Surname	Centre Number	Candidate Number
Other Names		0



# **GCSE**

4421/01



# S15-4421-01

# PHYSICAL EDUCATION UNIT 1

P.M. FRIDAY, 15 May 2015

1 hour 30 minutes

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Se	cti	on	Α

Section B

# ADDITIONAL MATERIALS

DVD.

#### INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen. Do not use pencil or gel pen. Do not use correction fluid.

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **all** questions in the spaces provided in this booklet.

If you run out of space, use the continuation page 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).

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



[2]

# **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.

	-related fitness omponents	Description of when the components are seen in the	e clip
Agility			
Speed			
(b)		r component of physical fitness demonstrated in the clip." term power.	
	(ii) Explain who	ere power is demonstrated in the clip.	[1 <u>]</u>



	(iii)	Describe a method of fitness training that could be used to help develop power.  [3
(c)	(i)	Explain why warming up and warming/cooling down are so important for the player in the clip.
		Warming up      Warming/cooling down
	(ii)	State how some players in the clip have <b>visibly</b> attempted to prevent injury. [7]
	(iii)	Suggest <b>two</b> reasons why rugby is more likely to cause injury than many other sports.  •



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2.	Video	o clip o	of cyclists.		
	(a)	The	following are	the two main fitness components demonstrated in the clip:	
		Card	iovascular en	durance;	
		Loca	l muscular er	ndurance.	
		(i)	Explain how	these components of fitness are demonstrated in the clip.	[2]
			l Fitness onents	Explanation of how components are demonstrated in the cli	р
	Cardio endura		lar		
	Local r endura		lar		
		(ii)	Identify the	method of training taking place.	[1]
		(iii)	Explain how performance	the cyclists could apply the <i>Principles of Training</i> to improve te.	heir [4]
		•••••			
		**********			
		•••••			
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Examiner only

(b)	(i)	Describe in detail the procedures for the two physical fitness tests identified below	N.
. ,	.,	[4	4]

Physical Fitness Components	Test	Description of procedures
Cardiovascular endurance	Multi Stage Fitness Test	
Local muscular endurance	Abdominal Curl Test	
(ii) "Fitn	ess tests must b	be both <b>valid</b> and <b>reliable</b> for results to be meaningful."
Expl <b>Vali</b>	ain both these to	erms. [2]
Reli	able	



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)	Give <b>four</b> reasons why the testing of physical fitness is important as part of a traprogramme.
	•
	•
	•
	•



Maman			
Women			
Disabled			



Offig

(b) Discuss the positive and negative aspects of media coverage of sport.	[6]



	Examiner
	only
	4 4 2 1



(c)	Discuss how activity.	school physica	ll education a	nd sport can i	influence partic	sipation in physica [6
•••••						
•••••						
•••••						
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## **SECTION B**

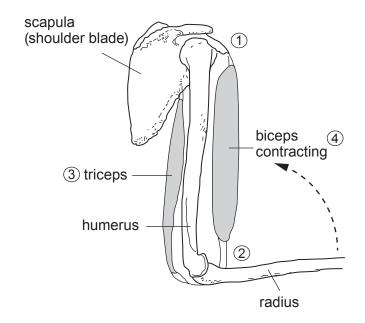
Answer all the questions in the spaces provided.

**4.** (a) Describe the following types of muscle contractions.

[2]

Concentric contraction	Eccentric contraction

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

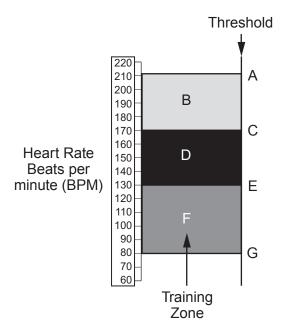




			Examine
Fror	n the diagram on the opposite page identify the following:		only
(i)	the origin – 1 or 2.	[1]	
(ii)	the insertion – 1 or 2.	[1]	
(iii)	which muscle is the prime mover – 3 or 4.	[1]	
(iv)	which muscle is the antagonist – 3 or 4.	[1]	
(v)	What type of synovial joint is found at the elbow?	[1]	
(vi)	What tissue connects muscles to bones at a joint?	[1]	
•••••			
			8



The following diagram 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]

(b)	Expl thres	ain w shold:	vhy it s and	is i Izon	mpo es.	rtant	for	a	spor	tspe	rson	to	have	e an	unc	lerst	andi	ng d	of	train	ing [4]
																		•••••			
	•••••																				
		•••••																			
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(c)	State	e the	term	used	l for	the e	extra	ox	ygen	tak	en in	at t	he e	nd o	f an	anae	erobi	c ac	tiv	ity.	[1]



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er

	ity movement. [4]	
TERM	DEFINITION	
Skill	Basic movement pattern	
Ability	How skill is carried out	
Technique	Innate characteristics whic facilitate movement	h
Performance	Learned ability	
Give reasons why it is	usually more difficult to learn an open skill rathe	r than a closed skill. [3]
	TERM  Skill  Ability  Technique  Performance	Ability  How skill is carried out  Technique  Innate characteristics which facilitate movement



(c) Describe the performance of a sportsperson in the early stages of learning.	[3]



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	
	(b)	"Feedback is used to improve technical performance and learning."	
		Suggest <b>four</b> ways how feedback should be presented to make it effective for sportsperson.	a 1]
		•	
		•	
		•	
		•	
	(c)	(i) Explain the term <i>selective attention</i> in sport.	1]
		(ii) Give an example of selective attention from a sporting activity of your choice. [	1]



(d) Ex	xplain why setting goals can help to maintain motivation in sport and physical a	activity. [4]



Examiner only

8.	Using the diagram as a guide, describe how appropriate practice can contribute to the quality of a sporting performance.    Practice
	AFFECTS OUR LEARNING
	WHOLE PART FIXED VARIABLE
	LINKS WITH



only
,
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6



	Performance in sport	and health related activities	s
		<u> </u>	
ICT	 Performance Analysis	 Material/Equipment	Clothing



END OF PA	APER	6
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 		 ••
 		 or



Question number	Additional page, if required. Write the question number(s) in the left-hand margin.	Examiner only
		7

