



The EverLearner

National Mock Exams 2024

POWERED BY ExamSimulator

Model Answers IGCSE PE Paper

This document contains:

- Model answers for the National Mock Exam questions

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 April 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 (Wednesday, 24th of April 2024, 15:00-16:30), available via the IGCSE PE Revision page:

<https://pages.theeverlearner.com/2024-igcse-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	IGCSE PE 0413
Time allowed	1 hour 45 minutes

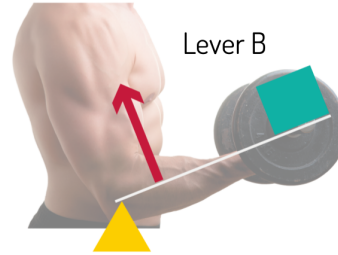
First name	
Last name	
Class	
Teacher	

Title	IGCSE PE 9-1 and 0413 National Mock Exam 2024
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Guidance	<ul style="list-style-type: none">• This paper is relevant for both iGCSE PE 9-1 students and iGCSE PE 0413.• This paper is marked out of 100 marks.• You have 105 minutes (plus additional time for those who have Exam Access Arrangements).• Answer all questions.• A calculator is permitted for this exam.• Good luck.
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Total marks	100
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1. Look closely at this image. Which two lever classifications are represented?

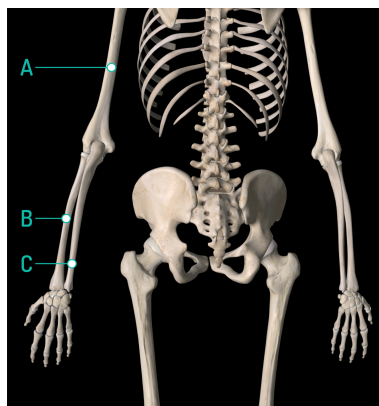


Lever A is a: First-class lever

Lever B is a: Third-class lever

Marks: **[2]**

2. Look closely at this image. Name the three long bones that are labelled with letters A, B and C.



Bone A is the: Humerus

Bone B is the: Radius

Bone C is the: Ulna

Marks: **[3]**

3. Describe the function of a long bone.

A long bone enables gross movement.

Marks: [1]

4. Identify the range of movement at a hinge joint.

Flexion to extension

Marks: [1]

5. Identify the range of movement at a ball-and-socket joint.

- Flexion to extension

- Abduction to adduction

Marks: [2]

6. Describe three positive effects of exercise and fitness on social health.

Positive effect 1: A positive effect of exercise on social health is that it can reduce loneliness.

Positive effect 2: A second positive effect is it helps in meeting new people.

Positive effect 3: Lastly, exercising with others can lead to developing communication skills.

Marks: **[3]**

7. Describe the relationship between health and fitness.

Ill health can lead to being unable to exercise, which results in fitness decreasing. High levels of physical fitness do not necessarily lead to high levels of mental or social health.

Marks: **[2]**

8. Suggest two short-term effects of exercise.

Short-term effect 1: Increase in heart rate

Short-term effect 2: Increase in sweating

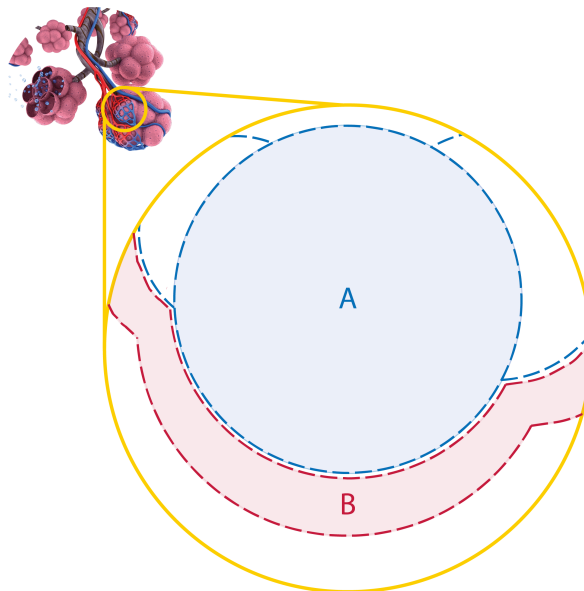
Marks: **[2]**

9. Explain how the structure of the heart changes to improve efficiency as a result of long-term training..

Regular training can lead to cardiac hypertrophy, which is where ventricular walls become thicker and stronger. This, in turn, leads to stronger contractions of the heart. Due to the heart being able to pump a greater volume of blood per beat, there is a reduction in resting heart rate called bradycardia. Being able to pump blood more forcefully also means stroke volume and cardiac output increase. This is due to the heart pumping a larger volume of blood per beat and, therefore, per minute.

Marks: [6]

10. Look closely at this image. Identify feature A **and** feature B.



A is: Alveolus

B is: Capillary

Marks: [2]

11. Describe gaseous exchange at the lung.

Gaseous exchange occurs at the lungs as a result of the diffusion of gases. The concentration of oxygen in the alveoli is higher than in the capillaries. Oxygen moves into the capillaries from the alveoli and is then transported to the working muscles and vital organs. Carbon dioxide moves in the opposite direction from the capillaries into the alveoli.

Marks: **[2]**

12. Describe a characteristic of a capillary that helps gaseous exchange.

Capillaries have a large blood supply which assist gaseous exchange.

Marks: **[1]**

13. Suggest **three outcomes of overarousal for a sports performer.**

Outcome 1: Stress

Outcome 2: Narrowing of attentional focus

Outcome 3: Decrease in performance

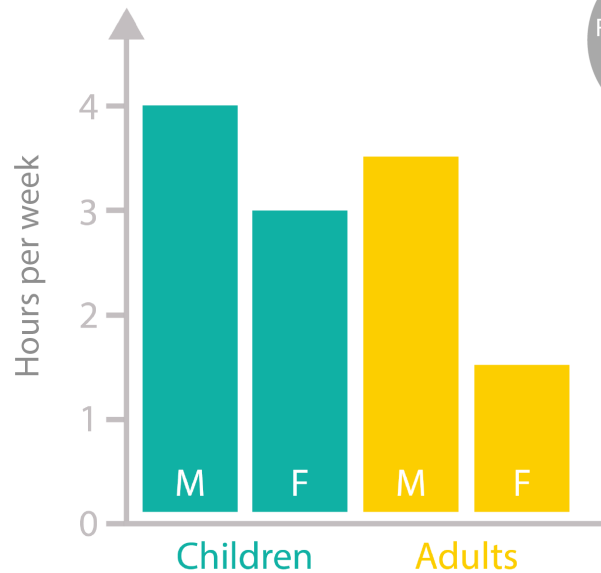
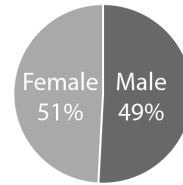
Marks: **[3]**

14. Using this graph to support your answer, identify the impact of gender on participation in physical activity in Wiggleton-by-Sea.

Wiggleton-by-Sea
Average participation
per week



Wiggleton-by-Sea
population gender split



Gender can affect participation, as there are fewer regular opportunities and less access for females to get involved in sport compared to males. So this restricts participation.

Lower levels of female coverage leads to fewer positive role models for females to be inspired to take part in physical activity. One of the main reasons for this is the lower levels of media coverage for female sport. There is also an issue with gender pay gap, where females will have less disposable income than their male equivalent, meaning they have less to spend on leisure pursuits. It could also be argued that females often have greater household responsibilities, such as child care, which limits time available to take part in physical activity. Lastly, some activities hold a male-dominated tradition, so females may feel they are stereotyped for taking part.

Marks: [6]

15. Suggest reasons why a sports performer may take anabolic steroids.

A performer might take anabolic steroids in order to increase muscle mass to improve strength performances. They may also use anabolic steroids to reduce recovery time.

Lastly, anabolic steroids can help the performer to train at a high intensity for longer.

Marks: **[3]**

16. Suggest **four** reasons for anabolic steroids being prohibited in sport.

Taking anabolic steroids will give a performer an unfair advantage over their competitors.

There are also side effects to taking this type of drug that are detrimental to health. Taking anabolic steroids is seen as deviant behaviour, as it goes against social and moral norms.

This results in damaging the reputation of the performer and their sport.

Marks: **[4]**

17. Describe the process of blood doping.

Blood doping involves the removal of blood from a performer a few weeks before competition. The blood is then frozen. Shortly before competition, the blood is thawed and reinjected back into the performer.

Marks: **[3]**

18. Justify why a combination of verbal and visual guidance is advantageous for novice performers.

A novice performer will benefit from a mixture of visual and verbal guidance, as they will need to build a mental picture of how a skill should look from the use of visual guidance such as a demonstration. They will also need a coach to talk them through the most important coaching points in order to perform the skill effectively.

Marks: **[1]**

19. Describe and give a sporting example of mechanical guidance.

Description: The use of equipment to support the correct learning of a skill.

Sporting example: A sporting example is the use of a float when learning the technique for a swimming stroke.

Marks: **[2]**

20. Define speed.

Speed is the maximum rate at which a performer can cover a set distance.

Marks: [1]

21. Describe the relative importance of speed for the following performers.



Squash player



Marathon runner



Weightlifter

Speed is needed by the weightlifter in order to generate power when lifting the weights upwards. Without this explosive movement, they will be unable to lift the weight. The squash player will require speed in order to move around the court to return the ball. Otherwise, they will lose points easily. Marathon runners need speed in order to overtake an opponent or for a sprint finish at the end of a race. However, it could be argued that cardiovascular endurance is more important to the marathon runner to last the whole 26 miles. It could also be said that agility is more important to the squash player, as they have to change direction at speed to react to the opposing player's shot rebounding off the wall.

Marks: [6]

22. Explain the reasons for fitness testing.

Fitness testing allows a performer to monitor improvements in their fitness levels. Based on the results, the performer can then adapt their training programme. Fitness testing can also be used to motivate the performer to train effectively in order to improve their scores when tested.

Marks: **[2]**

23. Describe the sit-and-reach test protocol.

The individual sits on the floor with their legs straight out and places their soles flat on the sit-and-reach box. They then stretch forward as far as they can with one hand on top of the other. The individual holds a still, stretched position for two seconds whilst a measurement is taken.

Marks: **[2]**

25. Describe the differences and similarities between skill and ability.

A skill is a learned ability which is developed through experience. In order to perform a skill effectively, certain abilities are required. Abilities are innate traits that are genetic and are predetermined. Abilities will have an influence on how well a performer learns and refines a skill.

Marks: **[6]**

26. Justify why a tennis serve is not a fully closed skill.

A tennis serve is not a completely closed skill, as the server may have to adjust to react to the opposing player moving positions as the serve is being taken. Someone calling out in the crowd as the serve is initiated can also distract the performer. This will affect the execution of the serve.

Marks: **[2]**

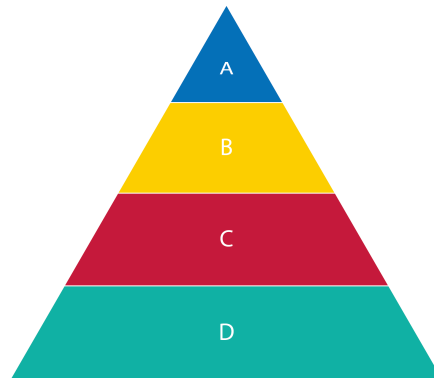
27. Describe each stage of the simple information processing model.

Stage one is input. This is through internal and external stimuli. Stage two is decision-making. This is where relevant information is used to initiate a response. Stage three is output, where there is a neural and muscular response. Stage four is feedback, which occurs through the feeling and outcome of completing the skill.

Marks: **[4]**

29. Look closely at this image. Name section A **and** section B of the sports development pyramid.

Sports Development Pyramid



Section A is: Excellence

Section B is: Performance

Marks: [2]

30. Look at this image and identify the highlighted muscle.



Quadriceps

Marks: [1]

31. Explain the antagonistic muscle action.

Antagonistic muscle action involves muscles working in pairs to create movement. One muscle is the agonist, which shortens and contracts. The other muscle is the antagonist, which relaxes and lengthens.

Marks: **[2]**

32. Describe how the muscles in the arm work together to create flexion at the elbow.

Flexion at the elbow occurs by the biceps contracting and shortening as the agonist. The triceps are the antagonist. They relax and lengthen.

Marks: **[2]**

33. Explain why a balanced diet is important to health.

A balanced diet will mean eating a wide variety of foods. By consuming a balanced diet, an individual will get the required nutrients to maintain health. Vitamins and minerals will assist in keeping an individual healthy and, if the diet is balanced correctly, it will ensure the individual consumes the correct amount of calories for energy balance.

Marks: **[4]**

34. Define aerobic respiration.

Glucose + Oxygen = Energy + Carbon Dioxide + Water

Marks: **[1]**

35. Justify the importance of a cool-down after a rugby match.

A cool-down is important after a rugby match, as it assists the removal of lactic acid. This, in turn, reduces the chances of delayed onset of muscle soreness. A cool-down will also help the players gradually return to resting heart rate.

Marks: **[2]**

36. Continuous training is often used by cross-country runners. Suggest **two** further methods of training a cross-country runner might benefit from.

Method of Training 1: Fartlek training

Method of Training 2: Circuit training

Marks: **[2]**

37. Describe two advantages **and** two disadvantages of plyometric training.

Advantage 1: An advantage of plyometric training is that it can improve a performer's power for explosive movements.

Advantage 2: Plyometrics is also easy to set up as a training method, with little equipment required.

Disadvantage 1: However, due to plyometrics being high intensity, it usually requires long periods of recovery.

Disadvantage 2: Another disadvantage is that the jumping and bounding movements can put stress on joints and cause injury.

Marks: **[4]**

END OF PAPER