



Model Answers

AQA A-Level PE – Exercise Physiology

(Revision session on Monday 16th May 2022, 5.45–7.15pm)

This document contains:

- Model answers for the Practice Questions answered during the 2022 Revision series
- Questions in AEI order
- Where possible, examples of extended writing
- No one-mark or multiple-choice questions

How should schools use these papers?

This paper has been constructed specifically for use in preparation for and during the live revision shows provided by James Simms in May 2022. I encourage students to attempt the questions in advance of the revision shows.

Please, use these model answers in combination with the mark scheme and the revision session, available in the AQA A-Level PE Revision page (<https://pages.theeverlearner.com/2022-aqa-a-level-pe-revision>).

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

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

James Simms

1. Compare the effectiveness of objective **and** subjective data.

<p>① Objective data is fact - based and is highly suitable for analytical ② decision making and feedback to performers, whereas subjective ③ data is based on opinion and interpretation so can be less ④ meaningful depending on the situation.</p>	<p>No comments provided.</p>
	<p>Marks:[2/2]</p>

2.

The Cooper run test is scored by a distance achieved in 12 minutes of running. Describe this data.

<p>1 This is quantitative data and is factual, 3 numerical data which is 2 objective.</p>	<p>No comments provided.</p>
	<p>Marks:[2/2]</p>

3. Identify **three** methods of injury prevention that athletes use.

<p>① Screening, ② PPE and ③ warming up and cooling down.</p>	<p>No comments provided.</p>
	<p>Marks:[3/3]</p>

4.

Explain how protective equipment and clothing can **minimise** the risk of injury. Use sporting examples to support your answer.

<p>4 Cricket batsmen wear pads to protect their legs from impact just 5 like amateur boxers wear head guards to prevent concussion. 6 Road cyclists wear baselayers during winter training to maintain 7 temperature and tennis players wear gripping shoes to prevent slipping and injury.</p>	<p>No comments provided.</p>
	<p>Marks:[4/4]</p>

5.

Rugby players use cryotherapy to support their post match recovery and rehabilitation. Evaluate the use of **cryotherapy** when rehabilitating from an injury.

Cryotherapy causes ¹ vasoconstriction of blood vessels and ² decreases blood flow and this can help ³ prevent swelling which, in turn, ⁴ reduces pain. However, cryotherapy ⁵ can cause tissue damage, especially to the skin and ⁶ protective clothing must be worn. Furthermore, cryotherapy is ⁷ extremely unpleasant as well as being hyper - expensive.

No comments provided.

Marks:[4/4]

6.

In a race to be fit for the 2017 Wimbledon Championships, Andy Murray had two ice baths a day.

Evaluate the use of **ice baths** to speed up recovery.

<p>1 Ice baths cause vasoconstriction of blood vessels and decreases 2 blood flow and this can help prevent swelling which, in turn, 3 reduces pain. However, ice baths are 4 very unpleasant and are not always practical for a performer.</p>	<p>4 Benefit of the doubt.</p>
	<p>Marks:[4/4]</p>

7. Evaluate the use of compression garments for long distance runners.

<p>Compression garments assist ¹ blood lactate removal by increasing venous return. This helps to ² limit inflammation. On the negative side, ³ research is not clear about the impact and the ⁴ high quality garments are very expensive.</p>	<p>No comments provided.</p>
	<p>Marks:[3/3]</p>

8. Since Christian Eriksen collapsed from a heart attack at Euro 2021, the number of young sports performers being screened has increased. Evaluate the use of screening for young athletes.

<p>1 Screening can be used to assess an ECG. They are also able to 2 find muscle injuries as well as 3 assess RoM at joints. On the 5 negative side, screening can provide false positive and the 6 process can lead to anxiety for the athlete.</p>	<p>No comments provided.</p>
	<p>Marks:[3/3]</p>

Feedback:

No feedback provided.