



The EverLearner

National Mock Exams 2024

POWERED BY ExamSimulator

Model Answers OCR GCSE PE - Paper 1

This document contains:

- Model answers for the National Mock Exam questions
- Model examples of extended writing

How should schools use these papers?

These model answers are written to support PE teachers and students review the National Mock Exam 2024 and to prepare for the live revision session delivered by James in May 2024. We strongly recommend that students learn these model answers in preparation for the summer exams 2024. The questions posed and the answers provided are based on significant analysis and model BOTH content and skills.

Please, use these model answers in combination with the National Mock Exam paper, mark scheme and the revision session (Thursday, 9th of May 2024, 15:00-16:30), available via the OCR GCSE PE Revision page:

<https://pages.theeverlearner.com/2024-ocr-gcse-pe-revision>

All questions are taken from ExamSimulator. ExamSimulator is a premium resource available via TheEverLearner.com.

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

First name	
Last name	
Class	
Teacher	

Title	OCR GCSE PE 9-1 Paper 1 National Mock Exam 2024
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Guidance	<ul style="list-style-type: none">• 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.
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Total marks	60
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1. Define tidal volume.

The amount of air which enters the lungs during inhalation at rest.

Marks: [1]

2. What type of joint is the shoulder?

The shoulder is a ball-and-socket joint.

Marks: [1]

3. Identify the movement pattern that has occurred at the **right shoulder** in the image.



Flexion

Marks: [1]

4. Identify which of the following describes a capillary.

- A** Vessel carrying blood away from the heart
- B** Site of gaseous exchange
- C** Vessel returning blood to the heart
- D** Vessel with a large lumen

B- Site of gaseous exchange

Marks: **[1]**

5. Red-blood-cell production and storage of minerals are two functions of the skeleton.

Explain how **two other** functions of the skeleton benefit a high diver.

The cranium protects the brain at impact when the diver hits the water. The skeleton provides support when the body is extended during a handstand at the start of the dive.

Marks: **[2]**

6. Identify the joint component responsible for the transmission of force from the **muscle onto a bone**.

Tendon

Marks: [1]

7. Define muscular endurance.

Muscular endurance is: The ability of muscles to work repeatedly without tiring

Marks: [1]

8. The intercostals are a muscle group involved in breathing. Describe the role of **one other** breathing muscle.

The diaphragm contracts and flattens when breathing in. The diaphragm relaxes when breathing out.

Marks: [2]

9. Look at the following image.

State the correct plane of movement **and** axis of rotation for the leg action of the runner.



Plane: Sagittal plane

Axis: Transverse axis

Marks: [2]

10. Identify a role of red blood cells from the following options.

- A To suspend other blood cells
- B To fight infection
- C To clot the blood
- D To bind with oxygen

D- Bind with oxygen.

Marks: [1]

11. Name the valve that prevents backflow of blood between the left ventricle to the left atrium.

Bicuspid valve

Marks: [1]

12. State where in the body you would expect to find the phalanges.

End of the fingers

Marks: [1]

13. Identify **one** potential hazard of an outdoor artificial sporting environment.

Tears in the pitch surface causing a trip or fall.

Marks: [1]

14. The components of an effective warm-up are listed alongside the impact of each component.

Which component of the warm-up has not been included?

Components of an effective warm-up

Pulse-raiser	Increased muscle temperature
Mobility exercises	Increased flexibility of joints
Stretching	Increased muscle pliability
Dynamic movements	Increased strength of contraction
?	Increase coordination of muscle pairs

The missing warm up phase is: Skill-related practice

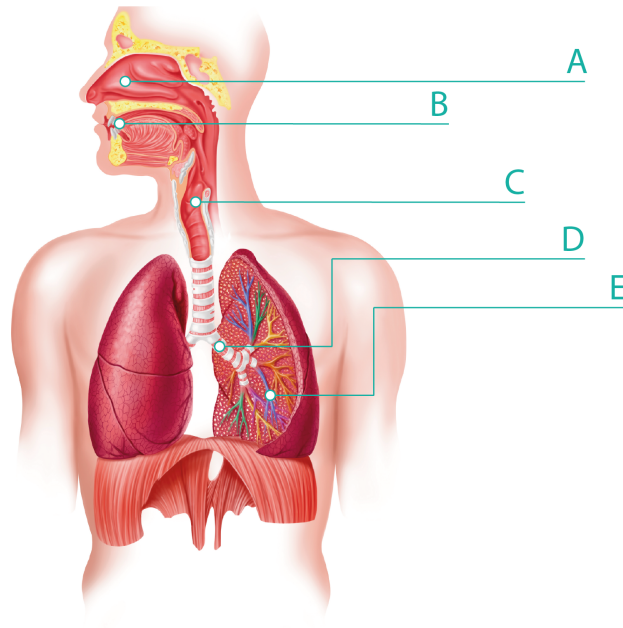
Marks: [1]

15. Describe the role of the triceps during **both** the upwards **and** downwards phases of a biceps curl.

The triceps act as the antagonist in the upwards phase. The triceps still act as the antagonist in the downwards phase.

Marks: [2]

16. Look closely at this image. Which respiratory feature is labelled D?



Feature D is a: Bronchus

Marks: [1]

17. A warm-up and cool-down can be used to minimise the risk of injury. State another way in which the **batsman** could minimise the risk of injury.



Protective equipment, such as wearing a helmet when batting.

Marks: [1]

18. Other than a decreased likelihood of injury, state **one** benefit to the **batsman** of completing a warm-up.



Increased pliability of tendons and ligaments

Marks: **[1]**

19. Describe the role of an agonist muscle.

The agonist muscle creates the force to cause movement.

Marks: **[1]**

20. Which is the correct option for the acronym **FITT**?

- A** Frequency, Intensity, Training, Type
- B** Frequency, Intensity, Time, Type
- C** Frequency, Interval, Time, Type
- D** Force, Intensity, Time, Type

B- Frequency, Intensity, Time, Type

Marks: **[1]**

21. Define stroke volume.

Stroke volume is: The quantity of blood pumped out of the heart per contraction.

Marks: **[1]**

22. Define coordination.

Coordination is: The ability for two or more body parts to work together smoothly and accurately.

Marks: **[1]**

23. Give **one** practical example of a sporting movement that occurs around the longitudinal axis.

A half-twist in trampolining

Marks: [1]

24. Identify the type of lever operating at the ankle when a gymnast balances on their tiptoes.

Second-class lever

Marks: [1]

25. Which type of training would be most suitable for an outfield hockey player?

- A Weight
- B Plyometrics
- C Fartlek
- D Continuous

C- Fartlek training

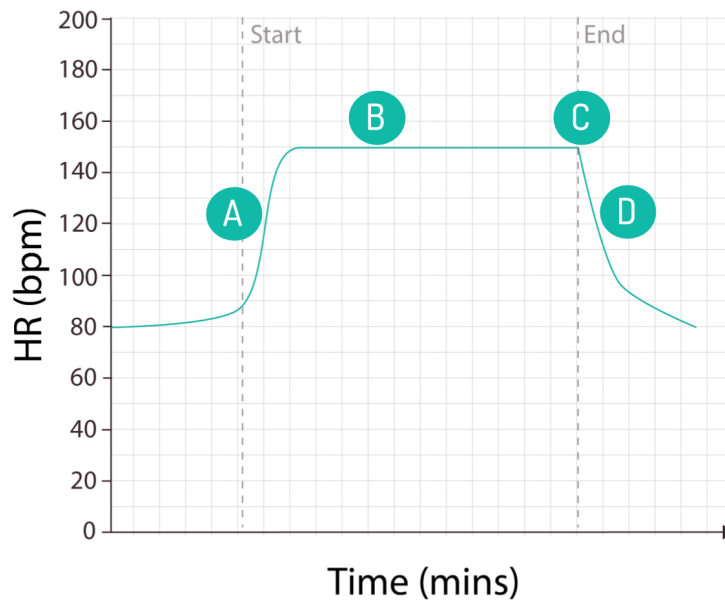
Marks: [1]

26. Describe the term overload.

When a performer trains harder than usual.

Marks: [1]

27. Using the information provided in the graph, analyse what is happening to the participant's heart rate between points A and B **and** between points C and D.



Between A and B, the heart rate reaches a steady state.

Between C and D, the heart rate decreases rapidly.

Marks: [2]

28. Name a long-term effect of exercise on the cardiovascular system.

Increased stroke volume

Marks: [1]

29. "Training with no breaks at a heart-rate range of 60%-80% maximum heart rate." What type of training is this referring to?

Continuous training

Marks: [1]

30. Explain how gaseous exchange occurs when exercising.

Gaseous exchange occurs during exercise due to a greater rate of diffusion than at rest. Oxygen will diffuse down a steeper concentration gradient into the blood, via the alveoli.

Marks: [2]

31. Using examples from sport, describe **both** aerobic and anaerobic exercise.

Aerobic exercise involves working with the presence of oxygen at a low intensity. An example of aerobic exercise is running a marathon. Anaerobic exercise involves working without the presence of oxygen at a high intensity. An example of anaerobic exercise is sprinting.

Marks: **[4]**

32. Explain how blood flow is redistributed during exercise.

Blood flow is redistributed during exercise through vasodilation and vasoconstriction.

Vasodilation is the widening of blood vessels to increase the blood flow to working muscles. This means more blood can be directed to the muscles, which provides oxygen to continue exercising. Vasoconstriction is the narrowing of blood vessels to decrease the blood flow to other organs in the body. Blood flow to other organs is, therefore, restricted, as demand at other organs is low when exercising, so the rate of blood flow is reduced.

Marks: **[4]**

33. A 50m freestyle swimmer completes a cool-down after a race. Describe the benefits of completing this cool-down.

A cool-down will assist the swimmer in gradually reducing their heart rate back to resting state. It will also help the swimmer to decrease breathing rate gradually. A cool-down will also reduce the chances of delayed onset of muscle soreness (DOMS).

Marks: **[3]**

34. Give **three** examples of potential hazards in and around the swimming pool that could cause injury to the swimmer.

Slippery surfaces could cause a fall. Poor water quality could cause infection. An overcrowded pool increases the probability of a collision.

Marks: **[3]**

35. Name **two** suitable fitness tests for strength.

Hand-grip dynamometer and one-rep max.

Marks: **[2]**

36. Describe the importance of muscular strength to a rugby player.

Muscular strength will allow the rugby player to tackle an opposition player to the floor and not be pushed backwards. Muscular strength in the legs will mean the player can kick the ball a long distance.

Marks: **[2]**

37. Using practical examples, evaluate the importance of flexibility for an elite rower.

Explain why an elite rower might be tempted to take a stimulant prior to performing.



Flexibility is the range of movement possible at a joint. Flexibility in the shoulder is important for the rower, in order to apply a full range of movement and, therefore, more force through the oar as it enters the water. The effect of this is that the rower will have to do fewer strokes per distance covered, resulting in less fatigue. However, it could be argued that power is more important to a rower than flexibility, as power will lead to the oar moving quickly and with great force through the water and assist in driving the legs as part of the rowing action. An elite rower might be tempted to take a stimulant, as it increases alertness, which is beneficial to react quickly at the start of a race. It also means they will be alert to the calls of the cox during the race, resulting in improved performance.

Marks: [6]

END OF PAPER