

Please write clearly in	block capitals.		
Centre number		Candidate number	
Surname			
Forename(s)			
Candidate signature			

AS

PHYSICAL EDUCATION

Factors affecting participation in physical activity and sport

Tuesday 23 May 2017

Morning

Time allowed: 2 hours

Materials

For this paper you may use:

a calculator.

Instructions

- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- Fill in the boxes at the top of this page.
- Answer all questions. You must answer the questions in the spaces provided. Do not write on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 84.
- Questions should be answered in continous prose. You will be assessed on your ability to:
 - use good English
 - organise information clearly
 - use specialist vocabulary where appropriate.

For Examiner's Use		
Section	Mark	
Α		
В		
С		
TOTAL		



Section A

Applied physiology

Applied Projected)					
Answer all questions in this section.					
For questions with four responses only one answer per question is allowed.					
For each answer c	For each answer completely fill in the circle alongside the appropriate answer.				
CORRECT METHOD WRONG METHODS © © 🕸 ෮					
If you want to char	nge your answer you must cross out your original answer as shown.				
If you wish to retur shown.	rn to an answer previously crossed out, ring the answer you now wish to select as				
	Which one of the following statements accurately describes Starling's law of the heart?				
	[1 mark]				
	A Increased action of skeletal muscles to increase venous return				
1	B Increased heart rate during long periods of exercise at the same intensity				
(C Increased rate of oxygen transport by the circulatory system				
	D Increased venous return leading to increased stroke volume				
0 2	Fitness testing needs to be valid.				
	Which one of the following statements accurately describes validity in relation to fitness testing?				
·	[1 mark]				
	A A test based on observations about the quality of the performance				
1	B A test that gives you consistent results if the correct protocol is followed				
•	C A test that measures what it sets out to measure				
I	D A test that provides numerical measurements				



0 3 Figure 1 shows an athlete hurdling.

Figure 1



0 3 . 1	Identify the type of joint, the joint action and the main agonist at the ank labelled A , as the athlete clears the hurdle.	le, [3 marks]
	Type of joint: Joint action: Main agonist:	
0 3 . 2	To clear the hurdle, hip flexion occurs. State the plane and the axis around which hip flexion takes place.	[2 marks]
	Plane:	



0 3 . 3	The ankle operates as a lever as the Identify the class of lever operating advantage of the class of lever for the	at the ankle and explain the mechanical
	Class of lever at the ankle:	
	Explanation:	
0 4	Figure 2 shows heart rate graphs for exercise session. Each athlete is us	or two athletes before, during and after an sing a different training method.
	Fig	ure 2
HR (bpn Befo exer	A Exercise Recovery	Athlete 2 HR (bpm) Before Exercise Recovery exercise Time (mins)
0 4 . 1	State the term used to describe the the hormone that causes this increa	increase in heart rate labelled A and name ase in heart rate. [2 marks]



0 4 . 2	Use Figure 2 to identify the type of training method each athlete is using in the exercise session. Justify your answers. [4 marks]		
	Training method used by athlete 1: Justification:		
	Training method used by athlete 2: Justification:		
0 5	Smoking is a poor lifestyle choice because of the negative effect it can have on health and performance. Identify one physiological effect of smoking on the respiratory system and explain		
	its impact on performance in endurance events. [4 marks]		





0 6	It is important for sprinters to push off the blocks effectively to achieve a fast start.
	Using Newton's first and second laws of linear motion and knowledge of the neuromuscular system, analyse how a sprinter is able to achieve a fast start. [8 marks]



-	
-	
-	
-	
_	
-	
-	
-	
-	



Extra space



Section B

Skill acquisition and sports psychology			
	Answer all questions in this section.		
0 7	A swimming teacher may use floats and arm bands with a group of beginners to keep them safe when they are learning to swim.		
	Identify this type of guidance.	[1 mark]	
	A Manual	0	
	B Mechanical	0	
	C Verbal	0	
	D Visual	0	
0 8	'Feelings of apprehension and worry due to a tendency to view situations as threatening.' Identify this type of anxiety.	all competitive [1 mark]	
	A Cognitive anxiety	0	
	B Competitive state anxiety	0	
	C Competitive trait anxiety	0	
	D Somatic anxiety	0	

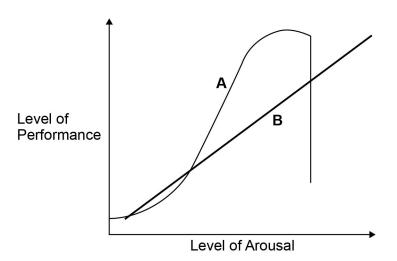


0 9	In most sports, coaches can give feedback during a break in play.
	Identify and describe two different types of feedback that a coach could give during a break in play. Give a sporting example to support each answer. [4 marks]
	Type of feedback 1:
	Type of feedback 2:



Figure 3 shows the relationship between arousal and performance for two different theories of arousal, labelled $\bf A$ and $\bf B$.

Figure 3



Analyse **Figure 3** to identify when optimal performance occurs for each theory of arousal, labelled **A** and **B**.

[2	maı	ˈks]

Turn over for the next question



1	1	Vicky is a badminton player. She has recently begun to play tennis.		
			Explain the impact of negative and zero transfer of learning on Vicky's progress in tennis. Give examples from badminton and tennis to support your answer. [4 marks]	
			Negative transfer:	
			Zero transfer:	

Figure 4 shows a player taking a corner kick in football.





2

1 2 . 1	Classify the corner kick in football using the following continua:	
	open – closedself-paced – externally paced.	
	Justify your answers.	[2 marks]
	Open – closed:	
	Self-paced – externally paced:	
1 2 . 2	Describe the high – low organisation skill continuum.	[2 marks]
1 2 . 3	Give one example of a low organisation skill in football.	[1 mark]





[3 marks]



1 4	Coaches need to consider the nature of the skills and the experience of the performers when structuring a practice session.		
	Evaluate the use of massed and distributed practice when coaching a group of beginners, in a game such as basketball.		
	[8 marks]		







Extra space

Turn over for Section C



Section C

Sport and society and technology in sport			
	Answer all questions in this section.		
	Which one of the following statements accurately describes the urbanisation?	term [1 mark]	
1	An improvement in living conditions in run-down areas of society	0	
I	An increase in the proportion of people living in towns compared to the countryside	0	
•	C The import and export of sports throughout the British Empire	e 🔾	
1	The movement from an industrial society to an agricultural society	0	
	Which one of the following components of fitness can be measu	red using indirect	
		[1 mark]	
	A Aerobic endurance	0	
1	B Flexibility	0	
(C Muscular endurance	\bigcirc	
1	D Strength	0	



1 7	Explain how the two-tier class system influenced the nature of sporting recreation in pre-industrial society.		
	[4 marks]		
Turn over for the next question			



1 8	Define the terms discrimination and stereotyping and explain how each can cause low participation rates amongst underrepresented groups in sport. Give sporting examples to support your answer.		
		[6 marks]	
	Discrimination:		
	Stereotyping:		



1 9	Explain how two characteristics of sport are evident in the game of tennis. [4 marks]
	Characteristic 1:
	Characteristic 2:
2 0	Sport England's aim is to increase the number of people participating in sport and physical activity.
	Explain one physical health benefit and one social health benefit to an individual who has increased their level of physical activity. [4 marks]
	Physical health benefit:
	Social health benefit:





Table 1 shows the winning times for the men's 100 metres final from previous Olympic Games.

Table 1

Year	Time completed (s)
1952	10.40
1964	10.00
1976	10.06
1988	9.92
2000	9.87
2012	9.63
2016	9.81

Consider how commercialisation **and** the improvement in technology for sports analytics have affected performance in the 100 metres at the Olympic Games. Use the data in **Table 1** to support your answer.

[8 marks]





Extra space
-

END OF QUESTIONS

Copyright Information

For confidentiality purposes, from the November 2015 examination series, acknowledgements of third party copyright material will be published in a separate booklet rather than including them on the examination paper or support materials. This booklet is published after each examination series and is available for free download from www.aqa.org.uk after the live examination series.

Permission to reproduce all copyright material has been applied for. In some cases, efforts to contact copyright-holders may have been unsuccessful and AQA will be happy to rectify any omissions of acknowledgements. If you have any queries please contact the Copyright Team, AQA, Stag Hill House, Guildford, GU2 7XJ.

Copyright © 2017 AQA and its licensors. All rights reserved.



28