



National Mock Exams 2025

POWERED BY **ExamSimulator**

OCR 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 OCR 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 **Thursday 8th of May 2025 at 15:30** (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



| | |
|--------------|---|
| Subject | Physical Education |
| Course | OCR Linear GCE PE Physiological Factors |
| Time allowed | 2 hours |

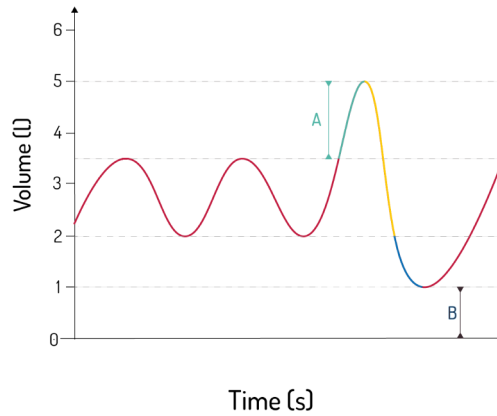
| | |
|------------|--|
| First name | |
| Last name | |
| Class | |
| Teacher | |

| | |
|-------|---|
| Title | OCR A-level (H555) Paper 1: Physiological Factors National Mock Exam 2025 |
|-------|---|

| | |
|----------|---|
| Guidance | <ul style="list-style-type: none">• This paper is marked out of 90 marks.• You have 120 minutes (plus additional time for those who have Exam Access Arrangements).• Answer all questions.• A calculator is permitted for this exam.• This paper contains one 20-mark question.• If the timer reaches zero prior to you submitting your paper, the software will automatically submit your responses.• Good luck! |
|----------|---|

| | |
|-------------|----|
| Total marks | 90 |
|-------------|----|

1. Look closely at this image of a spirometer trace.
Identify lung volumes A and B.



A is: _____
B is: _____

Marks: **[2]**

2. Identify **two** features of a goniometer test for flexibility.

Feature 1: _____

Feature 2: _____

Marks: **[2]**

3. Look closely at this image.

Explain why the active stage of SALTAPS comes before the passive stage when recovering from an injury.

Stop / see

Ask

Look

Touch

Active movement

Passive movement

Stand up

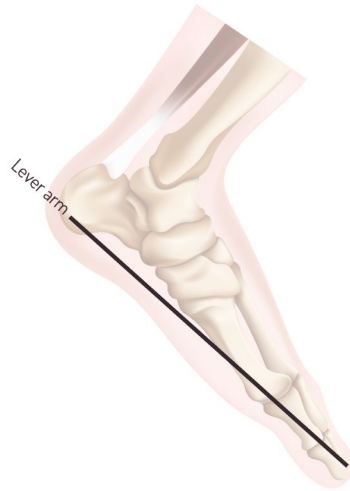
Marks: [2]

4. Explain why an anaerobic athlete is likely to consume protein after training.

Marks: [2]

5. This image shows a lever arm illustrated onto an ankle performing plantar flexion.

Describe the position of two of the missing lever components.



Marks: **[2]**

6. Describe the process of gaseous exchange at the alveoli.

Marks: **[4]**

7. Look closely at this image of a squat exercise and associated table.
Analyse the movement in each phase to complete the table.



| Phase | Right hip | | |
|-------|--------------|---------|---------------------|
| | Joint action | Agonist | Type of contraction |
| 1-2 | A | B | C |
| 2-1 | D | E | F |

A is: _____

B is: _____

C is: _____

D is: _____

E is: _____

F is: _____

Marks: **[6]**

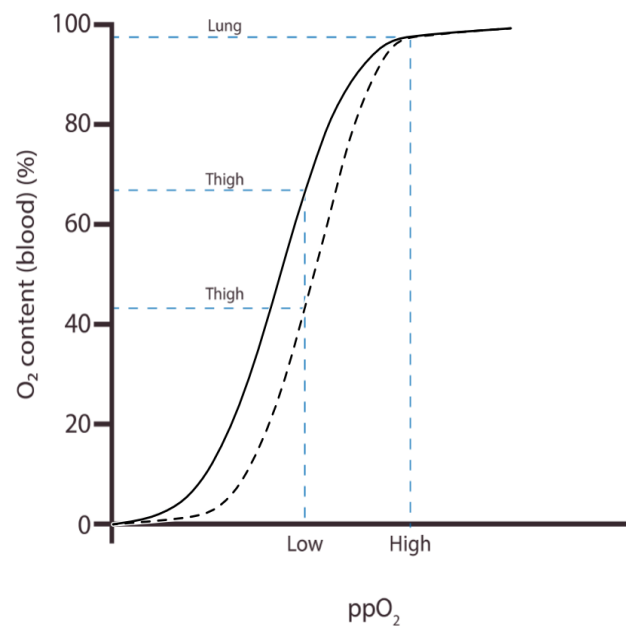
8. The glycolytic system is the most beneficial energy system to a 200m swimmer.

Justify this statement.

Marks: **[6]**

9. Look closely at this image.

Explain why the solid and dashed plots are different.



Marks: [4]

10. Creatine supplements and carbo-loading are nutritional ergogenic aids. Compare their use for a 100m sprinter.

Marks: **[5]**

11. Describe the one-repetition maximum test for strength.

Marks: **[2]**

12. Describe PNF stretching.

Marks: **[4]**

13. Explain why endurance runners have a high tendency to experience chronic injuries.

Marks: **[2]**

14. Explain how a sprained ankle should be treated.

Marks: **[3]**

15. Analyse the impact of long-term exercise on lifestyle diseases related to the cardiovascular system.

Marks: **[4]**

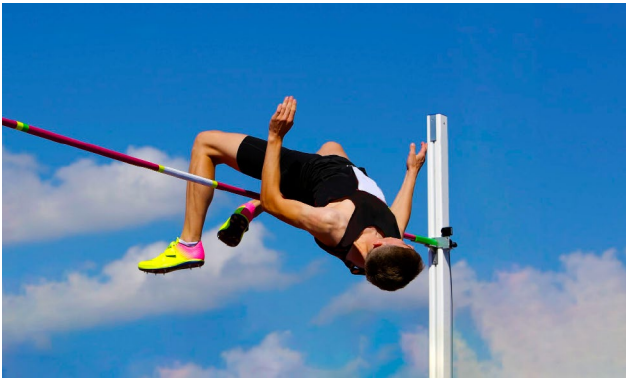
16. Explain why a knowledge of Newton's second law is beneficial to a high jumper in track-and-field athletics.

Marks: **[2]**

17. Describe the balance of vertical forces for a high jumper at the moment of take-off.

Marks: **[3]**

18. Using your knowledge of the centre of mass, explain why an elite high jumper is likely to use a Fosbury flop technique.



Marks: **[6]**

19. Describe the factors affecting the air resistance of a **fast-moving** projectile in sport.

Marks: **[4]**

20. Table tennis players often use backspin when they are out of position during a rally. Explain how they achieve this.

Marks: **[5]**

recover from the energy release.

Explain how the mechanics of breathing change to help an anaerobic athlete recover.

Analyse the flight path of a well-put shot.

[illegible]

Marks: [20]