The EverLearner

National Mock Exams 2025

POWERED BY ExamSimulator

Edexcel A-level PE - Paper 1

Please read before distributing to students.

Purpose of this document

The questions contained within this document and the associated mark scheme are based on the data analysis performed by The EverLearner Ltd. Please note the following:

- We believe this paper has a very strong association with the actual external exam in 2025 in relation to command terms, skills, AO distribution, extended-writing requirements and topics.
- However, this is categorically NOT a predicted paper. No one can accurately predict an exam paper and we make no claim to this end.
- It is vital that you only use this document internally in your school/college. Publishing the document online or sharing it in any other way is strictly prohibited, as this will undermine the potential educational experiences of students in other schools/colleges.
- Finally, please use this paper together with the mark scheme and make sure you attend the revision session in May.

This paper contains:

- Questions in the format of the Edexcel A-level PE Paper 1 2025
- Short-answer questions
- Extended writing

How should schools use these papers?

This paper has been constructed specifically for use as a mock exam but can be used less formally as a practice paper or model paper. The content and skills of the paper will be developed within the revision sessions offered by James Simms on **Monday 12th of May 2025 at 17:00** (available to all subscribing schools live and on demand; a shorter version for non-subscribers will be available on YouTube after the live session).

This paper is available to be set, answered and marked online via ExamSimulator. ExamSimulator is a premium resource available via TheEverLearner.com and provides immediate diagnostics of student writing performance after every exam answer. Get in touch with us to start a free trial.

James Simms

The EverLearner

Subject	Physical Education
Course	Edexcel Linear GCE PE Component 1: Scientific Principles of Physical Education
Time allowed	2 hours 30 minutes

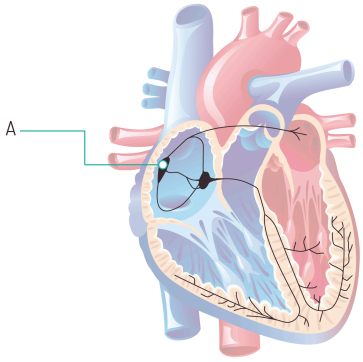
First name	
Last name	
Class	
Teacher	

Title	**Edexcel A-level** PE Component 1: Scientific Principles NME 2025

Guidance	• The total mark for this paper is 140 marks. • You have 2 hours 30 minutes (plus additional time for those who have exam access arrangements). • The marks for each question are shown in brackets (use this as a guide for how much time should be spent on each question). • The question marked with an asterisk (*) requires you to use your knowledge from across the course of study in your response. • You may use a calculator. • Read each question carefully and answer **all** questions. • If the timer reaches zero prior to you submitting your paper, the software will automatically submit your responses. • Good luck!

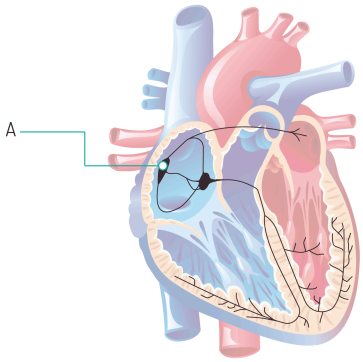
Total marks	140

1. Look at the image of the heart. State the missing label.



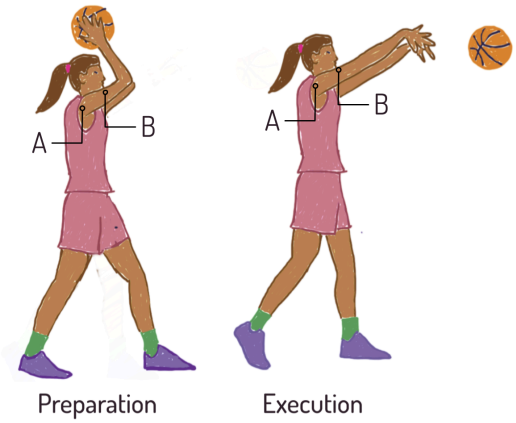
Marks: [1]

2. Look at the image. Describe the role of the feature labelled A.



Marks: [1]

3. Look closely at this image. Describe the role of the deltoids **and** triceps brachii during an overhead pass in basketball.



Role of the deltoid: _____

Description: _____

_____

Role of the triceps brachii: _____

Description: _____

_____

Marks: [4]

4. Use a sporting example to describe the term eccentric contraction.

_____

_____

_____

_____

_____

_____

Marks: [2]

5. Summarise the functions of the respiratory system shown in the table.

Feature	Function
Nasal cavity	A
Larynx	B
Trachea	C
Pulmonary capillary	D

A: _____

_____

B: _____

_____

C: _____

_____

D: _____

_____

Marks: [4]

6. Calculate the maximal potential cardiac output for a 20-year-old athlete with a maximal stroke volume of 160ml of blood.

_____

_____

_____

_____

_____

_____

Marks: [2]

7. Outline the process of venous return during exercise.

Marks: [4]

8. Summarise **three** neuromuscular adaptations that could occur at the end of an eight-week strength training programme.

Marks: [3]

9. Summarise **both** components of EPOC in assisting a performer's recovery from exercise.

Marks: [6]

10. Identify the predominant muscle fibre type for a 110m high hurdler in athletics.

Marks: [1]

11. Explain how the predominant muscle fibre type for a 110m high hurdler benefits their performance.

Marks: [4]

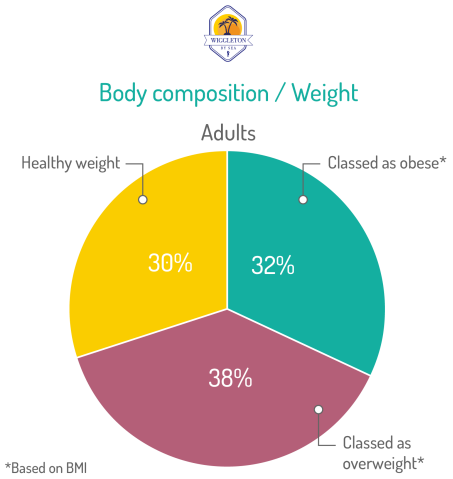
12. Look closely at this image. State **both** horizontal forces acting on the runner.

Marks: [2]

13. Look closely at this image. Describe the relationship between the horizontal forces if this runner is accelerating.

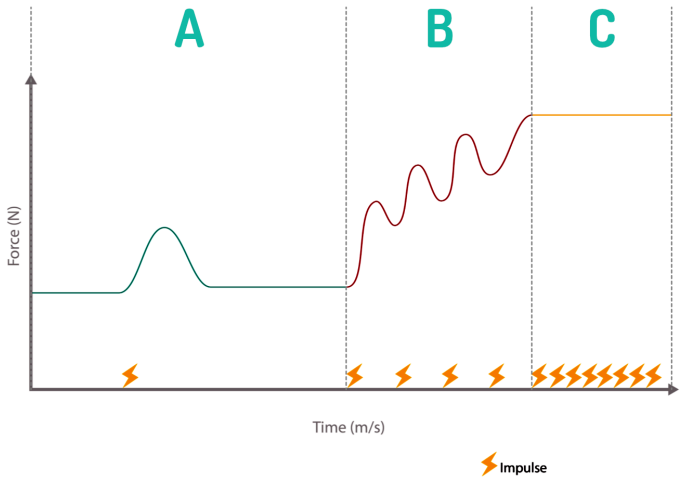
Marks: [2]

14. Look closely at this image. List three ways in which the risks to cardiovascular health can be reduced for the population of Wiggleton-by-Sea.



Marks: [3]

15. Using your knowledge of wave summation and the gradation of muscle contraction, analyse the graph provided in the image.



Marks: [8]

16. Examine the role of **both** the ATP-PC and anaerobic glycolytic systems for a football goalkeeper.

Marks: [8]

17. Marathon runners often train for four months for a single race in order to get maximal adaptations.
Analyse the chronic adaptations of the cardiorespiratory system for a marathon runner in the final weeks of a 16-week training programme for an upcoming road race.

Marks: [15]

18. Using a sporting example, define the term local muscular endurance.

Marks: [2]

19. Outline the protocol for the MAOD fitness test.

Marks: [4]

20. Identify **one** reason why a performer of your choice would use the MAOD fitness test.

Marks: [2]

21. Look closely at the table. For each type of injury, provide a description, give an example and state what preventative measure could be used.

Classification of injury	Description	Example	Preventative measure
Acute	?	?	?
Chronic	?	?	?

A: _____

_____

B: _____

C: _____

D: _____

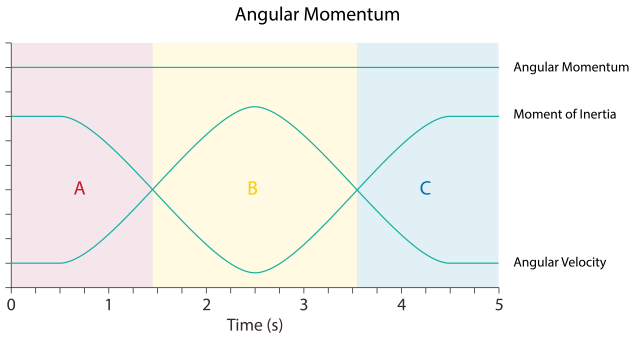
_____

E: _____

F: _____

Marks: [6]

22. Look closely at this image. Using an example, explain why a performer's angular momentum curve would look like this.

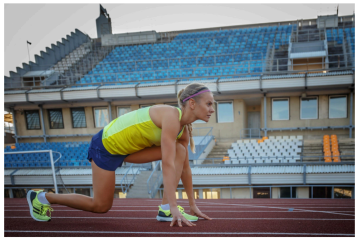


Marks: [4]

23. State **three** reasons for carrying out fitness testing.

Marks: [3]

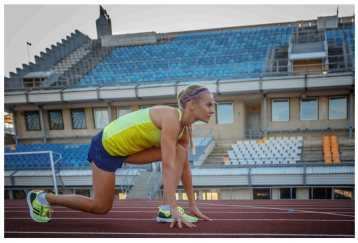
24. Look at the image. Identify an appropriate fitness test for this performer.



Age	Resting HR	Maximum HR	Intensity
Years	BPM	BPM	%
24	53	190	90

Marks: [1]

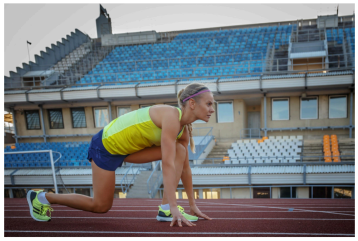
25. Look at the image. Using Karvonen's theory, calculate the sprinter's heart rate reserve.



Age	Resting HR	Maximum HR	Intensity
Years	BPM	BPM	%
24	53	190	90

Marks: [2]

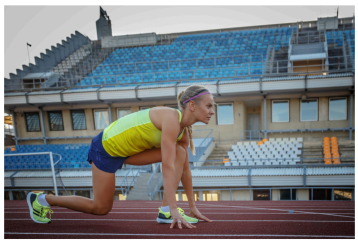
26. Look at the image. Calculate the sprinter's training heart rate.



Age	Resting HR	Maximum HR	Intensity
Years	BPM	BPM	%
24	53	190	90

Marks: [2]

27. Look at the image. Explain how a sprint coach could use their knowledge of training intensities during the pre-season phase of the training year.



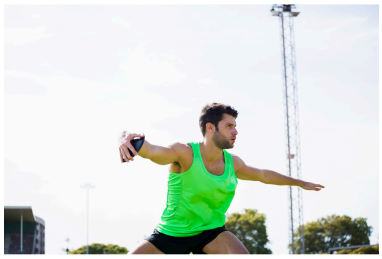
Age	Resting HR	Maximum HR	Intensity
Years	BPM	BPM	%
24	53	190	90

Marks: [2]

28. Explain why different types of sports drinks are used by athletes.

Marks: [3]

29. Using your knowledge of fluid mechanics, explain how a discus thrower can maximise the horizontal displacement of the discus.



Marks: [8]

30. A rugby player is using the FITT principle to improve the impact of their weight training.

Analyse the use of FITT to increase muscular strength and the impact this has when playing rugby.

Marks: [8]

31. Assess the most suitable training methods for a heptathlete.

Marks: [8]

32. Sports drinks are a dietary supplement.
Evaluate the use of **other** dietary supplements for a performer who wishes to delay fatigue. Use your knowledge and understanding from across the course of study to answer this question.

Marks: [15]