

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

Which **one** of these describes a mesocycle?

- A** A 4 – 12 week period of training.
- B** A period of training involving a long-term performance goal.
- C** A week or a few days of training sessions.
- D** The end of the session where rest and recovery takes place.

[1 mark]

0 2

Which athlete is most likely to supplement their diet with sodium bicarbonate?

- A** 400m hurdler
- B** 5000m runner
- C** High jumper
- D** Shot putter

[1 mark]

0 3

The Bohr Shift is the movement of the oxyhaemoglobin disassociation curve to the right during exercise.

Identify the **two** factors that cause the Bohr Shift.

A Decrease in carbon dioxide, decrease in temperature.

B Decrease in carbon dioxide, increase in temperature.

C Increase in carbon dioxide, decrease in temperature.

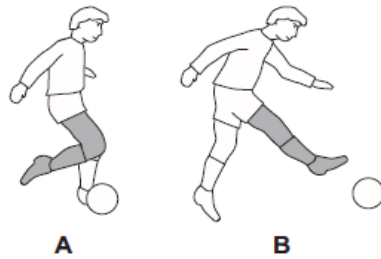
D Increase in carbon dioxide, increase in temperature.

[1 mark]

Turn over for the next question

0 4 . 1 Figure 1 shows a football player kicking a ball.

Figure 1



Complete **Table 1** to identify the articulating bones, the joint action and the main agonist at the shaded knee as the football player in **Figure 1** kicks the ball from **A** to **B**.

[3 marks]

Table 1

Articulating bones	Joint action	Main agonist

0 4 . 2 Name, sketch and label the lever system operating at the knee of the football player in **Figure 1**.

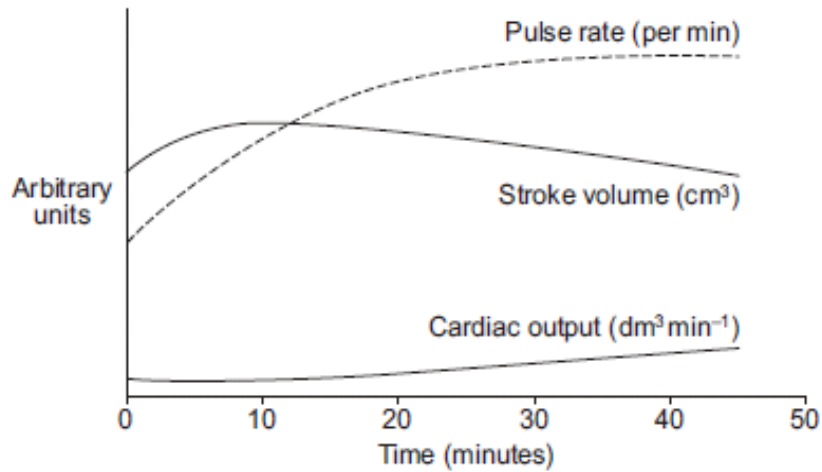
[2 marks]

Name of lever system:

0 5 . 1

Figure 2 shows the cardiac output, pulse rate and stroke volume of an athlete exercising in a warm environment for 45 minutes.

Figure 2



Consider the effect of prolonged exercise in a warm environment on cardiac output **and** its components. Refer to **Figure 2** in your answer.

[4 marks]

Question 5 continues on the next page

0 5 . **2**

Paul and Mark are both 20 years old. Paul does no exercise. Mark is a cross country runner who trains three times a week.

How would maximal cardiac output differ between Paul and Mark? Justify your answer.

[3 marks]

0 5 . **3**

Paul also has a high level of cholesterol.

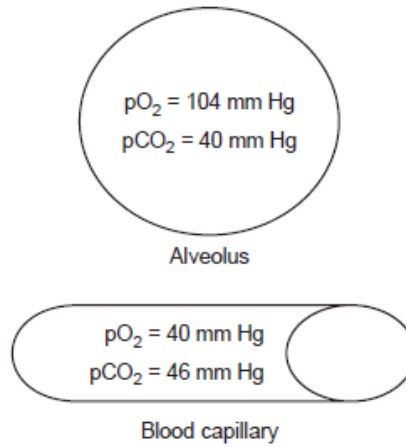
Identify **one** possible effect of high cholesterol levels on health.

[1 mark]

0	6
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Figure 3 shows the partial pressure of oxygen (pO_2) and carbon dioxide (pCO_2) in the alveoli and blood capillary.

Figure 3



Consider how oxygen **and** carbon dioxide move between the alveoli and the blood capillary. Refer to **Figure 3** in your answer.

[4 marks]

Turn over for the next question

Turn over for Section B

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**

Section B**Skill acquisition and sports psychology**

Answer **all** questions in this section.

0 8

There are a number of theories of arousal and performance.

Which **one** theory states that, as arousal increases, so does performance? This theory can also be written as $P = f(D \times H)$.

A Catastrophe theory

B Drive theory

C Inverted U theory

D Zone of optimal functioning theory

[1 mark]

0 9

'Changing the practice type and the practice drills.'

Identify this type of practice.

A Distributed

B Massed

C Mental practice

D Variable

[1 mark]

1 0

The triple jump is an athletic event where the aim is to jump as far as possible. The jumper does this by performing a hop, a step and a jump from a running start.

Figure 4 shows an athlete performing the triple jump.

Figure 4



Classify the triple jump using the following continua:

- open – closed
- self-paced – externally-paced
- discrete – serial – continuous
- gross – fine.

Justify your choices.

[4 marks]

1 1

There are three components which make up our attitude formation according to the triadic model.

Describe the **three** named components of the triadic model.

[3 marks]

1 2

. 1 What is a learning plateau?

[1 mark]

1 2 . **2** Identify **three** causes of a learning plateau. Suggest strategies that a coach could use to overcome these causes.

[6 marks]

1 3 . **1** What are outcome goals? Use a sporting example in your answer.

[2 marks]

1 3 . **2** What are task orientated goals? Use a sporting example in your answer.

[2 marks]

Turn over for Section C

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**

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

1 **5**Which **one** of these describes stereotyping?

- A** A preconceived idea about a group.
- B** The right to access the same opportunities, regardless of factors such as age, race, sex, mental or physical activity.
- C** The unfair treatment of a person.
- D** To form an unfavourable opinion of an individual often based on inadequate unfair treatment of a person.

[1 mark]**1** **6**Which **one** of these describes social control?

- A** The way in which people's thoughts, feelings, appearance and behaviour are regulated in social systems.
- B** Where members of a society learn its norms, values, ideas, practices and roles in order to take their place in that society.
- C** An alteration in the social order of a society.
- D** An organised group of people associated for some specific purpose or with a shared common interest.

[1 mark]

1 7

Explain **two** characteristics of nineteenth century lawn tennis.

[4 marks]

1 8 . **1** Outline **one** positive benefit for factories developing football teams in the post-industrial society.

[1 mark]

1 8 . **2** Explain the impact of improved transport and communication on sport in the post-industrial society.

[4 marks]

1 9 Explain how the modern-day amateur differs from an amateur of the 19th century.

[3 marks]

Extra space

END OF QUESTIONS

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