



GCSE

4421/01

PHYSICAL EDUCATION

UNIT 1

P.M. FRIDAY, 15 May 2015

1 hour 30 minutes plus your additional time allowance

Surname _____

Other Names _____

Centre Number _____

Candidate Number 0 _____

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
Section A		
1.	15	
2.	17	
3.	18	
Section A Total	50	
Section B		
4.	8	
5.	9	
6.	10	
7.	11	
8.	6	
9.	6	
Section B Total	50	
Overall Total	100	

ADDITIONAL MATERIALS

DVD.

INSTRUCTIONS TO CANDIDATES

Use black ink, black ball-point pen or your usual method.

Write your name, centre number and candidate number in the spaces provided on the front cover.

Answer ALL questions in the spaces provided in this booklet.

If you run out of space, use the continuation pages at the back of the booklet, taking care to number the question(s) correctly.

INFORMATION FOR CANDIDATES

The clips for Questions 1 and 2 in Section A will be shown three times.

Before the clips are shown you will have five minutes to read the questions. Two clips will be shown during which time you may answer the questions and make notes.

The clips will be shown a second time. There will be five minutes after each clip to answer the questions.

The clips will be shown for a third and final time.

There will then be approximately seventy minutes to complete Sections A and B.

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

You are reminded that assessment will take into account the quality of written communication used in your answers that involve extended writing in Section A (Q3 (b) and (c)) and Section B (Q.8, Q.9).

SECTION A

Answer ALL the questions in the spaces provided.

1. Video clip of rugby player.
- (a) Describe when the following **SKILL-RELATED** components can be seen in the clip. [2]

Skill-related fitness components	Description of when the components are seen in the clip
Agility	<hr/> <hr/> <hr/> <hr/> <hr/>
Speed	<hr/> <hr/> <hr/> <hr/>

1(b) “Power is another component of physical fitness demonstrated in the clip.”

(i) Define the term power. [1]

(ii) Explain where power is demonstrated in the clip. [2]

1(c) (i) Explain why warming up and warming/cooling down are so important for the players in the clip. [4]

– Warming up

– Warming/cooling down

1(c) (ii) State how some players in the clip have VISIBLY attempted to prevent injury. [1]

(iii) Suggest TWO reasons why rugby is more likely to cause injury than many other sports. [2]

- _____

- _____

2. Video clip of cyclists.

(a) The following are the two main fitness components demonstrated in the clip:

Cardiovascular endurance;

Local muscular endurance.

(i) Explain how these components of fitness are demonstrated in the clip. [2]

Physical Fitness Components	Explanation of how components are demonstrated in the clip
Cardiovascular endurance	<hr/> <hr/> <hr/> <hr/> <hr/>
Local muscular endurance	<hr/> <hr/> <hr/> <hr/>

2(b) (ii) “Fitness tests must be both **VALID** and **RELIABLE** for results to be meaningful.”

Explain both these terms. [2]

VALID

RELIABLE

SECTION B

Answer ALL the questions in the spaces provided.

4(a) Describe the following types of muscle contractions. [2]

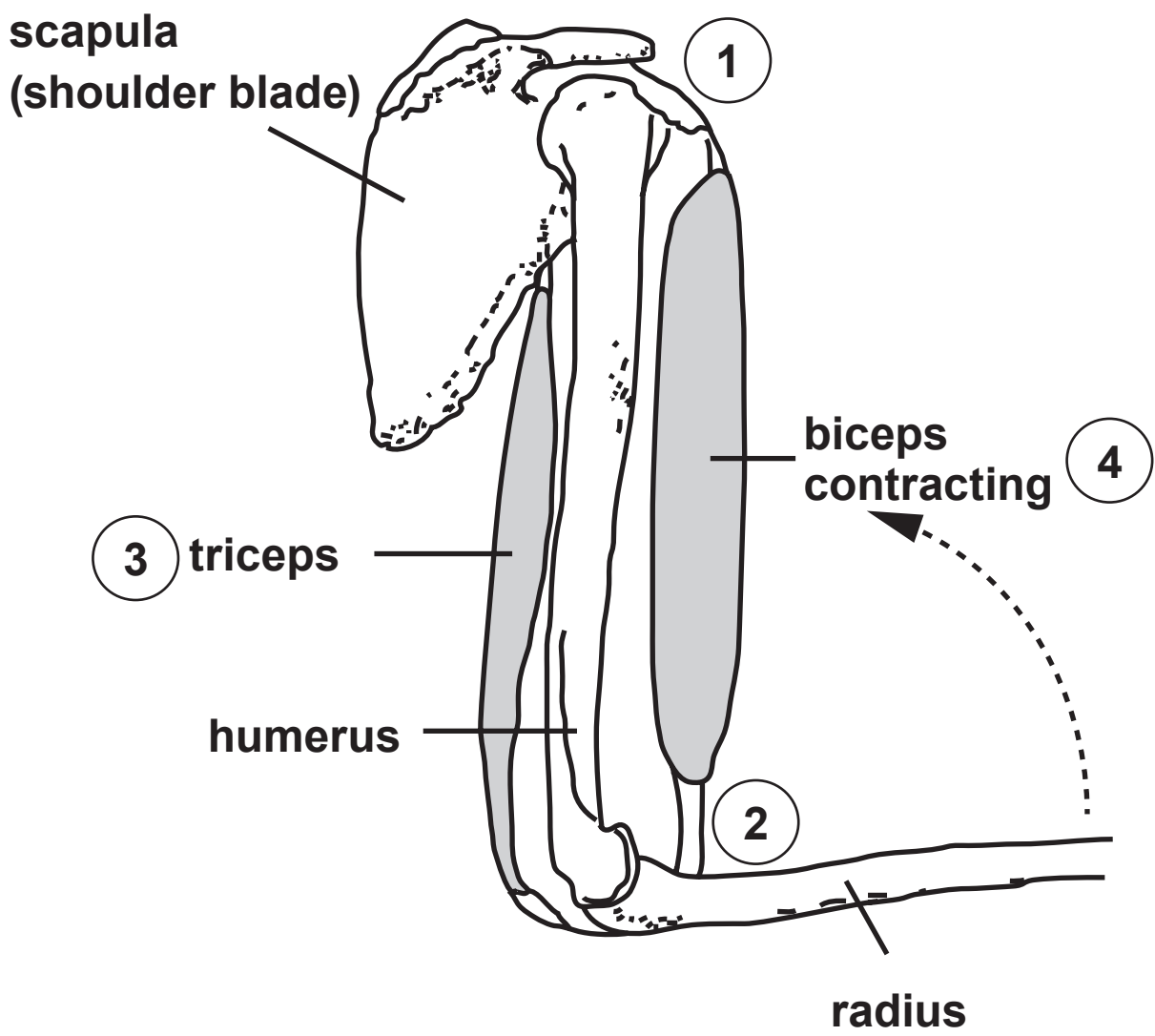
Concentric contraction	Eccentric contraction

4(b) The diagram opposite illustrates contraction at the elbow joint.

From the diagram on the opposite page identify the following:

- (i) the origin – 1 or 2. [1]
- (ii) the insertion – 1 or 2. [1]
- (iii) which muscle is the prime mover – 3 or 4. [1]
- (iv) which muscle is the antagonist – 3 or 4. [1]
- (v) What type of synovial joint is found at the elbow? [1]
-

- (vi) What tissue connects muscles to bones at a joint? [1]
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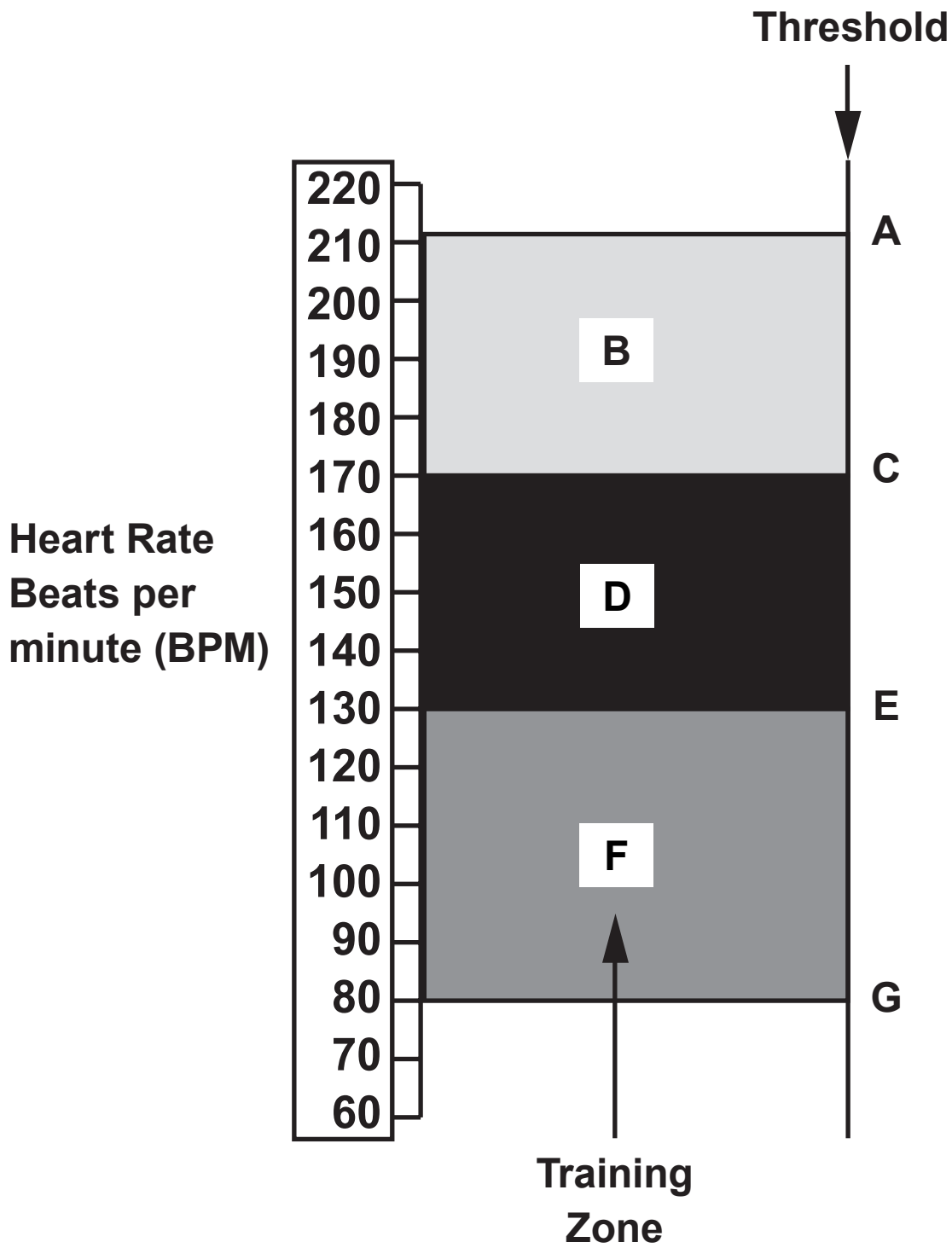
5. The diagram opposite shows how heart rate can be used to establish TRAINING ZONES and THRESHOLDS.

(a) (i) How has the threshold E been calculated? [1]

(ii) How has the threshold C been calculated? [1]

(iii) Identify training Zone B. [1]

(iv) Identify training Zone D. [1]



5(c) State the term used for the extra oxygen taken in at the end of an anaerobic activity. [1]

9

6(a) The following terms and definitions are used in the production of quality movement.

Draw a line to link each term to its definition. [4]

TERM	DEFINITION
Skill	Basic movement pattern
Ability	How skill is carried out
Technique	Innate characteristics which facilitate movement
Performance	Learned ability

7(a) To which part of the Information Processing model would the following apply? [1]

“Playing a smash having seen the shuttlecock being hit high in the air by your opponent.”

Tick (✓) ONE box only.

Decision making

Feedback

Input

Output

7(b) “Feedback is used to improve technical performance and learning.”

Suggest FOUR ways how feedback should be presented to make it effective for a sports person.

[4]

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7(c) (i) Explain the term **SELECTIVE ATTENTION** in sport. [1]

Practice

