Please write clearly in block capitals.

Centre number | | | | | | Candidate number | | | | |

Surname _____

Forename(s) _____

Candidate signature _____
I declare this is my own work.

A-level
PHYSICAL EDUCATION

Paper 1 Factors affecting participation in physical activity and sport

Time allowed: 2 hours

Materials
For this paper you may use:
- a calculator.

Instructions
- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- Fill in the boxes at the top of this page.
- Answer **all** questions. You must answer the questions in the spaces provided. Do **not** write on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information
- The marks for questions are shown in brackets.
- The maximum mark for this paper is 105.
- Questions should be answered in continuous prose. You will be assessed on your ability to:
  - use good English
  - organise information clearly
  - use specialist vocabulary where appropriate.

For Examiner's Use	
Section	Mark
A	
B	
C	
TOTAL	

Do not write outside the box

Section A

Applied anatomy and physiology

Answer **all** questions in this section.

Only **one** answer per question is allowed.

For each question completely fill in the circle alongside the appropriate answer.

CORRECT METHOD ⬬ WRONG METHODS

If you want to change your answer you must cross out your original answer as shown.

If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown.

0 1 Which **one** of the following describes spatial summation?

[1 mark]

A A motor unit being capable of fully contracting or not contracting at all

B A sustained, smooth muscular contraction

C Repeated nerve impulses allowing no time for the muscle fibres to relax

D The addition of impulses received at different places on the neuron

0 2 Measuring energy expenditure can be useful during training.

Which **one** of the following would be most practical to use with a swimmer during a training session in the pool?

[1 mark]

A Direct gas analysis VO_2 max test

B Indirect calorimetry

C Lactate sampling

Do not write outside the box

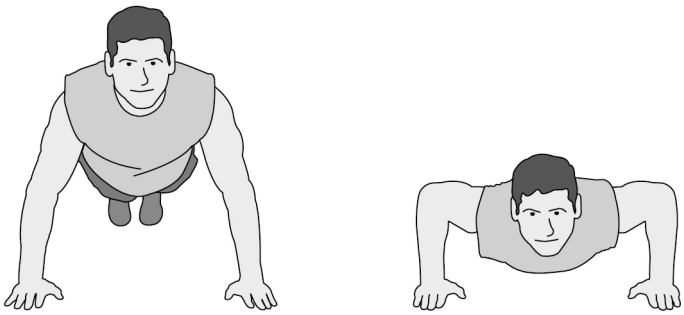
0 3 Describe how an increase in carbon dioxide in the blood during exercise would lead to an increased breathing rate.

[3 marks]

0 4 **Figure 1** shows an athlete performing the downward phase of a press-up.

[4 marks]

Figure 1



Position **A** Position **B**

Complete the table for the movement occurring at the **elbow** as the athlete moves from position **A** to position **B**.

Articulating bones at the elbow	
Main agonist	
Plane	
Axis	

Do not write outside the box

0 5 If endurance events take place in warm conditions, cardiovascular drift can occur.

Analyse how cardiovascular drift may result in lower levels of performance.

[3 marks]

Do not write outside the box

0 6 Evaluate the effectiveness of altitude training for an endurance athlete preparing for a one-off event like the London Marathon.

[8 marks]

You may use this space to plan your answer.

Do not write outside the box

Extra space

Do not write outside the box

Turn over ►

Do not write outside the box

0 7 Each of the following athletes uses a different main energy system to resynthesise ATP during a race:

- Athlete A is a 100 m runner
- Athlete B is a 400 m runner
- Athlete C is a marathon runner.

Analyse how **each** of these athletes could use different dietary supplements or manipulation to optimise their performance in a race.

Refer to the relevant energy systems throughout your answer.

[15 marks]

You may use this space to plan your answer.

Do not write outside the box

Extra space

Do not write outside the box

Do not write outside the box

35

Turn over ►

Do not write outside the box

Section B

Skill acquisition

Answer **all** questions in this section.

0 8 Baddeley and Hitch devised a model of the working memory.

Which component of this model coordinates sight, hearing, and movement information into sequences to be sent to the long-term memory?

[1 mark]

A Central executive ⬭

B Episodic buffer ⬭

C Phonological loop ⬭

D Visuospatial sketchpad ⬭

0 9 Which **one** of the following is an example of temporal anticipation in hockey?

[1 mark]

A Predicting what your opponent will do next ⬭

B Predicting when a player will shoot ⬭

C Predicting where the ball will go ⬭

Do not write outside the box

1 0 Bandura's observational learning model describes how we learn from watching others. In sport this can take the form of a demonstration.

Outline **three** factors that make a demonstration effective.

[3 marks]

1 _____

_____

2 _____

_____

3 _____

_____

1 1 . 1 Skills in sport can be classified in different ways.

Define the term 'continuous skill'. Give a sporting example.

[2 marks]

Definition _____

_____

Sporting example _____

_____

1 1 . 2 Explain why bowling in cricket might **not** be placed exactly at either end of the Gross – Fine continuum.

[2 marks]

_____

_____

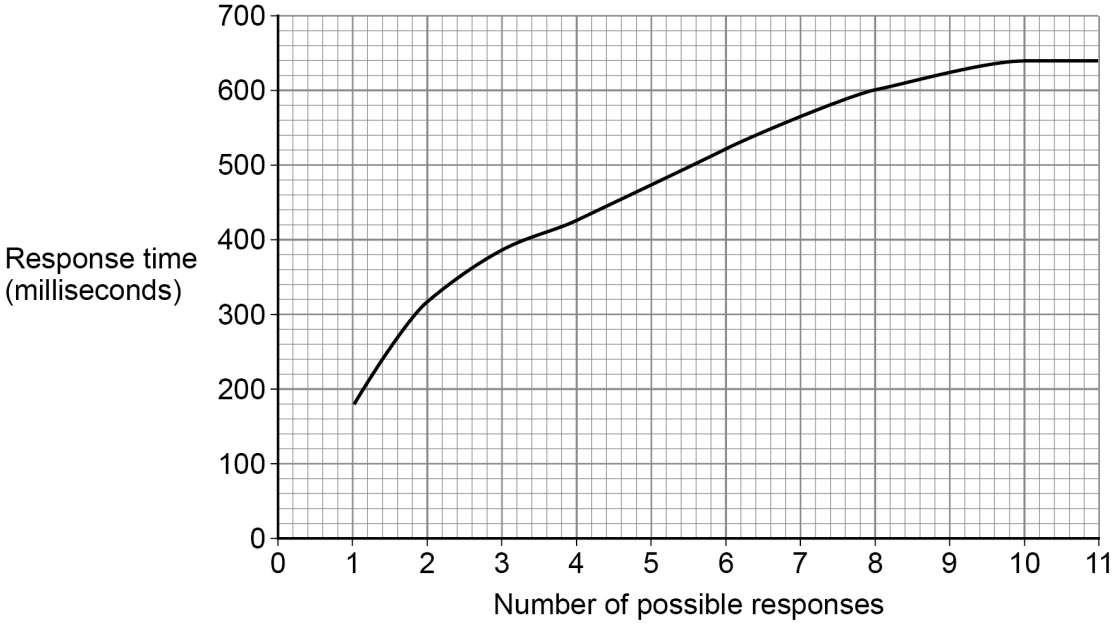
_____

_____

Do not write outside the box

1 2 **Figure 2** shows the impact of the number of possible responses on response time.

Figure 2



Analyse **Figure 2** to suggest why response times may be longer when passing in football than at the start of a 100 m race. Support your answer with data from **Figure 2**.

[3 marks]

Do not write outside the box

1 3 A high jumper is experiencing a learning plateau.

Evaluate the effectiveness of setting a SMARTER process goal to overcome this learning plateau. Refer to an appropriate goal in your answer.

[8 marks]

You may use this space to plan your answer.

Do not write outside the box

Extra space

Do not write outside the box

Turn over ►

Do not write outside the box

1 4 Trampolinists **A** and **B** have both performed the same set routine on a number of occasions in training. For each attempt they have been awarded an execution score out of 10 by their coach, with 10 being the best possible score.

Table 1 shows the execution scores the trampolinists were awarded for each attempt.

Table 1

Attempt number	**1**	**2**	**3**	**4**	**5**	**6**
Trampolinist A scores	9.7	9.8	9.8	9.7	9.6	9.8
Trampolinist B scores	3.7	3.4	4.2	4.7	5.9	5.1

Evaluate whether massed practice or distributed practice would be most effective for their coach to use with:

- Trampolinist **A**
- Trampolinist **B**.

Refer to each trampolinist's stage of learning in your answer.

[15 marks]

You may use this space to plan your answer.

Do not write outside the box

Extra space

Do not write outside the box

Do not write outside the box

35

Turn over ►

Do not write outside the box

Section C

Sport and society

Answer **all** questions in this section.

1 5 Which **one** of the following had the most significant impact on the invention of lawn tennis?

[1 mark]

A Development of professional sport

B Emergence of the middle class

C Improvements in transport and communication

D Influences from across the British Empire

1 6 Which **one** of the following is defined as 'an organised group of people associated for some specific purpose or with a shared common interest'?

[1 mark]

A Social action theory

B Social control

C Socialisation

D Society

Do not write outside the box

1 7 Ex-public-school boys and university old boys helped spread sport throughout the British Empire during the industrial and post-industrial period (1780–1900).

State **three** professions that were also responsible for the spread of sport throughout the British Empire during this period.

[3 marks]

1 _____

2 _____

3 _____

1 8 Explain how mob football reflected the characteristics of pre-industrial British society (pre-1780).

[3 marks]

_____

_____

_____

_____

_____

_____

Turn over for the next question

Do not write outside the box

1 9 . 1 A 2019 survey looked at the physical activity of adults. **Table 2** shows the percentage of men and women who completed a minimum of 150 minutes of physical activity per week.

Table 2

	% who completed 150 mins of physical activity/week
Men	65%
Women	61%

One possible cause of the difference shown is stereotyping.

Define the term 'stereotyping'.

[1 mark]

1 9 . 2 Analyse how stereotyping may contribute to the difference shown in **Table 2**.

[3 marks]

Do not write outside the box

2 0 The number of factories increased in the UK during the industrial and post-industrial period (1780–1900).

Evaluate the impact of this development on the physical activity of the working class:

- at the start of the 19th century
- at the end of the 19th century.

[8 marks]

You may use this space to plan your answer.

Do not write outside the box

Extra space

Do not write outside the box

Turn over ►

Do not write outside the box

2 1 Active Partnerships, formerly County Sports Partnerships, are an example of a local partner of Sport England. Sport England's local partners work to overcome the barriers to participation that some groups may face.

Analyse how the work of Sport England's local partners can overcome the barriers to participation for those disadvantaged by their socio-economic status.

[15 marks]

You may use this space to plan your answer.

Do not write outside the box

Extra space

Do not write outside the box

Do not write outside the box

END OF QUESTIONS

35

Do not write outside the box

There are no questions printed on this page

DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED

Do not write outside the box

Question number	**Additional page, if required.** **Write the question numbers in the left-hand margin.**

Do not write outside the box

Question number	**Additional page, if required.** **Write the question numbers in the left-hand margin.**

Do not write outside the box

Question number	**Additional page, if required.** **Write the question numbers in the left-hand margin.**

Do not write outside the box

There are no questions printed on this page

DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED

Copyright information

For confidentiality purposes, all acknowledgements of third-party copyright material are published in a separate booklet. This booklet is published after each live examination series and is available for free download from www.aqa.org.uk.

Permission to reproduce all copyright material has been applied for. In some cases, efforts to contact copyright-holders may have been unsuccessful and AQA will be happy to rectify any omissions of acknowledgements. If you have any queries please contact the Copyright Team.

Copyright © 2022 AQA and its licensors. All rights reserved.