

New  
Specification

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ADVANCED

General Certificate of Education

2018

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

[AAL21]

MONDAY 11 JUNE, MORNING



AAL21

**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)(ii)**, **5(b)** and **5(c)**.

For Examiner's use only	
Question Number	Marks
1	
2	
3	
4	
5	

<b>Total Marks</b>	
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Answer **all** questions

1 Age is a factor which affects  $VO_2$  max.

(a) Identify and explain **two** other factors which may affect an athlete's maximal oxygen consumption.

1. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

2. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

Examiner Only	
Marks	Remark

(b) Research has clearly shown the positive impact of exercise on the respiratory system and the benefits for long-term health and well-being.

Identify **two** long-term effects of aerobic exercise on the respiratory system for an individual.

1. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

2. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

Examiner Only	
Marks	Remark



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**(Questions continue overleaf)**







(ii) Spatial summation:

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[2]

Examiner Only	
Marks	Remark

























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**THIS IS THE END OF THE QUESTION PAPER**

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