

National Mock Exams 2025

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Mark Scheme OCR GCSE PE - Paper 1

Please read before distributing to students.

Purpose of this document

This document and the associated question paper are based on the data analysis performed by The EverLearner Ltd and published within the 2025 infographics. Please, note the following:

- We believe this mark scheme has a very strong association with previous OCR GCSE PE Paper 1
 exams in relation to command terms, skills, A0 distribution, extended writing requirements and
 topics.
- However, this is categorically NOT a mark scheme for 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 make sure you attend the associated revision session in May.

This mark scheme contains:

- Copy of each question for reference
- Marking guidance where appropriate
- Marking points containing alternative acceptable responses plus relevant assessment objective

How should schools use this mark scheme?

The mark scheme has been constructed specifically for the exam paper used in The EverLearner's National Mock Exams from 2025. Many of these questions will be discussed in the live revision show provided by James Simms on Thursday 1st 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).

The 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.

I hope this helps both students and teachers in their exam preparations.

James Simms



Subject	Physical Education
Course	OCR GCSE PE 9-1
Time allowed	1 hour 0 minutes

Title OCR GCSE PE Paper 1 National Mock Exam 2025	
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Guidance	 This paper is marked out of 60 marks. You have 60 minutes (plus additional time for those who have Exam Access Arrangements). Answer all questions. A calculator is permitted for this exam. This paper contains a 6-mark question.
	Good luck.

Total marks	60			
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1. Identify **one** bone that articulates at the shoulder joint.

Marking guidance

Do not accept 'clavicle'.

Marking points (maximum 1)

- (1) [AO 1] Humerus
- (2) [AO 1] Scapula
- **2.** Describe **one** way in which the skeleton provides support for a gymnast during a floor routine.

Marking guidance

Accept other suitable examples of support in gymnastics.

- (1) [AO 2] Keeps the body upright to allow the gymnast to maintain position in a floor balance
- (2) [AO 2] Framework for the gymnast to make different body shapes such as a tuck position when rolling or tumbling
- (3) [AO 2] Keeps the gymnast's body straight when performing a handstand
- (4) [AO 2] Muscle attachment to create movement when performing combinations of skills fluently/Supports muscles in creating movement so the gymnast can perform multiple skills fluently/Advanced skills such as a somersault

3. Describe one role of ligaments at a joint.

Marking guidance

Do not accept 'prevents injury' or 'protection'. These terms are too vague.

Marking points (maximum 1)

- (1) [AO 1] Connect bone to bone/Connect bones
- (2) [AO 1] Stabilise the joint/Stabilise bones during movement/Stabilise
- (3) [AO 1] Prevent dislocations
- (4) [AO 1] Protect joints
- (5) [AO 1] Assist in maintaining posture/Maintain posture

4. Describe the role of cartilage at the knee joint during a long jump.

Marking guidance

Accept other suitable examples. To be awarded the mark, candidates must link the role of cartilage to the long jump. Listing only the role is too vague.

- (1) [AO 2] Shock absorber as foot hits the floor during approach/Shock absorber when landing/Shock absorber at the knee during take-off
- (2) [AO 2] Prevents friction during approach/Prevents bones rubbing during run up
- (3) [AO 2] Prevents wear and tear so long jump can be completed repeatedly/Prevents wear and tear to allow long jumper to continue performing or training
- (4) [AO 2] Provides stability to the joint during weight-bearing elements of long jump/Provides stability during approach/Provides stability during landing
- (5) [AO 2] Aids mobility to maintain flight after take-off/Aids mobility to perform the skill of long jump effectively

5. Identify one characteristic of veins.

Marking points (maximum 1)

- (1) [AO 1] Large lumen/Wide lumen
- (2) [AO 1] Carry blood at low pressure/Low pressure/Low-pressure blood
- (3) [AO 1] Veins have valves/Pocket valves/Valves
- (4) [AO 1] Usually transport deoxygenated blood
- **6.** Other than veins, state **two** types of blood vessel.

Marking guidance

Do not accept 'venules'

Marking points (maximum 2)

- (1) [AO 1] Arteries/Artery/Arterioles
- (2) [AO 1] Capillaries/Capillary
- 7. Which one of the following is not a muscle in the upper body?

Marking points (maximum 1)

- (1) [AO 1] B- Gastrocnemius/Gastrocnemius/B
- **8.** For which **one** of the following athletics events would plyometric training be least helpful for?

Marking points (maximum 1)

- (1) [AO 1] C-Marathon/Marathon/C
- **9.** Look closely at this image. Identify the class of lever.

Marking points (maximum 1)

(1) [AO 2] Third-class lever/Third class/Biceps curl is a third-class lever

10. Explain why some levers have a mechanical advantage.

Marking points (maximum 2)

- (1) [AO 3] Effort arm must be longer than the load arm/Effort arm longer/Load arm must be shorter than the effort arm
- (2) [AO 3] All second-class levers have mechanical advantage
- (3) [AO 3] First-class levers can have a mechanical advantage if the fulcrum is nearer the load
- (4) [AO 3] Third-class levers cannot have mechanical advantage
- (5) [AO 3] Mechanical advantage allows performer to lift a heavy load with little effort/Mechanical advantage results in little effort required to lift a large load/Mechanical advantage means performer can apply large forces with little effort

11. Define adduction.

Marking guidance

The definition must contain 'movement towards the midline' for the marks to be awarded.

Marking points (maximum 1)

(1) [AO 1] Movement towards the midline of the body/Movement of a limb towards the midline of the body

12. Identify **one** suitable fitness test to assess the leg power of a basketball player.

Marking guidance

Although sergeant jump is not included in the OCR specificiation, it is a valid test for power.

- (1) [AO 2] Vertical jump
- (2) [AO 2] Standing jump/Standing broad jump/Sergeant jump

13. Look closely at this image.

Identify the plane of movement this skill is occurring along.

Marking points (maximum 1)

(1) [AO 3] Sagittal/Sagittal plane/Somersault occurs on the sagittal plane

14. Look closely at this image.

Identify the axis of rotation this skill is occurring around.

Marking points (maximum 1)

(1) [AO 3] Frontal/Frontal axis/Cartwheel occurs on the frontal axis

15. State **one** short-term effect of exercise on the respiratory system.

Marking points (maximum 1)

- (1) [AO 1] Increase in respiratory rate/Increase in breathing rate
- (2) [AO 1] Increase in tidal volume
- (3) [AO 1] Increase in minute ventilation

16. Look closely at this image.

Identify the parts of the heart labelled A and B.

- (1) [AO 1] A- Aorta/A is the aorta/Aorta
- (2) [AO 1] B- Right atrium/B is the right atrium/Right atrium

17. Define minute ventilation.

Marking guidance

Accept other suitable definitions. The definition must include '**volume**' and refer to '**per minute**' to be awarded the mark.

Marking points (maximum 1)

(1) [AO 1] Volume of gas inhaled or exhaled from the lungs per minute/The volume of air inhaled or exhaled from the lungs per minute

18. Describe the role of the intercostals during expiration.

Marking points (maximum 1)

- (1) [AO 2] Intercostals relax/Relaxation/Relax
- (2) [AO 2] Intercostals return the ribs to original position/Ribs down and in/Assist in reducing the volume of thoracic cavity

19. Define the principle of overload.

Marking points (maximum 1)

- (1) [AO 1] Greater-than-normal stress that is applied on the body for training adaptations to take place/Putting stress on the body/Training to cause adaptations to your body
- (2) [AO 1] Training more than you would usually do/Training beyond what is comfortable
- 20. The sit and reach test measures flexibility.

Look closely at this table. Identify which performer has the highest single score across the two tests.

Marking points (maximum 1)

(1) [AO 3] Anita has the highest test score/Anita

21. Calculate which performer has shown the least improvement in their sit and reach test score.

Marking points (maximum 1)

- (1) [AO 3] Nelson has shown the least improvement/Nelson
- **22.** Describe how each performer could improve their sit and reach test score further by applying specificity to their training programme.

Marking points (maximum 1)

- (1) [AO 3] Ensure the type of training is specific to flexibility/Choose training that focuses on flexibility/Choose flexibility exercises as part of training sessions
- (2) [AO 3] Complete exercises which focus specifically on hamstring muscles/Sit and reach test measures hamstring flexibility, so performer needs to focus on these muscles/Hamstring flexibility training will likely lead to better sit and reach test scores
- (3) [AO 3] Reduce upper-body flexibility exercises/Upper-body flexibility exercises are not specific enough to score well in the sit-and-reach test

23. Describe continuous training.

Give **one** example of a sporting activity where continuous training is beneficial.

Marking guidance

Accept other suitable sporting examples.

Max one mark for description and max one mark for example.

- (1) [AO 1] Constant speed/Constant velocity/Steady state
- (2) [AO 1] No rest/Little rest/No recovery periods
- (3) [AO 1] Long distance/Long duration/At least 20 minutes
- (4) [AO 1] Aerobic training zone/Aerobic
- (5) [AO 2] Triathlon/Long-distance running/Endurance swimming

24. Look closely at this image. Phase A is the upward phase. Phase B is the downward phase.

State the type of movement occurring at the knee during the **upward** phase.

Marking points (maximum 1)

- (1) [AO 3] Phase A is extension/Upward phase is extension/Extension
- **25.** Look closely at this image. Phase A is the upward phase. Phase B is the downward phase.

Identify the agonist and the antagonist muscles at the knee during the **upward** phase.

Marking guidance

Do not accept abbreviations of ""quadriceps"" and ""hamstrings"". Accept phonetic spelling errors.

- (1) [AO 1] Agonist muscles are the quadriceps/Quadriceps is agonist muscle/Quadriceps
- (2) [AO 1] Hamstrings are the antagonist muscles/Hamstrings is antagonist muscle/Hamstrings

26. Explain why agility and muscular endurance are more important fitness components for playing Association football than 100m sprinting.

Marking points (maximum 3)

- (1) [AO 3] Agility is changing direction at speed and 100m sprinters run in a straight line/100m sprinting is in a straight line, so agility is not important
- (2) [AO 3] 100m sprinting is short in duration, so muscular endurance not important as muscles do not work for prolonged periods of time/Muscular endurance is not needed in 100m sprinting due to short duration
- (3) [AO 3] Agility is important in football in order to dribble round an opponent/Change direction when possession is turned over/Turn with the ball in a tight space
- (4) [AO 3] Muscular endurance is important in football to last 90 minutes/Last the whole game/Perform well towards the end of the game
- (5) [AO 3] Speed is more important than agility in sprinting/Power is more important than agility in sprinting

27. Look closely at this image.

Identify the **two** fitness components that are most important to a 100m sprinter at the start of a race.

- (1) [AO 2] A-Reaction time/Reaction time/A
- (2) [AO 2] D- Power/Power/D

28. Identify **two** long-term effects of exercise on the muscular system. Explain how each effect could benefit a 100m sprinter.

Marking guidance

Accept other suitable examples related to sprinting. Max two marks for AO1 points. Max two marks for AO2 points.

Marking points (maximum 4)

- (1) [AO 1] Muscular hypertrophy/Increase in muscle size
- (2) [AO 1] Increase in muscular strength/Muscles able to transmit more force
- (3) [AO 1] Increase in muscular endurance/Muscles able to work for longer prior to fatigue/Muscles are more resistant to fatigue
- (4) [AO 1] Increase in strength of respiratory muscles
- (5) [AO 2] Increase in size of muscle will help 100m sprinter generate power out of the blocks
- (6) [AO 2] Increase in muscular strength will allow 100m sprinter to generate more force per stride when pushing foot into the track
- (7) [AO 2] Increase in muscular endurance will allow sprinter to get to the finish line without fatiguing/Muscular endurance not as important to a sprinter but will still allow muscles to work repeatedly without tiring
- (8) [AO 2] Increase in strength of respiratory muscles will allow sprinter to repay oxygen debt at the end of the race more efficiently/Will assist in repaying oxygen debt/Will allow sprinter to recover at the end of the race quickly
- **29.** Look closely at this graph, which shows the heart rate of two different performers during an exercise session. Which performer has the lowest resting heart rate?

Marking points (maximum 1)

(1) [AO 3] Perfomer A has the lowest resting heart rate/Performer A/A

30. Calculate the **difference** in heart rate for performer B from resting heart rate to their heart rate after six minutes.

Marking points (maximum 1)

(1) [AO 3] 60bpm/The difference in heart rate is 60bpm/60

31. Identify **two** ways to minimise the risk of injury in sport and give a sporting example of each.

Marking guidance

Accept other suitable sporting examples of ways to prevent injury. The example must match the identified way of preventing injury.

Max two marks for identifying ways to prevent injury. Max two marks for associated examples.

- (1) [AO 1] Personal protective equipment/PPE
- (2) [AO 1] Correct clothing/Correct footwear
- (3) [AO 1] Appropriate level of competition/Competition at the right level
- (4) [AO 1] Lifting and carrying equipment safely
- (5) [AO 1] Use of a warm-up/Use of a cool-down
- (6) [AO 2] PPE-Helmet in cricket/Pads in skateboarding/Shin pads in football
- (7) [AO 2] Correct clothing- Wicking fabric / Correct footwear-Spiked athletics shoes for track running/Trainers for long-distance running
- (8) [AO 2] Carrying equipment Walking with a javelin with the point facing the ground/Carrying heavy tackle bags in pairs/Bending knees when picking up weights in the gym
- (9) [AO 2] Warm-up and cool-down/Pulse raiser by jogging/Stretching before a match

32. State **one** example of an aerobic activity and **one** example of an anaerobic activity.

Using these examples, compare aerobic and anaerobic exercise.

Marking guidance

100m sprinting and marathon running have been used for the purpose of the mark scheme for AO3 marking points. Accept other sporting activities.

For AO3 marks to be awarded, there must be a direct comparison between the difference in the two activities.

Max 1 mark for example of aerobic activity. Max 1 mark for example of anaerobic activity. (AO1)

Max 2 marks for comparsion points (AO3)

- (1) [AO 2] Anaerobic 100m sprint/Weightlifting/Javelin
- (2) [AO 2] Aerobic Long-distance running/Long-distance cycling/Long-distance swimming
- (3) [AO 3] 100m sprinting occurs over a short duration, whereas marathon running occurs over a long duration
- (4) [AO 3] 100m sprinting occurs at a high intensity, whereas marathon running occurs at a moderate intensity
- (5) [AO 3] 100m sprinting is performed without the presence of oxygen, whereas marathon running is performed with the presence of oxygen
- (6) [AO 3] During the 100m lactic acid is a by-product of working anaerobically, whereas lactic acid is not a by-product of most of a marathon running as the oxygen supply to muscles meets demand

33. Identify **one** potential hazard of playing on a grass tennis court.

Marking guidance

Accept other suitable examples of hazards that are associated with outdoor grass facilities.

Marking points (maximum 1)

- (1) [AO 2] Slipping over on wet surface/Slipping on frosty surface/Slipping over on short grass
- (2) [AO 1] Hidden sharp objects within the grass
- (3) [AO 1] Holes in the grass surface/Uneven playing surface/Poorly tended surface

34. A tennis player completes a cool-down after a long match. Identify **one** component that could be included in the cool-down and describe **two** benefits of completing a cool-down for the tennis player.

Marking guidance

Max one mark for component of a cool-down. Max two marks for benefits of cool-down for the tennis player.

- (1) [AO 1] Low-intensity exercises/Light jogging/Exercises to lower the heart rate
- (2) [AO 1] Stretching/Stretches
- (3) [AO 2] Help the body return to resting state
- (4) [AO 2] Lower heart rate
- (5) [AO 2] Lower body temperature
- (6) [AO 2] Circulate blood and oxygen
- (7) [AO 2] Reduce breathing rate
- (8) [AO 2] Increase removal of waste products/Removal of lactic acid
- (9) [AO 2] Reduce the risk of sore muscles/Reduce the risk of stiff muscles/Reduce the risk of DOMS
- (10) [AO 2] Aid recovery/Aid recovery to play or train again soon

35. Explain the redistribution of blood flow for a performer **during** a tennis match. Describe the use of imagery **before** the match to optimise the tennis player's performance.

Marking guidance

OCR GCSE PE (6-mark level descriptors)

- (1) [AO 1] Redistribution of blood flow during exercise occurs via the vascular shunt mechanism/Vascular shunt/Blood shunting
- (2) [AO 1] Vasodilation of blood vessels towards the working muscles
- (3) [AO 1] Vasoconstriction of blood vessels towards other organs in the body
- (4) [AO 2] Opening of vessels leading to the muscles allows more blood through/Arteries leading to the muscles become wider/Arteries leading to the muscles open
- (5) [AO 2] Narrowing of vessels leading to the other organs allows less blood through/Arteries leading to the other organs become narrow/Arteries leading to the other organs narrow
- (6) [AO 3] Tennis player requires more oxygen to working muscles to be able to maintain performance levels so vessels vasodilate/To be able to keep playing so vessels vasodilate/To ensure muscles do not fatigue so vessels vasodilate
- (7) [AO 3] Less blood is required than at rest to the tennis players other organs so vessels to other organs constrict
- (8) [AO 3] Tennis player able to play a full match/Able to play multiple sets/Able to play long points
- (9) [AO 1] Imagery is visualisation of success/Visualising success/Visualisation of success
- (10) [AO 2] Tennis player uses imagery to visualise hitting winning shots/Serving aces/Beating opponent
- (11) [AO 3] Leads to a positive mindset/Positive thoughts during the match/Feeling confident
- (12) [AO 3] Lowers anxiety levels/Reduces stress/Reduces nerves
- (13) [AO 3] Can be used to increase the chances of winning the match/Increases the chances of successful outcome/Reduce chances of negative outcome



OCR GCSE Physical Education 6 Mark Level Descriptors

Level	Marks	Description
3	5-6	 Detailed knowledge and understanding. Clear and consistent practical application of knowledge and understanding. Effective analysis/evaluation and/or discussion/explanation/development. Relevant information drawn upon from other areas of the specification. Accurate use of technical and specialist vocabulary. There is well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.
2	3-4	 Satisfactory knowledge and understanding. Some success in practical application of knowledge and understanding. Analysis/evaluation and/or discussion/explanation/development attempted with some success. Some relevant information drawn upon from other areas of the specification. Technical and specialist vocabulary used with some accuracy. There is a line of reasoning presented with some structure. The information presented is most part relevant and supported by some evidence.
1	1-2	 Basic knowledge and understanding Little or no attempt at practical application of knowledge and understanding Little or no attempt to analyse/evaluate and/or discuss/explain/develop Little or no relevant information drawn upon from other areas of the specification Technical and specialist vocabulary used with limited success The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.
	0	No response or no response worthy of credit.