



Surname _____

Other Names _____

Centre Number _____

Candidate Number _____

Candidate Signature _____

I declare this is my own work.

A-level

PHYSICAL EDUCATION

**Paper 2 Factors affecting optimal performance in
physical activity and sport**

7582/2

Time allowed: 2 hours

At the top of the page, write your surname and other names, your centre number, your candidate number and add your signature.

[Turn over]



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For this paper you may use:

- a calculator.

INSTRUCTIONS

- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- 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.

DO NOT TURN OVER UNTIL TOLD TO DO SO



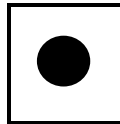
SECTION A**EXERCISE PHYSIOLOGY AND BIOMECHANICS**

Answer ALL questions in this section.

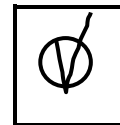
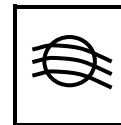
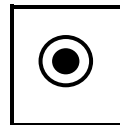
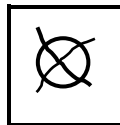
Only ONE answer per question is allowed.

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

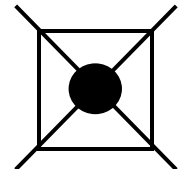
CORRECT METHOD



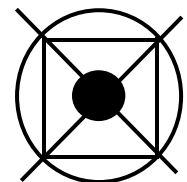
WRONG METHODS



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
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Which ONE of the following is a definition of the term 'mass'? [1 mark]

A The amount of space a body occupies

B The gravitational force exerted on an object

C The quantity of matter a body possesses

[Turn over]



0 2

FIGURE 1 shows an athlete throwing a javelin.

FIGURE 1



**Which lever system is operating at the elbow as the javelin is released during the execution of the throw?
[1 mark]**

A First class

B Second class

C Third class

[Turn over]



03.1

The data gathered from a fitness test can be either quantitative or qualitative.

Define the terms quantitative AND qualitative. [2 marks]

Quantitative _____

Qualitative _____



03.2

State TWO factors that can affect the reliability of a fitness test. [2 marks]

1 _____

2 _____

[Turn over]



0 4

The start of a 100 m sprint race requires athletes to accelerate as quickly as they can out of the blocks.

0 4 . 1

Acceleration is a vector quantity.

Define what is meant by a vector quantity. [1 mark]

0 4 . 2

TABLE 1 shows the velocity of a sprinter measured at 10 m intervals, as well as the split times for each 10 m segment of the race.

TABLE 1

Distance at end of 10 m split (m)	10	20	30	40	50
Split time (s)	2	1.5	0.9	0.8	0.8
Velocity at the end of the split (m/s)	4	10	11	12	12



Calculate the sprinter's acceleration between 10 and 20 m using the data in TABLE 1.

Give the correct units in your answer. [2 marks]

Sprinter's acceleration _____

Units _____

[Turn over]



0 5

Evaluate the suitability of including high-intensity interval training (HIIT) in EITHER a basketball OR a netball team's training programme. [3 marks]

[Turn over]



0	6
---	---

Elite-level rugby players are at high risk of suffering from musculo-skeletal injuries due to the physical nature of the sport.

Evaluate the use of screening to prevent musculo-skeletal injuries in elite rugby. [8 marks]

You may use this space to plan your answer.



[Turn over]



[Turn over]



[Turn over]





[Turn over]



0	7
---	---

Analyse how an athlete can maximise the distance a discus travels.

Use your knowledge of the factors affecting horizontal displacement of projectiles and the Bernoulli principle in your answer. [15 marks]

You may use this space to plan your answer.





[Turn over]







[Turn over]





[Turn over]



SECTION B**SPORT PSYCHOLOGY**

Answer ALL questions in this section.

0 8

‘Interpersonal differences begin to be resolved and a sense of cohesion emerges’.

Which stage of Tuckman’s model is described in this statement? [1 mark]

A Forming

B Norming

C Performing

D Storming

[Turn over]



0	9
---	---

Which component of an attitude involves a person's emotions? [1 mark]

A Affective

B Behavioural

C Cognitive

1	0
---	---

A performer's likelihood of success is influenced by them having a positive attitude.

Describe FOUR factors which may lead to the formation of a positive attitude. [4 marks]

1 _____



2

3

4

[Turn over]



1 1

Hollander’s model is one example of an interactionist perspective of personality.

Explain how a coach can apply knowledge of Hollander’s model of personality to improve performance. Refer to each level of the model in your answer. [3 marks]

[Turn over]



1	2
---	---

Evaluate the impact of extrinsic rewards on a performer's motivation. [3 marks]



[Turn over]



1	3
---	---

A badminton player is suffering from learned helplessness.

Analyse the strategies a coach could use to help the player overcome learned helplessness and improve their performance. [8 marks]

You may use this space to plan your answer.



[Turn over]





[Turn over]



[Turn over]



1	4
---	---

An experienced women's rugby team is bottom of the league with only a few games left before the end of the season.

A new head coach is recruited and chooses to adopt an autocratic leadership style during training sessions and games.

Analyse the impact an autocratic leadership style may have on the team. Refer to Chelladurai's multi-dimensional model in your answer. [15 marks]

You may use this space to plan your answer.

[Turn over]





[Turn over]





[Turn over]







SECTION C**SPORT AND SOCIETY AND TECHNOLOGY IN SPORT**

Answer ALL questions in this section.

1 | 5

**Which ONE of the following organisations provides support to BOTH elite AND participation level sport?
[1 mark]**

A National Governing Bodies

B National Institutes of Sport

C UK Sport

[Turn over]



1 6

Which ONE of the following would benefit most from taking beta blockers? [1 mark]

A Golfer

B Marathon runner

C Rugby player

D Sprinter



1	7
---	---

Maintaining data integrity ensures the accuracy, consistency and completeness of data whilst it is collected, stored and shared.

State THREE ways that data integrity can be maintained. [3 marks]

1 _____

2 _____

3 _____

[Turn over]



18.1

Define the term 'negligence'. [1 mark]



1 8 . 2

**Give THREE examples of negligence by a rugby official.
[3 marks]**

1 _____

2 _____

3 _____

[Turn over]



1	9
---	---

‘The use of performance enhancing drugs should be allowed in sport.’

Evaluate this statement. [3 marks]



[Turn over]



2	0
---	---

One football coach believes in the importance of winning fairly so encourages their players to demonstrate sportsmanship.

Another coach believes the win ethic is more important so encourages their players to use gamesmanship.

**Evaluate these views in relation to professional football.
[8 marks]**

You may use this space to plan your answer.



[Turn over]





[Turn over]





2	1
---	---

Media coverage of professional tennis has increased over the past 20 years. Tennis players are increasingly required to interact with the media in the lead-up to matches.

Evaluate the impact the media may have on a professional tennis player's self-efficacy in an upcoming match.

Refer to Bandura's Model of self-efficacy in your answer. [15 marks]

You may use this space to plan your answer.



[Turn over]





[Turn over]







[Turn over]





Additional page, if required.

Write the question numbers in the left-hand margin.

Additional page, if required.

Write the question numbers in the left-hand margin.

Additional page, if required.

Write the question numbers in the left-hand margin.

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For Examiner's Use	
Section	Mark
A	
B	
C	
TOTAL	

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