Centre No.						Paper Reference	Surname	Initial(s)
Candidate No.						6 7 2 3 / 0 1	Signature	

Paper Reference(s)

6723/01

Edexcel GCE

Physical Education

Advanced Subsidiary

Unit 3

Exercise and Training

Time: 1 hour 15 minutes

Examiner's use only

Team Leader's use only

Question Number	Leave Blank
1	
2	
3	
4	
Total	

Materials required for examination	**Items included with question papers**
Nil	Nil

Instructions to Candidates

In the boxes above, write your centre number, candidate number, your surname, initials and signature.
Answer TWO questions in the spaces provided in this question paper.
Indicate which question you are answering by marking the box at the start of the question (☒). If you change your mind about a question, put a line through the box (☒) and then indicate your new question with a cross (☒).

Information for Candidates

The marks for the various parts of questions are shown in round brackets: e.g. **(2)**.
There are 4 questions in this question paper. The total mark for this paper is 50.
There are 16 pages in this question paper. Any blank pages are indicated.

Advice to Candidates

You will be assessed on your ability to organise and present information, ideas, descriptions and arguments clearly and logically, taking account of your use of grammar, punctuation and spelling.

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If you answer Question 1 put a cross in this box ☒.

1. (a) Explain the benefits that an athlete would hope to gain from each stage of a warm up.

(8)

Leave blank

(b) Using examples, explain how joint structure and muscle elasticity affects flexibility.

(6)

Leave blank

(c) Explain the term *isokinetic contraction*. Identify the advantages and disadvantages of isokinetic training.

(5)

Leave blank

(d) Fitness tests are often criticised because of a lack of reliability, accuracy and validity. Use examples of fitness test protocols to illustrate these areas of criticism.

(6)

(Total 25 marks)

Q1

Leave blank

If you answer Question 2 put a cross in this box ☒.

2. (a) (i) Define the term *bradycardia* and explain the structural and functional adaptations that enable it to occur.

(4)

(ii) Name and describe a method of training that will result in bradycardia.

(4)

Leave blank

(b) Muscle size and shapes differ. Identify and describe a characteristic of **two** different shapes of muscle, providing a named example for each.

(6)

Leave blank

(c) (i) Define the term $\dot{V}O_2max$ and identify factors that can affect it.

(6)

Leave blank

(ii) How can specific training increase an athlete's $\dot{V}O_2$max?

(5)

(Total 25 marks)

Q2

Leave blank

If you answer Question 3 put a cross in this box ☒.

3. (a) Define the terms *agonist*, *antagonist, fixator* and *synergist.* Using a named sporting example, illustrate each term.

(8)

Leave blank

(b) (i) Explain why an athlete might expect to experience an increase in heart rate both before and during exercise.

(4)

(ii) Towards the end of a marathon an athlete's stroke volume and oxygen delivery to the working muscles may decrease. Give reasons for this change.

(3)

Leave blank

(c) (i) Identify **one** fitness test that would be suitable for an endurance athlete and **one** that would be suitable for a speed or power athlete.
State the area of fitness measured by each test.

(4)

(ii) Describe the protocol for each test referred to in your answer to (c)(i).

(6)

(Total 25 marks)

Q3

Leave blank

If you answer Question 4 put a cross in this box ☒.

4. (a) (i) The biceps brachii work both *concentrically* and *eccentrically* during a bicep curl. Explain these terms, identifying the phase within the movement when they occur.

(4)

(ii) Provide a sporting example in which the triceps brachii work both *concentrically* and *eccentrically*. Identify each phase of your example.

(3)

Leave blank

(b) (i) Identify and explain **three** components of fitness essential for success within a named sport.

(6)

Leave blank

(ii) For each component of fitness listed in your answer to (b)(i), name the most appropriate method of training to enhance performance. Explain why each is the most suitable method.

(6)

Leave blank

(iii) Using a method of training from your answer to (b)(ii), identify **two** adaptations that could result from that method of training. Explain why each occur and the benefit provided for the performer.

(6)

(Total 25 marks)

Q4

TOTAL FOR PAPER: 50 MARKS

END