A

AQA

Surname _____

Other Names _____

Centre Number _____

Candidate Number _____

Candidate Signature _____

A-level

PHYSICAL EDUCATION

Paper 1 Factors affecting participation in physical activity and sport

7582/1

Monday 11 June 2018 **Morning**

Time allowed: 2 hours

For this paper you may have:
- **a calculator.**

At the top of the page, write your surname and other names, your centre number, your candidate number and add your signature.

[Turn over]

BLANK PAGE

INSTRUCTIONS

- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- 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.

DO NOT TURN OVER UNTIL TOLD TO DO SO

SECTION A

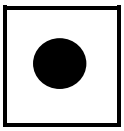
APPLIED ANATOMY AND PHYSIOLOGY

Answer ALL questions in this section.

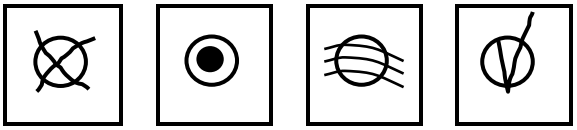
Only ONE answer per question is allowed.

For each answer completely fill in the circle alongside the appropriate answer.

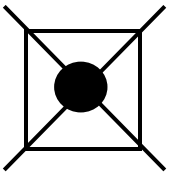
CORRECT METHOD



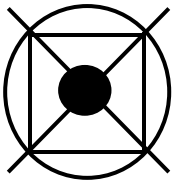
WRONG METHODS



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 Which receptor is responsible for detecting a change in blood pressure? [1 mark]

- ○ A Baroreceptor
- ○ B Chemoreceptor
- ○ C Proprioceptor

0 2 Which method of estimating energy expenditure involves measuring the production of CO_2 and/or the consumption of O_2? [1 mark]

- ○ A Indirect calorimetry
- ○ B Lactate sampling
- ○ C VO_2 max test

TABLE 1 shows the oxygen content of arterial and venous blood at rest and during intense aerobic exercise.

TABLE 1

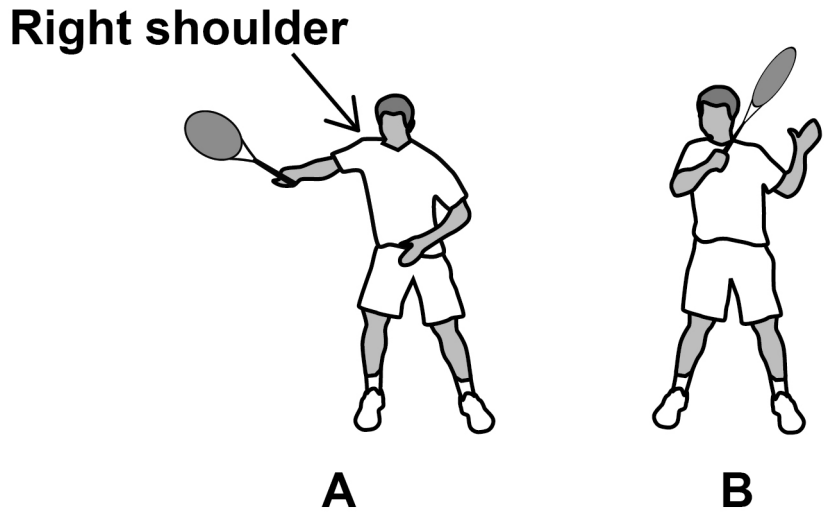
	Rest		Intense aerobic exercise	
	Arterial blood	Venous blood	Arterial blood	Venous blood
ml O_2 /100 ml blood	20	15	20	5

0 3 . 1 **Define the term A-VO_2 diff. [1 mark]**

0 3 . 2 **Explain the change in A-VO_2 diff during exercise. Use the data in TABLE 1, on page 6, in your answer. [3 marks]**

0 4 **FIGURE 1 below shows a tennis player performing a forehand stroke.**

FIGURE 1



0 4 . 1 **Identify the main agonist, and plane and axis of movement at the right shoulder as the tennis player in FIGURE 1 moves from position A to position B. [3 marks]**

Agonist: _____

_____

Plane: _____

_____

Axis: _____

_____

0 4 . 2 **In FIGURE 1, on page 8, the main muscle fibre type used for a powerful forehand stroke is fast glycolytic (type IIx).**

State THREE characteristics of this muscle fibre type. [3 marks]

1. _____

_____

2. _____

_____

3. _____

_____

[Turn over]

0 5 **FIGURE 2 shows Chris Froome. He is a British cyclist and multiple Tour de France winner.**

In 2015 he recorded a VO_2 max score of 84.6 ml/kg/min. An average cyclist would have a VO_2 max score of 40–42 ml/kg/min.

FIGURE 2

Analyse the factors which explain Chris Froome's higher VO_2 max AND the effects these factors have on his performance.
[8 marks]

[Turn over]

0 6 **Proprioceptive Neuromuscular Facilitation (PNF) is a specialist training method used by a range of athletes.**

Explain the role of proprioceptors in PNF AND evaluate its effectiveness as a specialist training method.

Use sporting examples in your answer.
[15 marks]

You may use this space to plan your answer.

BLANK PAGE

[Turn over]

SECTION B

SKILL ACQUISITION

Answer ALL questions in this section.

0 7 Baddeley and Hitch devised a model of the working memory.

Which subsystem in this model deals with auditory information from the senses to help produce a memory trace? [1 mark]

○ A Episodic buffer

○ B Phonological loop

○ C Visuospatial sketchpad

0 8 **Which types of feedback would be most appropriate for a performer in the cognitive stage of learning? [1 mark]**

- ○ **A** Knowledge of performance, negative, intrinsic
- ○ **B** Knowledge of performance, positive, extrinsic
- ○ **C** Knowledge of results, negative, intrinsic
- ○ **D** Knowledge of results, positive, extrinsic

[Turn over]

0 9 **Performers need to learn skills in order to take part in physical activity. Skilled movements are learned, economic and consistently successful.**

State THREE other characteristics of skill.
[3 marks]

1. _____

_____

2. _____

_____

3. _____

_____

1 0 **Vygotsky's Social Development Theory is a constructivist theory. Learning is built up in stages based on the current level of performance.**

Outline the THREE stages of development in this theory.

Give a sporting example for each stage.
[3 marks]

1 1 **'Verbal guidance is a suitable way of introducing a new skill to a cognitive learner.'**

Discuss this statement. [4 marks]

1 2 **Goalkeepers in hockey need to respond quickly to the actions of the attacking players.**

Analyse the factors which will affect a goalkeeper's response time AND the strategies a coach can use to help them respond quicker. [8 marks]

1 3 **Skill classification can be used to place skills onto a range of continua including:**

- **Simple – Complex**
- **Discrete – Serial – Continuous**
- **Self-paced – Externally paced**
- **High Organisation – Low Organisation.**

'Progressive part practice is suitable for developing a tumbling routine in gymnastics.'

Evaluate this statement, using your knowledge of the continua listed above. [15 marks]

You may use this space to plan your answer.

35

BLANK PAGE

[Turn over]

SECTION C

SPORT AND SOCIETY

Answer ALL questions in this section.

1 4 **Which of these is a characteristic of the popular recreation available to the lower class in pre-industrial Britain? [1 mark]**

- ○ **A** Local and specific to each community
- ○ **B** Regular
- ○ **C** Rule based
- ○ **D** Skill and tactics based

1 5 **Ethnic minorities may be pushed into certain sports, based on assumptions about them.**

What is this an example of? [1 mark]

- ○ **A Channelling**
- ○ **B Racism**
- ○ **C Stacking**
- ○ **D Stereotyping**

[Turn over]

1 6 **State TWO social benefits to an individual of increasing their participation in physical activity and/or sport. [2 marks]**

1. _____

_____

_____

2. _____

_____

_____

1 7 **Explain TWO benefits of sponsorship to companies investing large amounts of money into sport. [4 marks]**

1. _____

_____

_____

_____

_____

_____

2. _____

_____

_____

_____

_____

_____

_____

[Turn over]

1 8 **Rational recreation saw the development of early professionalism during the industrial and post-industrial era (1780–1900).**

Explain the differences between the gentleman amateur and working-class professional AND the impact these had on their participation during this time. [4 marks]

1 9 **Lauren is a 22-year-old member of a local athletics club and has regularly competed in middle distance races since an early age.**

Evaluate the impact that socialisation could have had on Lauren's choices and her current involvement in sport. [8 marks]

2 0 **TABLE 2 shows the participation data for disabled and non-disabled adults over a 4-year period since the London 2012 Olympic and Paralympic Games.**

TABLE 2

% participating in 30 minutes of moderate intensity activity at least once per week		
	Non-disabled	**Disabled**
2012–2013	**40.1**	**19.1**
2013–2014	**39.8**	**17.6**
2014–2015	**39.6**	**17.2**
2015–2016	**39.9**	**16.8**

Explain the barriers that disabled athletes face AND evaluate the effectiveness of the strategies used to overcome these barriers.

Use the data in TABLE 2 to support your answer. [15 marks]

You may use this space to plan your answer.

END OF QUESTIONS

35

There are no questions printed on this page.

For Examiner's Use	
Section	Mark
A	
B	
C	
TOTAL	