OCR A-level PE - Paper 1

Please read before distributing to students.

Purpose of this document

The questions contained within this document and the associated mark scheme are based on the data analysis performed by The EverLearner Ltd and published within the 2023 infographics. We are confident that:

- We believe this paper has a very strong association with the actual external exam in 2023 in relation to command terms, skills, AO distribution, extended writing requirements and topics.
- However, this is categorically NOT 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 potentially educational experiences of students in other schools/colleges.
- Finally, please check the publication dates of the mark scheme and model answers for this paper as well as the associated revision sessions in April and May.

This paper contains:
- Questions in the format of OCR A-level PE Paper 1 2023
- Short answer questions
- Extended writing

How should schools use these papers?

This paper has been constructed specifically for use as a mock exam but can be used less formally as a practice paper or model paper. The content and skills of the paper will be developed within the free-to-air revision sessions offered by James Simms in April and May 2023.

Mark schemes and model answers will be published on the following dates:
- Mark scheme: 1st of March
- Model answers: 28th of April
- Revision: 10th of May, 15:30-17:00

All questions are available on ExamSimulator, where they can be practised multiple times in both online and printable format. ExamSimulator is a premium resource available via TheEverLearner.com and provides immediate diagnostics of student writing performance after every exam answer.

James Simms

Subject	Physical Education
Course	OCR Linear GCE PE
Time allowed	2 hours

First name	
Last name	
Class	
Teacher	

Title	OCR A-level (H555) Paper 1 National Mock Exam 2023

Guidance	- This paper is marked out of 90 marks. - You have 120 minutes (plus additional time for those who have Exam Access Arrangements). - Answer all questions. A calculator is permitted for this exam. This paper contains one 20-mark question. - Good luck.

Total marks	90

Section A

1. Describe the all-or-none law of muscle contraction.

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Marks: [2]

2. Identify **two** causes of cardiovascular drift.

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Marks: [2]

3. Describe **two** long-term **neural** adaptations to strength training.

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Marks: [2]

4. Look closely at this image.
State both missing stages of periodisation.

Preparatory phase	?	?
• 6-12 weeks before the start of the season • June and July for a football club	• Perform, recover, train, taper	• 4-6 weeks at the end of the season • Active rest, recuperation and recovery

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Marks: [2]

Look closely at this image.

5. Describe the type of contraction occuring in the triceps when moving from position A to position B.

Phase A

Phase B

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Marks: [2]

Section B

6. Look closely at this image.
   Analyse the landing phase on the box by completing the table.

Joint	Type of joint	Joint movement	Agonist
Hip	A	B	C
Knee	D	E	F

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Marks: [6]

7. The vascular system is responsible for venous return.
Describe what happens to the skeletal muscle pump and the respiratory pump during a recovery period.

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Marks: [2]

8. Explain how a middle-distance runner is able to exchange a greater quantity of gases at the alveoli when performing.

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Marks: [6]

9. Look closely at this image.
Calculate the missing values.

Average cardiac values for three A-level PE students during an 800m race

		Athlete		
		Shay	Thea	Georgie
Heart rate (HR)	bpm	A	136	144
Stroke volume (SV)	ml	109	110	B
Cardiac output (Q)	ml/min	13,516	C	13,800

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Marks: [3]

10. State the controlling enzyme and the fuel source of the ATP/PC system.

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Marks: [2]

11. Other than the water jump, Identify one point of a 3,000m steeplechase race when the ATP/PC system would be predominant.

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Marks: [1]

12. State **one** reason why a 3,000m steeplchase athlete is likely to consume protein **immediately after** an intense training session.

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Marks: [1]

13. Describe the role of fats during an elite 3,000m steeplechase race.

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Marks: [2]

14. Describe the Queen's College step test.

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Marks: [4]

15. Explain why an athlete would complete HIIT as part of their aerobic training.

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Marks: [4]

16. State **one** pharmacological ergogenic aid that would help an open water swimmer to increase their aerobic capacity.

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Marks: [1]

17. Explain how the pharmacological ergogenic aid named in the previous question is able to increase aerobic capacity.

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Marks: [4]

18. Evaluate the use of PNF training.

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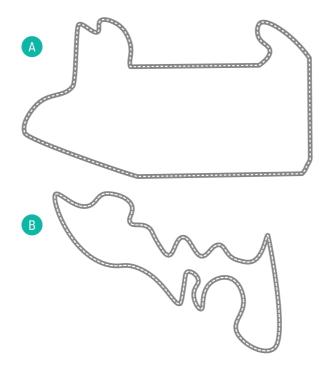_____

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Marks: [4]

19. Electric racing cars carry their batteries underneath the floor.
Explain why this helps to increase the stability of the car when cornering.
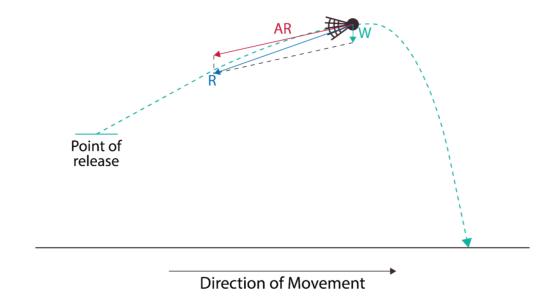

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Marks: [1]

Look closely at this image.

20. Explain why a racing car travelling around track A is likely to have a smaller rear wing than a racing car travelling around track B.

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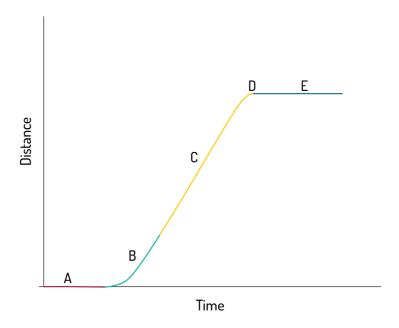_____

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Marks: [3]

21. Look closely at this image of image of a shuttlecock in flight.
Using your knowing of fluid mechanics, explain why the shuttlecock has such a large air resistance.

Point of release

Direction of Movement

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22. Look closely at this image which represents a shot being putted.
Analyse the state of motion at each point.

Distance–time graph of a shot being putt

Distance (y-axis)

Time (x-axis)

Points labelled: A, B, C, D, E

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Marks: [5]

Look closely at the table in this image.

23. Identify the three classifications of levers A, B and C.
Identify the three components X, Y and Z of the bottom lever classification in the table.

Lever classification	Order of components	Movement	Lever components
A	FLE	Plantar flexion	Fulcrum is the ball and socket of the foot.
			Load is the body weight.
			Effort is the insertion of the gastrocnemius muscle on the heel.
B	FEL	Flexion	Fulcrum is the elbow joint.
			Load is a dumbbell.
			Effort is the insertion of biceps tendon onto the radius.
C	LFE	Extension	Fulcrum is X .
			Load is Y .
			Effort is Z .

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Section C

Explain how blood is redistributed by a player during a netball match.

24.   Identify treatment methods for exercise-induced muscle damage **and** evaluate the effectiveness of these treatments for a netball player.

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END OF QUESTIONS