



Rewarding Learning

ADVANCED

General Certificate of Education

2016

Centre Number

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Candidate Number

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# Sports Science and the Active Leisure Industry

Unit A2 2

*assessing*

The Application of Science  
to Sports Performance

[A2LB1]

TUESDAY 24 MAY, MORNING



A2LB1

## TIME

2 hours.

## INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.

Write your answers in the spaces provided in this question paper.  
Answer **all five** questions.

## INFORMATION FOR CANDIDATES

The total mark for this paper is 100.

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question. Quality of written communication will be assessed in Questions **3(c)**, **4(b)**, **5(b)** and **5(c)**.

For Examiner's use only	
Question Number	Marks
1	
2	
3	
4	
5	
<b>Total Marks</b>	

Answer **all** questions

Examiner Only

Marks Remark

1 (a) Define cardiac output.

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 [2]

(b) (i) State the expected stroke volume for an elite athlete at rest.

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 [1]

(ii) Explain the response of an elite athlete's stroke volume when exercise levels increase from rest to maximal effort.

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 [3]

(c) Outline the **two** phases of the cardiac cycle during physical activity.

(i) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

(ii) \_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
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\_\_\_\_\_ [2]

Examiner Only	
Marks	Remark











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[8]

Examiner Only	
Marks	Remark

4 (a) Identify and explain the effects of **three** types of transfer that may occur when learning and performing movement skills.

(i) \_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_ [4]

(ii) \_\_\_\_\_  
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\_\_\_\_\_ [4]

Examiner Only	
Marks	Remark



















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