The EverLearner

National Mock Exams 2023

POWERED BY ExamSimulator

Model Answers
AQA GCSE PE - Paper 1

This document contains:

- Model answers for the National Mock Exam questions
- Model examples of extended writing
- Marking for each of the model answers in order to guide teachers and students to credit-worthy elements of the answers

How should schools use these papers?

These model answers are written to support PE teachers and students review the National Mock Exam 2023 and to prepare for the live revision sessions delivered by James in May 2023. We strongly recommend that students learn these model answers in preparation for the summer exams 2023. The questions posed and the answers provided are based on significant analysis of past papers.

Please, use these model answers in combination with the National Mock Exam paper, mark scheme and the revision session (Wednesday, 3rd May 3.30pm-5.00pm), available in the AQA GCSE PE Revision page: https://pages.theeverlearner.com/2023-aqa-gcse-pe-revision.

All questions are taken from ExamSimulator. Please note, there are hundreds of additional questions on ExamSimulator covering all topics and skills. ExamSimulator is a premium resource available via TheEverLearner.com.

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

James Simms

The EverLearner

Subject	Physical Education
Course	AQA GCSE PE
Time allowed	1 hour 15 minutes

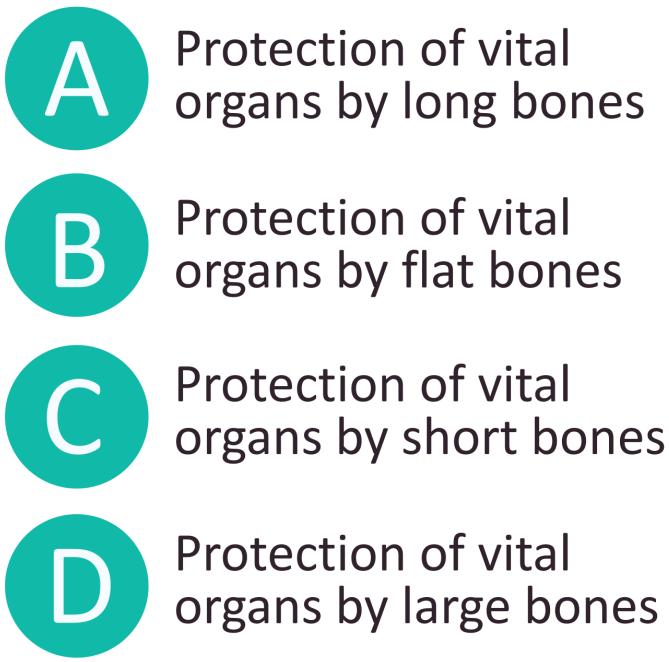
First name	
Last name	
Class	Physical Education GCSE
Teacher	

Title	AQA GCSE PE 9-1 Paper 1 National Mock Exam 2023

Guidance	• This paper is marked out of 78 marks. • You have 75 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 and a 9-mark question. • Good luck.

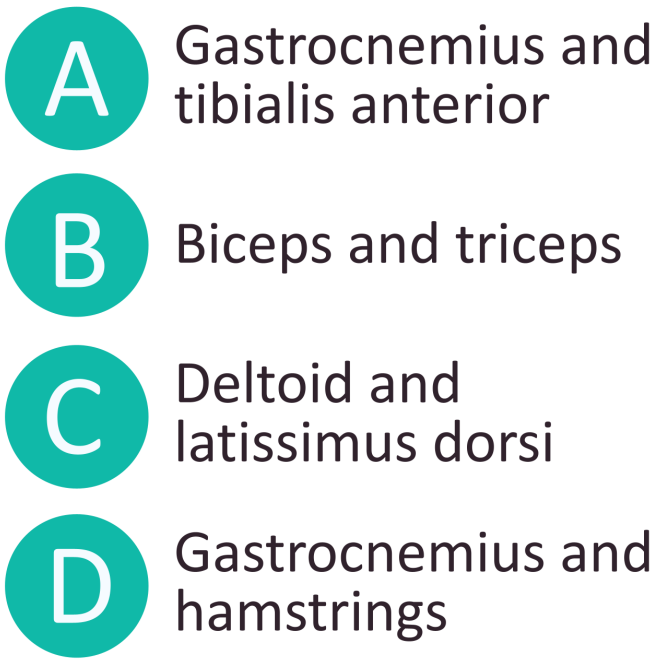
Total marks	78 / 78 (100%)

1. Which of the following is a function of the skeleton?



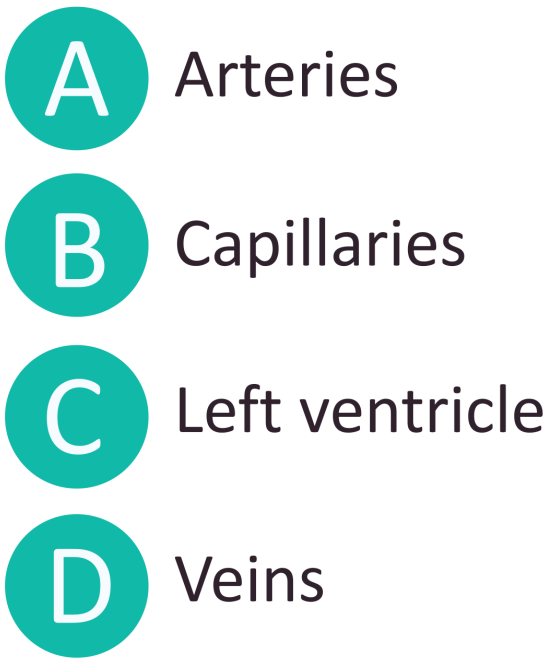
1 B - Protection by flat bones.	No comments provided.
	Marks:[1/1]

2. Which of the following are an antagonistic pair of muscles in the **legs**?



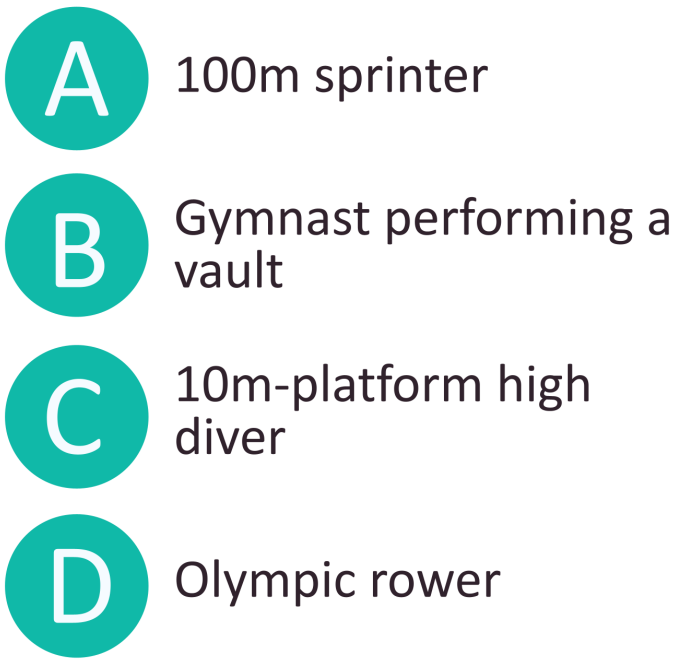
1 **A - Gastrocnemius and tibialis anterior.**	**No comments provided.**
	Marks:[1/1]

3. Which type of blood vessel tends to have the largest lumen?



1 D - Veins.	No comments provided.
	Marks:[1/1]

4. Which of the following sports performers relies most heavily on muscular endurance?



1 Rower - option D.	No comments provided.
	Marks:[1/1]

5. Which of the following sporting movements is the best example of anaerobic exercise?

1 Option A.	No comments provided.
	Marks:[1/1]

6. Define balance. Give a sporting example.

Balance is maintaining the 1 centre of mass over a base of support. It can be both static and dynamic. An example of static balance is 2 holding a Y pose in a dance routine.	2 Very nice example. Could be improved by stating the impact of holding the balance such as it having greater aesthetic quality.
	Marks:[2/2]

7. Justify the importance of balance to a handball player.

An attacker needs to be balanced before taking a shot at goal so the shot is accurate and difficult to save. A defender needs to have a strong base of support when defending the ball so no contact is made with the opposition. A goalkeeper requires lots of dynamic balance to remain stable whilst moving quickly to be able stop the ball going into the net. A mid - court player needs to have excellent dynamic balance so that they can move down court and evade challenges.	No comments provided.
	Marks:[4/4]

8. This image shows the performance of a deadlift.
Identify the movement pattern occuring at the knee in position A.

A

B

The knee is in a position of flexion.	No comments provided.
	Marks:[1/1]

9. This image shows the performance of a deadlift.
Identify *both* the **agonist** and the **antagonist** at the knee when the performer moves from position A to position B.

A

B

The agonist for [1] flexion of the knee in the deadlift are the quadriceps[2]. The antagonist are the hamstrings.	[1] Superb. You recognised that the movement is an eccentric contraction of the quadriceps.
	Marks:[2/2]

10. This image shows the performance of a deadlift.
Identify the type of muscle contraction occuring in the **agonist** of the knee when moving from position A to position B.
Justify your answer.

A

B

1 The muscle contraction is isotonic concentric. This is because 2 the muscle is under tension and shortening.	No comments provided.
	Marks:[2/2]

11. Identify **two** elements of an effective cool-down.

1. A light jog 1 to maintain breathing rate. 2. Static 3 stretching.	No comments provided.
	Marks:[2/2]

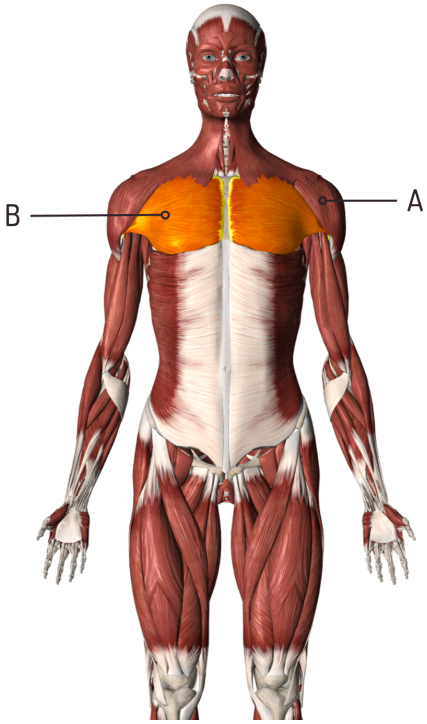
12. Explain why a cool-down is beneficial to a badminton player.

The cool - down removes lactic acid more rapidly so the badminton player does not experience too much muscle fatigue. The reduced muscle soreness will ensure the player can train sooner after the match and still be able to complete positions such as a deep lunge to stop the shuttlecock hitting the floor. Finally, the cool - down allows the player to be able to reflect on the game, which will support what needs to be completed in training to prepare for the next match.	No comments provided.
	Marks:[3/3]

13. Calculate the heart-rate training range for the badminton player in the image.

MaxHR is 220 minus age. Therefore, 220 - 20 = 200bpm. The anaerobic training zone is 80 - 90% of MaxHR. 80% is calculated as 0.8 x 200 = 160bpm. 90% is calculated as 0.9 x 200 = 180bpm. The range will be 160 - 180bpm.	③ Excellent summary point.
	Marks:[3/3]

14. Look closely at this image.
Identify **both** muscle A **and** muscle B.



A - Deltoid. B - Pectorals.	No comments provided.
	Marks:[2/2]

15. The tibia is one bone that articulates at the ankle.
Name the other two.

The two other bones in the ankle are the fibula and talus.	No comments provided.
	Marks:[2/2]

16. Name the type of joint found at the ankle.

The ankle joint is a hinge joint.	No comments provided.
	Marks:[1/1]

17. Describe the role of cartilage in a joint.

The cartilage covers the end of long bones. The cartilage can absorb shock when landing from a jump and also stops the bones rubbing together.	No comments provided.
	Marks:[2/2]

18. Describe the protocol for the wall-throw test of coordination.

An individual starts by facing a wall two metres away. The ball is thrown against the wall with one hand using an underarm action and caught by the other hand. This process repeats and continues for 30 seconds and the number of successful catches are recorded.	No comments provided.
	Marks:[4/4]

19. Identify **four** short-term effects of exercise that occur up to 36 hours after exercise.

1. DOMS. 2 - Nausea. 3. Cramp. 4. Fatigue.	No comments provided.
	Marks:[4/4]

20. Explain how a middle-distance runner could use **time** from FITT to progressively overload weight training.

Time from FITT can be used in the following three ways in order to progressively overload weight training. The runner can complete more repetitions. The runner can train for longer. The runner could lower the recovery time between sets.	No comments provided.
	Marks:[3/3]

21. Other than an ice bath, identify **three** recovery methods from vigorous exercise.

1. Massage. 2. Stretching. 3. Rehydration.	No comments provided.
	Marks:[3/3]

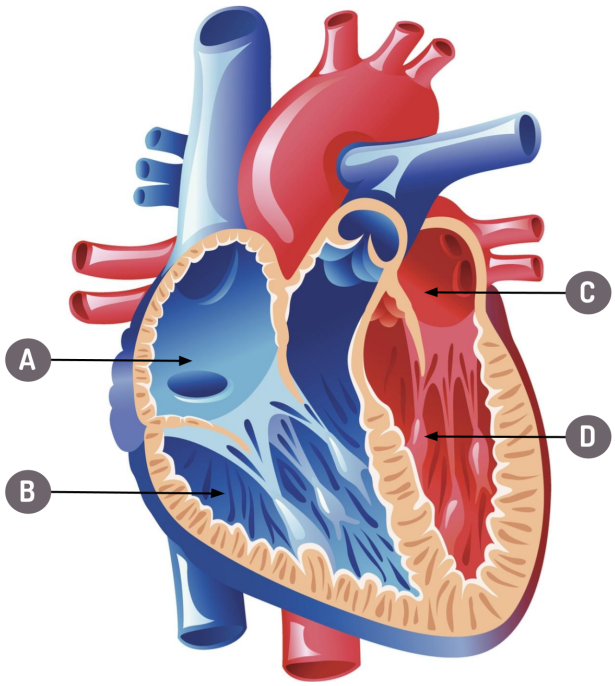
22. Discuss the use of an ice bath when recovering from sport.

Ice baths can be beneficial due to the extreme cold reducing swelling and inflammation, leading to a performer being able to train sooner from a quicker recovery process. However, ice baths are extremely uncomfortable and, if used too frequently or for too long, can lead to nerve damage resulting in weaker muscle performance when next competing.	6 Fantastic point especially because you wrote "...if used too frequently of for too long...".
	Marks:[4/4]

23. This image shows a discus thrower preparing to throw.
Identify **both** the plane of movement **and** the axis of rotation during the spin.

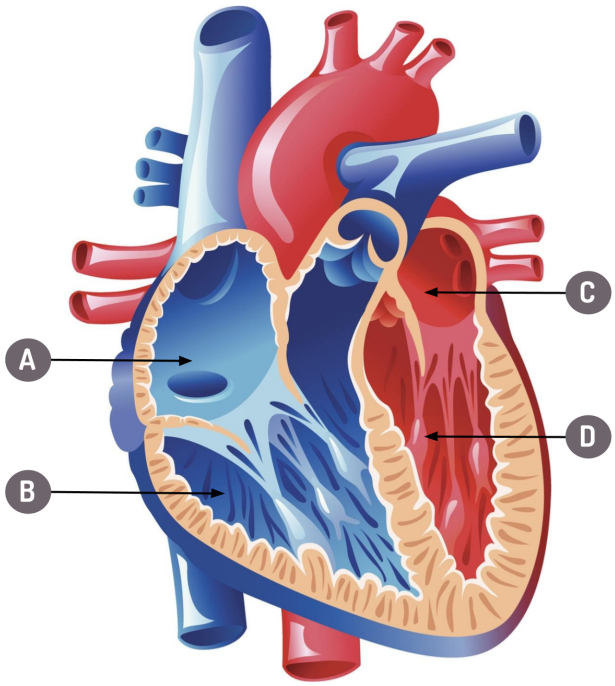
1 Transverse plane and 2 longitudinal axis.	No comments provided.
	Marks:[2/2]

24. Look closely at this image of the heart.
Identify the heart structures labelled A, B and C.



1 A. Right atrium. 2 B. Right ventricle. 3 C. Left atrium.	No comments provided.
	Marks:[3/3]

25. Look closely at this image of the heart.
Describe the role of the heart feature C.



The (1) left atrium is the chamber of the heart which receives (2) oxygenated blood from the pulmonary vein and pushes it through (3) the bicuspid valve to the left ventricle.	No comments provided.
	Marks:[2/2]

26. Look at the data closely.
Calculate the runner's exercising stroke volume.
Include the correct units in your answer.

Exercising cardiac output, stroke volume and heart rate for a marathon runner

Heart rate	Stroke volume	Cardiac output
160 bpm	?	24l/min

Q = HR x SV. Therefore SV = (1) Q divided by HR. The calculation is 24000ml divided by 160bpm. The stroke volume is (2) 150ml.	No comments provided.
	Marks:[2/2]

27. State which classification of lever is operating at the ankle during plantar flexion.

The (1) ankle is a second - class lever.	No comments provided.
	Marks:[1/1]

28. State **two** different sporting examples using a first-class lever system.

A first - class lever can be seen at the elbow when (1) throwing the ball in during a rugby line - out and a (2) set shot in basketball when extending the arm to push the ball in the air.	No comments provided.
	Marks:[2/2]

29. This image shows the fitness test results for four GCSE PE students.
Analyse the students' performances and the normative data. How many other students share the same flexibility rating as Hannah?

Student performances

	MSF test	Sit and reach	Vertical jump
John (m)	11.1	12cm	37cm
Alfie (m)	8.4	10cm	31cm
Hannah (f)	7.6	14.5cm	35cm
Alessandra (f)	12.3	15cm	42cm

Normative data

Gender	Excellent	Above average	Average	Below average	Poor
Male	>14	14.0 - 11.0	10.9 - 7.0	6.9 - 4.0	< 4
Female	>15	15.0 - 12.0	10.9 - 7.0	6.9 - 4.0	< 4

Data from DAVIS, B. et al. (2000) *Physical Education and the study of sport*, 4th ed. London: Harcourt Publishers.

The data shows Hannah is above average. John and Alessandra are also in this rating.	**No comments provided.**
	Marks:[2/2]

30. Andre is a 17-year-old tennis player competing at county level.
Justify the importance of taping and bracing and hydration as injury prevention methods for Andre.

Taping and bracing is often placed around a joint to protect a weakness in that joint. The knee and ankle joints are used frequently in tennis, as the player has to be agile and turn multiple times to be able to move onto and return the ball. Therefore, the taping or bracing is important, as it leads to increased joint stability, which prevents further injury. It becomes far less likely that the joints would dislocate or receive a soft tissue sprain, even during the full range of movement needed to be able to twist and turn to stay in a rally. This will mean the tennis player is also able to play with the confidence that the joint is protected as fully as possible, which compliments an effective warm - up routine. Hydration is the maintenance of fluid levels before, during and after exercise. Tennis games take place over a long period of time and the player sweats to regulate body temperature. Therefore, good rehydration is vital to prevent any consequences of dehydration occurring, such as increased blood viscosity and slow blood flow, which will lead to a deterioration in cardiovascular endurance. If dehydrated, the player will fatigue sooner and not be able to reach shots or last the set to their full potential. Likewise, the reaction times are likely to be increased (longer), which means shots can be missed and points lost.	No comments provided.
	Marks:[6/6]

31. A rugby league team use fitness tests to identify strengths and weaknesses.
Discuss the suitability of the sit-and-reach test **and** the sit-up bleep test to assess the fitness levels of the team.

The sit - and - reach test is a test of flexibility. Flexibility is the range of movement at a joint. The procedure for the test typically involves the use of a sit - and - reach box. When stretching, the player sits on the floor and must keep their knees fully extended as they reach forward as far as they can with their arms. The point at which they reach is measured in centimetres. A rugby player requires flexibility in the hip joint when sprinting and driving past players with the ball. They also need a flexible lower back when evading tackles. The sit - and - reach test is only a measure of the flexibility at the lower back and hamstrings and the flexibility which exists at the hip joint. Therefore, this test is useful to work out some of the baseline levels of the lower - back flexibility stated. However, rugby league players require flexibility in other areas of the body too. For example, their shoulders need to be flexible in order to reach around another player when making a tackle. This would suggest that the sit - and - reach test is not a valid test for overall flexibility required in rugby league. The reliability of the test can also be low. If a rugby player were to perform a warm - up and stretch before the test, they would be likely to reach further and the quantitative results may be inaccurate. The sit - up bleep test is a test of muscular

26 Excellent equivalent synoptic link.

(1) Excellent description of a the S&R test but doesn't receive credit in this discussion.

31. A rugby league team use fitness tests to identify strengths and weaknesses.
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endurance. It targets the abdominal muscles. An individual completes the sit - up movement and maintains the pace of bleeps on an audio recording. Rugby league players require overall muscle endurance to keep running during the many phases of open play. This would suggest the test is useful but not specific enough to the muscles in the legs and arms as well as the abdominal muscles. Additionally, the abdominals and the sit - up movement are used when getting up quickly from the ground after a tackle. However, the abdominals are used in other movements such as passing and kicking, which are very different from the sit - up technique. It can also be argued that other fitness components and tests such as strength and the one - rep max are more suitable to rugby league, as the one - rep max can be completed with multiple and specific muscles in the body. This also links to the importance of diet. To power a fitness test such as the sit - up bleep test, consumption of the right types of carbohydrates is important for energy release. Carbohydrates contain sugars (glucose) and these are the energy source of both the aerobic and anaerobic energy systems, both of which will be required for the test.	
	Marks:[9/9]

END OF QUESTIONS