

Surname	Centre Number	Candidate Number
First name(s)		2



**GCE A LEVEL**

**A550U10-1**



Z22-A550U10-1



**THURSDAY, 26 MAY 2022 – AFTERNOON**

**PHYSICAL EDUCATION – A level component 1**  
**Exploring Concepts in Physical Education**

**2 hours**

**INSTRUCTIONS TO CANDIDATES**

Use black ink or black ball-point pen. Do not use gel pen or correction fluid.

You may use a pencil for graphs and diagrams only.

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **all** questions.

Write your answers in the spaces provided in this booklet. If you run out of space, use the additional page(s) at the back of the booklet, taking care to number the question(s) correctly.

**INFORMATION FOR CANDIDATES**

The number of marks is given in brackets at the end of each question or part-question.

You are reminded of the necessity for good English and orderly presentation in your answers.

Diagrams, charts and graphs can be used to support answers when they are appropriate.

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1.a	1	
1.b	3	
1.c	6	
1.d	4	
1.e	6	
2.a	4	
2.b(i)	2	
2.b(ii)	2	
2.c	6	
2.d	4	
3.a	4	
3.b	6	
3.c	4	
3.d	6	
4.a	1	
4.b	5	
4.c	8	
4.d	12	
5.a	4	
5.b	3	
5.c	3	
5.d	5	
5.e	6	
Total	105	

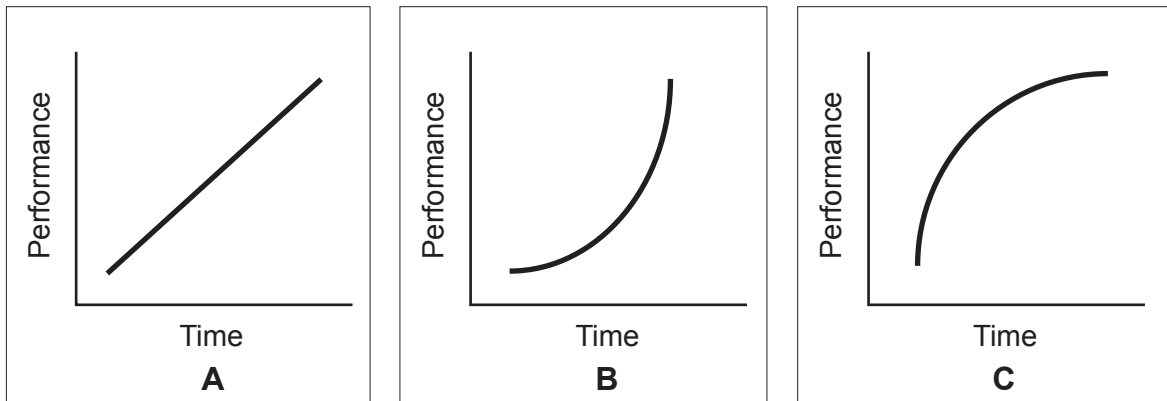


JUN22A550U10101

Answer **all** questions.

1. **Figure 1** shows the different learning curves that can occur when learning a new skill.

**Figure 1**



- (a) Identify the curve shown at **C**.

[1]

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- (b) Outline **three** strategies a coach could use to ensure a positive learning curve occurs.

[3]

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- (c) Explain how a coach could apply Bandura's theory of observational learning when teaching a beginner.

[6]

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Motor or movement skills can be classified on continuums.

- (d) Justify the placement of **two** different specific skills on the following continuums. [4]

Specific skill .....

Open \_\_\_\_\_ Closed

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Specific skill .....

Continuous \_\_\_\_\_ Serial \_\_\_\_\_ Discrete

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- (e) Explain how different types of reinforcement could be used in the cognitive stage of learning.

[6]

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2. Biomechanics applies the laws of mechanics and physics in order to gain a greater understanding of sporting performance.

**Figure 2** shows a weightlifter performing the upward phase of a bicep curl.

**Figure 2**



- (a) Identify, using **Figure 2**, the following:

[4]

Type of movement	Agonist muscle	Type of muscular contraction	Plane of movement
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- (b) (i) Describe the mechanical advantage of the second-class lever system.

[2]

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- (ii) Describe the mechanical disadvantage of the third-class lever system.

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- (c) Explain, using examples, the relationship between moment of inertia, angular velocity and angular momentum. [6]

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- (d) Explain, using examples, how an understanding of fluid mechanics could improve performance. [4]

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3. Motivation is a combination of the performer's determination and enthusiasm to achieve goals and can be affected by external factors.

(a) Outline the different possible motives for involvement in physical activity. [4]

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(b) Discuss how an individual's attitude can have an impact on their sporting performance. [6]

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- (c) Outline how persuasive communication could be used to change a performer's attitude. [4]

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- (d) Analyse strategies that could be used to develop self-confidence and self-efficacy in a performer. [6]

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4. (a) Define social institution.

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(b) Explain, using examples, the role of sport in society.

[5]

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[8]



(d) Discuss the view that professional sport destroyed the amateur ideal of the 19th century.

[illegible]

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5. (a) Justify the use of creatine as an ergogenic aid to improve performance. [4]

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- (b) Explain the possible causes of fatigue during anaerobic exercise. [3]

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- (c) Explain how an active cool down can assist the removal of lactic acid. [3]

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- (d) Discuss the advantages and disadvantages of altitude training for endurance athletes.

[5]

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- (e) Analyse how knowledge of the three energy systems could help a coach develop a training programme.

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**END OF PAPER**

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