



Rewarding Learning

ADVANCED
General Certificate of Education
2015

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]

FRIDAY 29 MAY 2015, AFTERNOON



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

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

Answer **all five** questions.

Examiner Only	
Marks	Remark

- 1 (a) Define the term bradycardia and explain **two** structural adaptations that enable it to occur.

[4]

- (b)** Identify **two** functional adaptations to the cardiovascular system as a result of both aerobic and anaerobic training.

- (i) Aerobic training:

[2]

(ii) Anaerobic training:

[2]

(c) Identify **two** adaptations to the muscular system and **two** adaptations to the skeletal system of an athlete as a result of prolonged aerobic training.

(i) Muscular system:

[2]

(ii) Skeletal system:

[2]

Examiner Only	
Marks	Remark

- 2 (a) Skeletal muscle fibres are not all uniform, they can differ in both structure and function.

Identify the **three** types of skeletal muscle fibres and describe the structural characteristics that enable these muscle fibres to work during different sporting activities.

(i) _____

_____ [3]

(ii) _____

_____ [3]

Examiner Only	
Marks	Remark

(iii) _____

_____ [4]

Examiner Only	
Marks	Remark

(ii) Equipment Design:

[4]

Examiner Only	
Marks	Remark

Handwriting practice lines on page 17.

Examiner Only	
Marks	Remark

[16]

THIS IS THE END OF THE QUESTION PAPER

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