

AS

PHYSICAL EDUCATION

Factors affecting participation in physical activity and sport

Specimen 2017

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 84.
- 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

Candidate number

Surname

Forename(s)

Candidate signature _____

Section A

Applied physiology

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

Heart rate is controlled by the cardiac conduction system.

Which **one** of the following is the order of the cardiac conduction system?

- A** Atrioventricular node, sinoatrial node, bundle of His, Purkinje fibres
- B** Atrioventricular node, sinoatrial node, Purkinje fibres, bundle of His
- C** Sinoatrial node, atrioventricular node, bundle of His, Purkinje fibres
- D** Sinoatrial node, atrioventricular node, Purkinje fibres, bundle of His

[1 mark]

0 2

During sprinting, flexion occurs at the hip.

Identify which plane and about which axis hip flexion occurs.

- A** Frontal plane and sagittal axis
- B** Sagittal plane and longitudinal axis
- C** Sagittal plane and transverse axis
- D** Transverse plane and longitudinal axis

[1 mark]

0 3

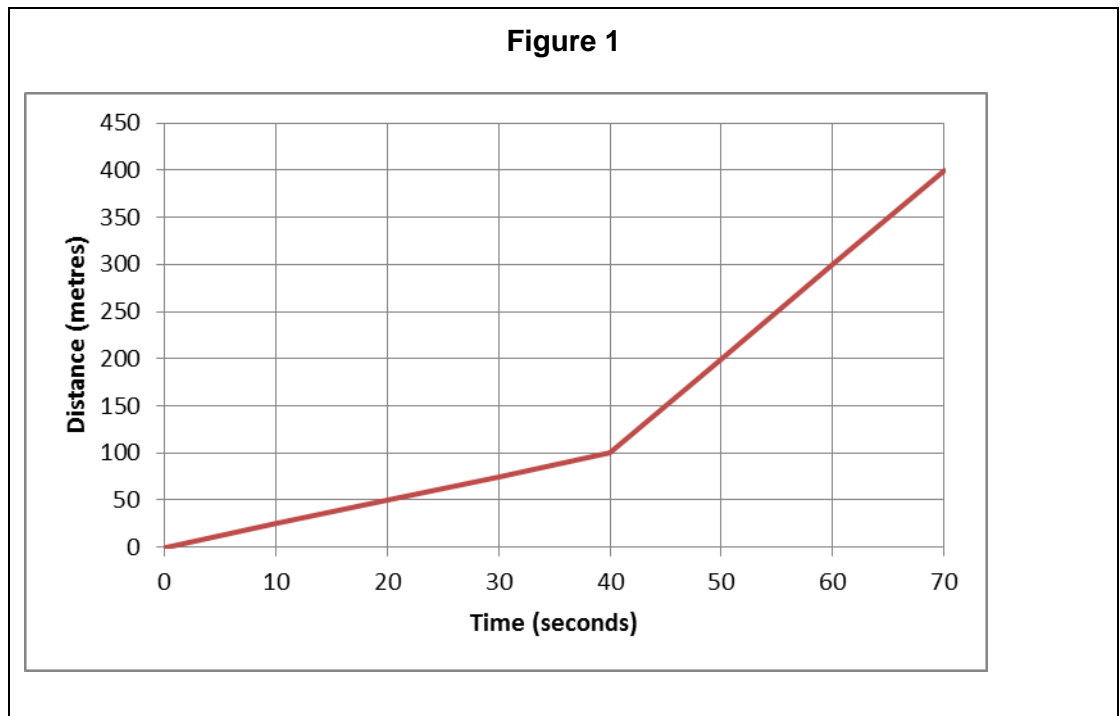
A long-distance cyclist may use continuous training to increase the strength of their heart.

State how this increase in fitness can lead to an increase in the cyclist's performance and health.

[2 marks]

0 4

Figure 1 is a distance time graph for a cycle sprint.



Using **Figure 1**, calculate the speed of the cyclist between 40 and 70 seconds.

[2 marks]

0 5 . **1** Tidal volume and minute ventilation of a cyclist will vary at rest and during a race.

Define tidal volume **and** minute ventilation.

[2 marks]

0 5 . **2** Explain how the cyclists' increase in minute ventilation allows them to maintain performance throughout the race.

[3 marks]

0 6

Justify why a gymnast may include ballistic stretches in a warm up.

[3 marks]

0 7

Muscle spindles are proprioceptors located between the muscle fibres.

Outline the role of muscle spindles.

[2 marks]

0 8

Analyse, using Newton's First **and** Second Laws of motion, how a footballer will move towards the ball from a stationary position.

[4 marks]

Extra space

Turn over for Section B

Section B**Skill acquisition and sports psychology**Answer **all** questions in this section.

1 | 0

Which **one** of the following classifications accurately describes the skill of taking a football penalty kick?

A Closed, externally-paced, complex and discrete

B Closed, externally-paced, simple and discrete

C Closed, self-paced, complex and discrete

D Closed, self-paced, simple and discrete

[1 mark]**1 | 1**

Tuckman suggested the formation of a group occurs in a specific order.

Which **one** of the following orders is correct?

A Forming, storming, norming, performing

B Norming, performing, forming, storming

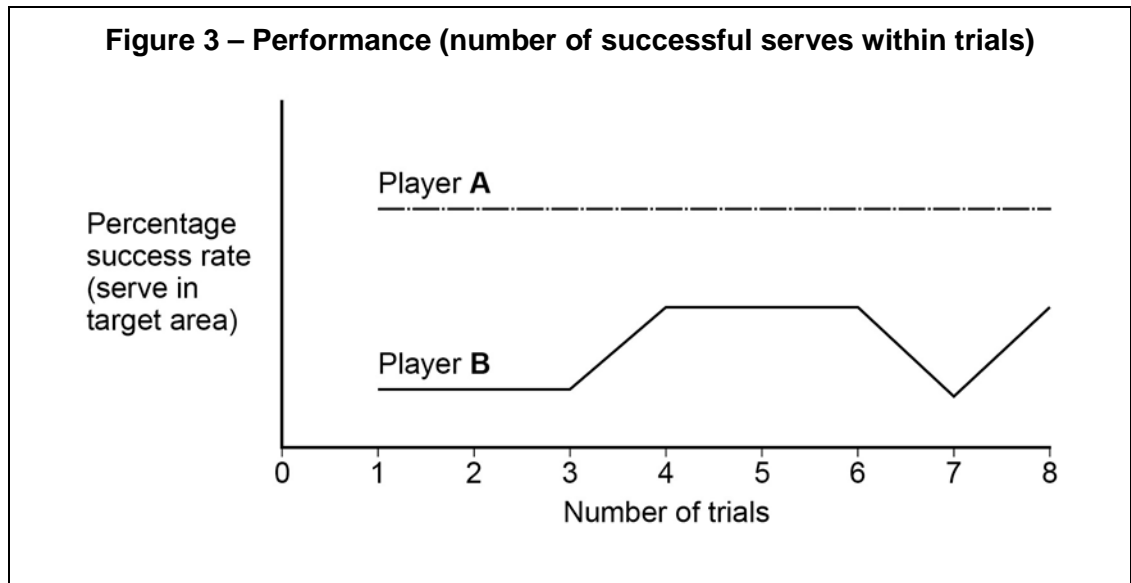
C Performing, forming, storming, norming,

D Storming, norming, performing, forming

[1 mark]

1 2

Figure 3 shows the success rate of two badminton players, during a number of trials, performing a serve into a target area.



Using **Figure 3**, identify the stage of learning of player **A** and state **two** characteristics of a performer in this stage of learning.

[3 marks]

1 3**1**

To develop skills, performers will use different types of practice.

Define the term 'massed practice'.

[1 mark]

1 3 . **2** Explain **three** reasons why a coach would use massed practice to produce optimum improvements in performance.

[3 marks]

1 4 Describe what you understand by the term 'competitive state anxiety'.

[2 marks]

1 5 Performers who display a negative attitude will often disrupt the performance of a team.

When using persuasive communication, explain the factors that need to be considered to change the negative attitude of a performer.

[3 marks]

1 | 6

During competitive situations, performers may display aggressive behaviour.

Suggest **three** strategies a coach could use to eliminate aggressive behaviour.

[3 marks]

1 | 7

The way in which performers within a team relate to each other is known as cohesion.

Suggest why cohesive teams tend to be more successful.

[3 marks]

Turn over for the next question

Section C**Sport and society and technology in sport**Answer **all** questions in this section.

1 9Which **one** of the following is a primary agent of socialisation?**A** Immediate family**B** Mass media**C** Peer**D** Schools**[1 mark]****2 0**Which **one** of the following was played in pre-industrial society?**A** Association football**B** Lawn tennis**C** Rationalised track and field events**D** Real tennis**[1 mark]****Turn over for the next question**

2 | **1**

Explain **two** characteristics of pre-industrial football.

[4 marks]

2 | **2**

Explain how the church encouraged the post-industrial game of football.

[2 marks]

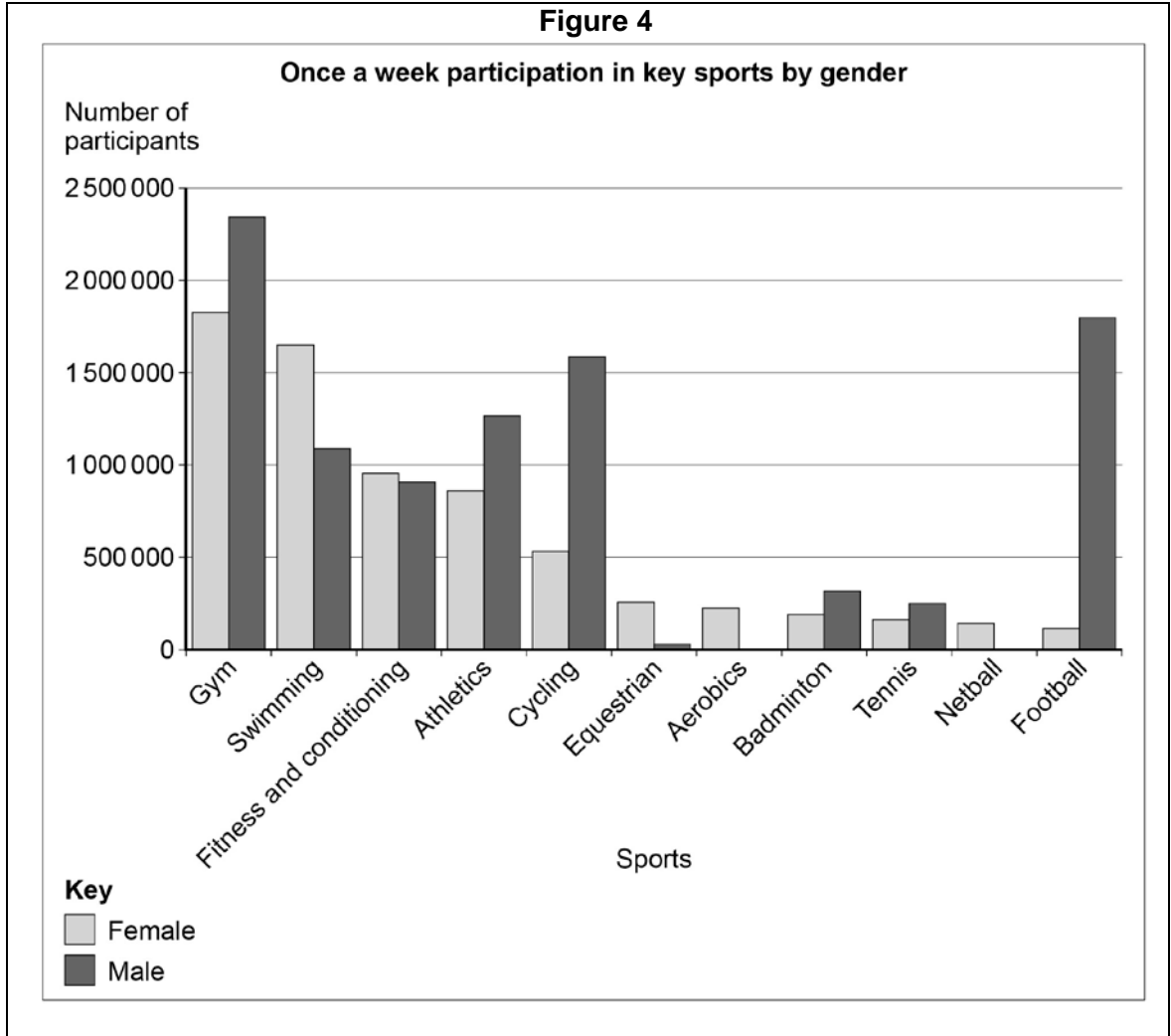
2 5

Explain **two** reasons why raising participation in physical activity and sport will lead to increased health benefits for the individual.

[4 marks]

2 | 6

One objective of Sport England’s 2012/17 strategy is raise the percentage of females playing sport once a week. **Figure 4** shows the once a week participation in key sports by gender.



Using the data in **Figure 4**, evaluate the sociological and psychological factors affecting female participation in football, athletics and tennis.

[8 marks]

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ANSWER IN THE SPACES PROVIDED**

There are no questions printed on this page

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