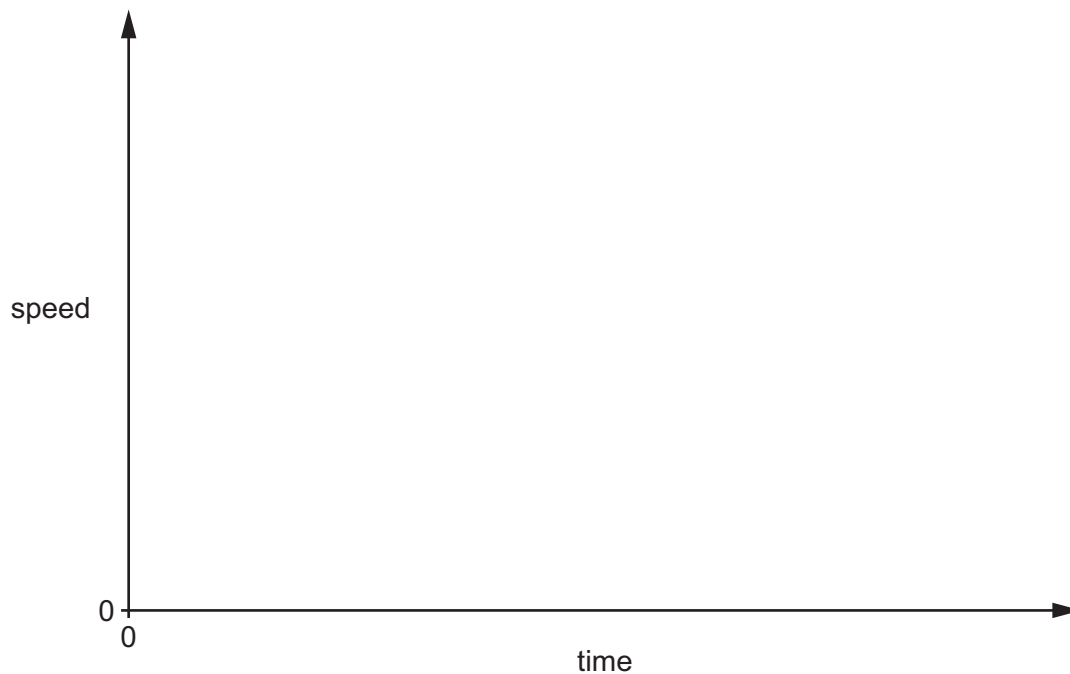
(b) Describe the role of the pectoralis minor in the mechanics of breathing during exercise.

..... [2]

3 A track-and-field sprinter runs in a 100-metre race.

(a) Sketch a speed–time graph for the sprinter to show:

- acceleration from the start, followed by
- constant speed, followed by
- coming to a stop after completing the race.



[4]

(b) Explain linear motion with reference to a track-and-field sprinter running in a 100-metre race.

.....

.....

.....

.....

.....

.....

[2]



- (c) Use examples from a track-and-field sprinter running in a 100-metre race to describe each of the following terms:

reaction time

.....

.....

response time

.....

.....

movement time.

.....

.....

[3]

- (d) The table shows the personal best (PB) times of three 100-metre sprinters before and after a 12-week programme of sprint training.

sprinter	PB time before sprint training /seconds	PB time after sprint training /seconds
A	10.94	10.77
B	12.06	11.62
C	11.39	11.04

- (i) Identify the sprinter with the smallest change in PB time in seconds.

..... [1]

- (ii) Calculate the mean improvement in PB time in seconds for the three sprinters.

Give your answer to two decimal places.

mean improvement = seconds [1]



(iii) Calculate the percentage improvement in PB time for sprinter **C**.

Give your answer to two decimal places.

percentage improvement = % [1]



- 4 The table shows examples of two types of transfer of learning.

Complete the table by stating the type of transfer of learning described in each example.

type of transfer of learning	example
	The learning of the skill of throwing a javelin hinders the learning of the skill of overarm bowling in cricket.
	The learning of a new skill, such as a volleyball serve, affects the learning of a previously learned skill, such as a tennis serve.

[2]

- 5 (a) The photograph shows an elite association football player who has played at national and international level.



Describe **two** characteristics of elite association football players, other than playing at international level.

- 1
- 2

[2]





- (b)** Elite association football players may need science support to play at international level.

State **three** types of science support.

2

[3]

- (c)** An association football player's heart rate will change during a match.

Describe how the cardiac control centre regulates heart rate during a football match.

.....

.....

.....

[6]





(d) Use the example of receiving a pass in association football to explain the theory of information processing.

..... [5]

(e) State **three** forms of competition manipulation that may occur in association football.

1

2

3 [3]





- 6 (a)** Discuss similarities and differences between the concept of sport and the concept of physical education.

[6]





(b) State **four** factors that may lead to the commercialisation of sport.

- 1
- 2
- 3
- 4

[4]

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