SPECIMEN MATERIAL

A-level PHYSICAL EDUCATION

Paper 2 Factors affecting optimal performance in physical activity and sport

Specimen 2018

Morning

Time allowed: 2 hours

Materials

For this paper you may have:

• a calculator.

Instructions

- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- Fill in the boxes at the bottom 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 105.
- Questions should be answered in continuous prose. You will be assessed on your ability to:
 - use good English
 - organise information clearly
 - use specialist vocabulary where appropriate.

Please write clearly, in block capitals, to allow character computer recognition.				
Centre number				
Forename(s)				
Candidate signature				

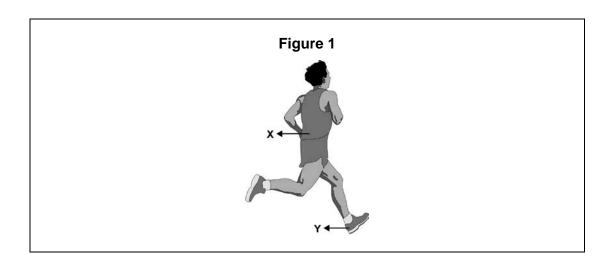
Section A

Exercise physiology and biomechanics

Answer all questions in this section.

For questions with four responses only one answer per question is allowed.
For each answer completely fill in the circle alongside the appropriate answer.
CORRECT METHOD WRONG METHODS 🐼 💿 📾 🗹
If you want to change your answer you must cross out your original answer as shown.
If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown.

0 1



Identify the forces labelled X and Y in Figure 1 that act on the runner during a race.



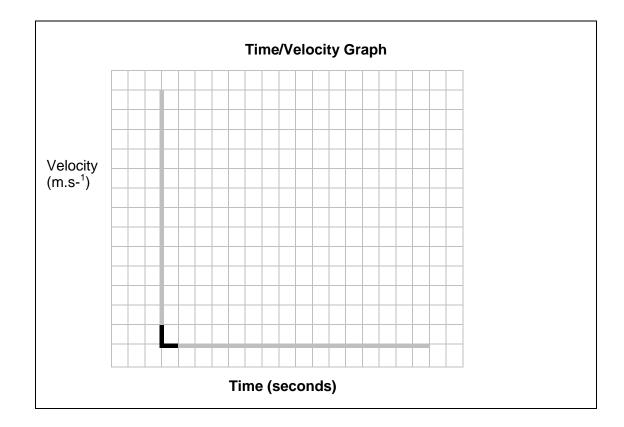
Which **one** of the following training methods would be used to improve aerobic endurance?



0

Table 1 shows time and velocity data for the first 6 seconds of a 100m sprint.

		Т	able 1				
Time (seconds)	0	1	2	3	4	5	6
Velocity (m.s ⁻¹)	0	7	8.5	9	9.5	10	9.5



0 3 . 1 Plot the points from **Table 1** on the time/velocity graph.

[2 marks]

0 3 . 2 Identify the period of time when acceleration was the greatest.

[1 mark]

04.1	Discus is another athletic event.	
	Describe how a lift force can be generated by a discus in flight. [4 mail]	rks]
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-		
04.2	Explain how a high angle of attack will affect the distance travelled by the discus. [3 mail]	rks]
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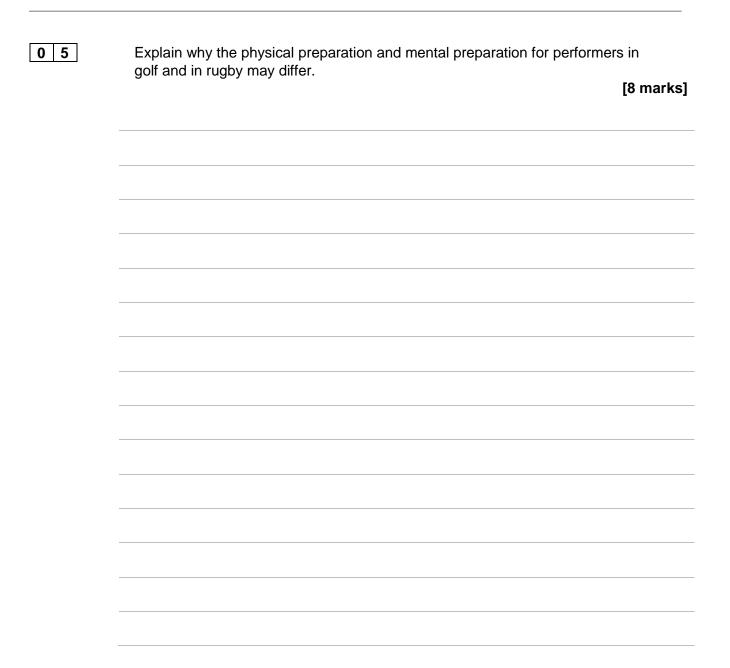


Figure 2

Explain Newton's Laws of Motion in relation to the dancer spinning **and** how the dancer can alter her rate of spin.

[15 marks]

You may use this space to plan your answer.

06

Figure 2 shows a dancer performing a spin as part of a routine.

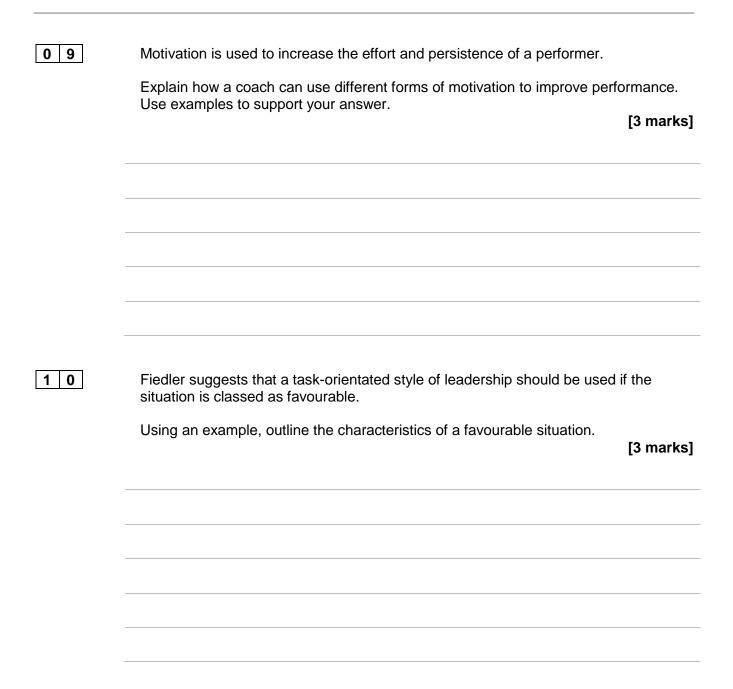


Section B

Sports psychology

Answer **all** questions in this section.

0 7	Th	e inverted U theory suggests optimal arousal can improve perfor	rmance.	
	Wł	nich one of the following statements is correct?		
	Α	Complex skills require lower levels of arousal	0	
	В	Experienced performers require lower levels of arousal	\bigcirc	
	С	Introverts require higher levels of arousal	\bigcirc	
	D	Simple skills require lower levels of arousal	\bigcirc	
				[1 mark]
08	Ne Wł	e Theory of Achievement Motivation suggests there are two per eed to Achieve and Need to Avoid Failure. hich one of the following statements best describes the characte rformer with a Need to Achieve personality?		oes:
	Α	Complete task quickly, attribute failure to external factors, choose challenging tasks, enjoy performing in front of others	0	
	В	Complete task quickly, persevere, choose challenging tasks, enjoy performing in front of others	0	
	С	Complete task quickly, persevere, choose easy or hard tasks, enjoy performing in front of others	0	
	D	Complete task quickly, worry about failure, choose challenging tasks, enjoy performing in front of others	0	
				[1 mark]



1 1

Figure 3 shows Weiner's Model of attribution.

Figure 3				
		Locus of	Causality	
		Internal	External	
Locus of Stability	Stable	Ability	С	
	Unstable	В	D	
	Unstable	В	D	

Define the term attribution **and**, using sporting examples, describe the different attributions labelled **B**, **C** and **D**.

[4 marks]

1	2

Elite performers need high levels of health and fitness to display a positive attitude to training and competition to be successful.

Explain the term attitude **and** using named psychological theories, outline how the negative attitude of a performer towards training could be changed. Use examples to support your answer.

[8 marks]



Successful teams often display cohesion.

Explain the importance of cohesion on group productivity **and** suggest strategies a coach can use to improve the actual productivity of a team.

[15 marks]

You may use this space to plan your answer.



Section C

Sport and society and technology in sport

Answer **all** questions in this section.

1 4	W	hich one of the following definitions best describes the term dev	viancy?	
	Α	Behaviour which goes against society's norms and values	0	
	в	Not playing by the unwritten rules	\bigcirc	
	С	Not showing opponents respect	0	
	D	Taking drugs to enhance performance	\bigcirc	
				[1 mark]
1 5	W	hich one of the following definitions best describes the term spo	onsorship?	
	Α	An athlete's money held by a national governing body until retirement from sport	\bigcirc	
	в	Athletes personally endorse a company's merchandise	\bigcirc	
	С	Disposable income	\bigcirc	
	D	Financial support provided to an individual performer or event of a mutual return	0	
				[1 mark]

1 6	Explain how the structure of the World Class Performance Pathway supports th development of elite athletes.	е
		narks]
1 7	State how the technological development of facilities and equipment can help to optimise elite performance.)
		narks]
1 8	Evaluate the reasons why elite athletes will resort to taking illegal performance enhancing drugs.	
		narks]



Discuss the suggestion that an increase in the commercialisation of sport has been beneficial for performers and the sport.

[8 marks]

2 0	Evaluate the effectiveness of technology as a deterrent for deviant behaviour in
	sport.

[15 marks]

You may use this space to plan your answer.





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