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PHYSICAL EDUCATION**0413/11**

Paper 1 Theory

May/June 2026**1 hour 45 minutes**

You must answer on the question paper.

No additional materials are needed.

INSTRUCTIONS

- Answer **all** questions.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen. Do **not** use correction fluid or tape.
- Do **not** write on any bar codes.
- You may use a calculator.
- You should show all your working and use appropriate units.

INFORMATION

- The total mark for this paper is 100.
- The number of marks for each question or part question is shown in brackets [].

This document has **16** pages.



- 1 Identify **three** types of sponsorship that a performer may receive.

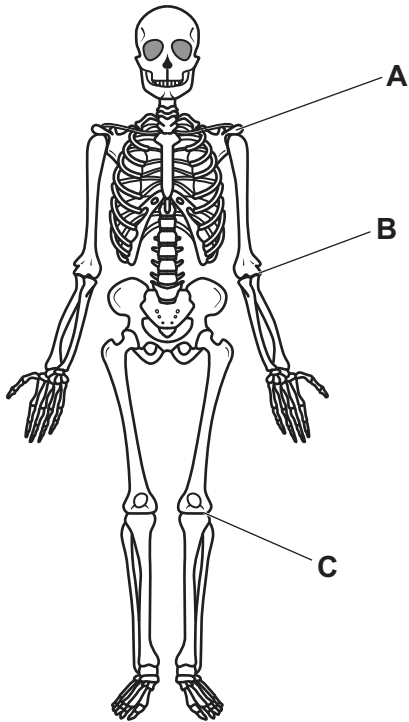
1

2

3

[3]

- 2 The diagram shows a human skeleton with joints labelled **A**, **B** and **C**.



- (a) Identify each of the following types of synovial joint.

joint labelled **A**

joint labelled **C**

[2]

- (b) Compare the range of movement and stability of the joint labelled **A** with the joint labelled **B**.

range of movement

.....

stability

.....

[2]



(c) Describe a different function of **three** named structural components of a synovial joint.

structure 1

function

.....

structure 2

function

.....

structure 3

function

.....

[6]

[Total: 10]

3 Using **three** different examples from a named physical activity, explain how technology has supported improvements in performance.

physical activity

example 1

explanation

.....

example 2

explanation

.....

example 3

explanation

.....

[6]



- 4 The photograph shows a performer playing badminton.



- (a) Complete the table to describe how each of the following components of fitness benefit a badminton performer. Identify a recognised fitness test for each of the components of fitness.

component of fitness	benefit to a badminton performer	fitness test
agility		
power		
flexibility		

[6]



- (b) A badminton player will require coordination when hitting the shuttlecock.

Describe how to carry out the Anderson Wall Toss Coordination Test.

.....

.....

.....

.....

.....

..... [3]

- (c) A coach may use the results from fitness testing to plan a training programme.

Other than fitness test scores, suggest **three** factors that could inform the design of a training programme.

.....

.....

.....

.....

.....

..... [3]

[Total: 12]

- 5 (a) Describe stroke volume.

.....

..... [1]

- (b) Calculate the cardiac output of a person with a heart rate of 60 beats per minute and a stroke volume of 80 millilitres. Your answer should include an appropriate unit.

cardiac output

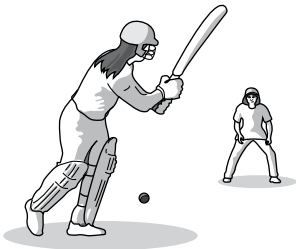
unit [2]

[Total: 3]
[Turn over]



- 6 The table shows three physical activities and a different method of training used by performers in each activity.

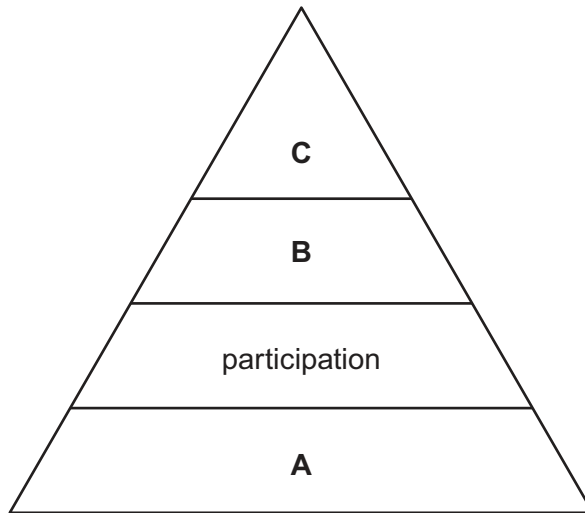
(a) For each physical activity, explain a different benefit to performance of using the stated method of training.

activity	method of training	benefit
netball 	circuit training	
cricket 	weight training	
table tennis 	high intensity interval training (HIIT)	

[3]



(b) The diagram shows a sports development pyramid.



(i) Identify the levels of the sports development pyramid labelled **A**, **B** and **C**.

- A**
- B**
- C** [3]

(ii) Describe **three** characteristics of the participation level of the sports development pyramid.

- 1
-
- 2
-
- 3
- [3]

[Total: 9]





7 Describe how each of the following factors can affect participation in physical activity.

media coverage

.....

family

.....

education

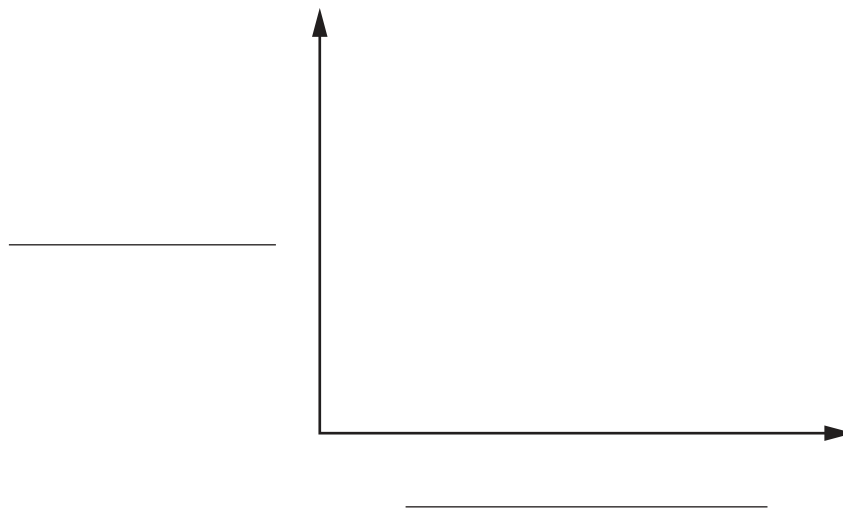
.....

discrimination

.....

[4]

8 (a) Complete the graph by drawing the Yerkes-Dodson Law. Label both axes.



[3]



(b) The photograph shows performers in a rugby union match.



Using different examples from a rugby union match, suggest when a performer needs the following levels of arousal to perform well. Justify each example.

low level of arousal

example

.....

justification

.....

high level of arousal

example

.....

justification

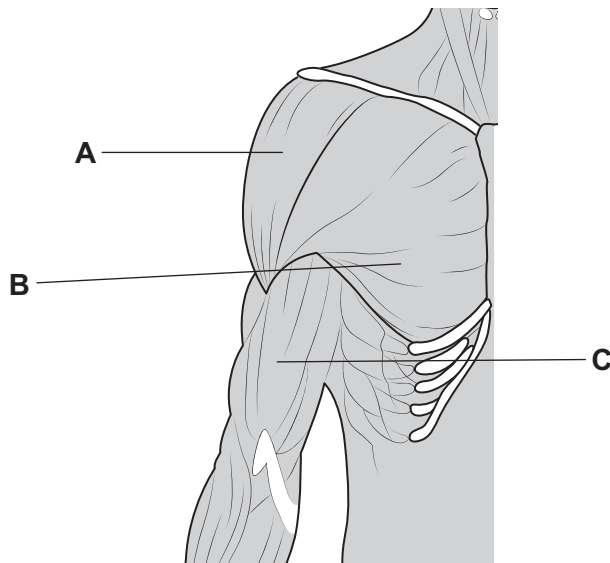
.....

[4]

[Total: 7]



- 9 The diagram shows part of the upper body and arm.



- (a) Identify the muscle labelled **A** and the muscle labelled **B**.

A

B

[2]

- (b) Identify the muscle labelled **C** and describe its role when flexion occurs at the elbow.

muscle **C**

description

.....

.....

.....

[3]

- (c) Fast twitch muscle fibres and slow twitch muscle fibres contract at different speeds. Compare **two** other features of fast twitch muscle fibres and slow twitch muscle fibres.

1

.....

2

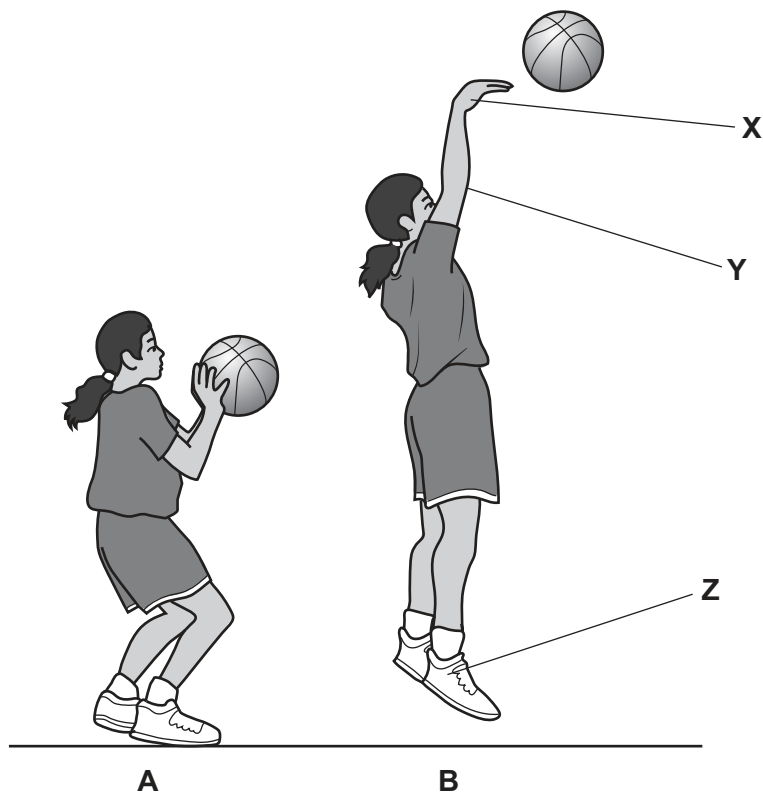
.....

[2]

[Total: 7]



10 The diagrams **A** and **B** show stages of a basketball player shooting the ball.



Identify the movement that occurs at joints **X**, **Y** and **Z** from diagram **A** to diagram **B**.

X

Y

Z [3]

11 (a) (i) Describe a function of each of the following structures of the heart.

left atrium

.....

right ventricle

..... [2]

- (ii) Complete the table to identify the components of blood and a description of each of their functions.

component of blood	function
red blood cells	
white blood cells	
	causes blood to clot to prevent blood loss during injury
	allows substances to dissolve and be transported easily

[4]

- (b) (i) Describe **two** structural differences between arteries and veins.

1

.....

2

.....

[2]

- (ii) Capillary walls are one cell thick which allows gaseous exchange to take place.

Describe **two** areas in the body where gaseous exchange takes place.

1

.....

2

.....

[2]

[Total: 10]



- 12 (a) Describe **three** advantages and **three** disadvantages for a performer receiving visual guidance from a coach.

advantages

1

.....

2

.....

3

.....

disadvantages

1

.....

2

.....

3

.....

[6]

- (b) Identify an appropriate type of feedback that may be used by a performer at the autonomous stage of learning. Justify your choice.

type of feedback

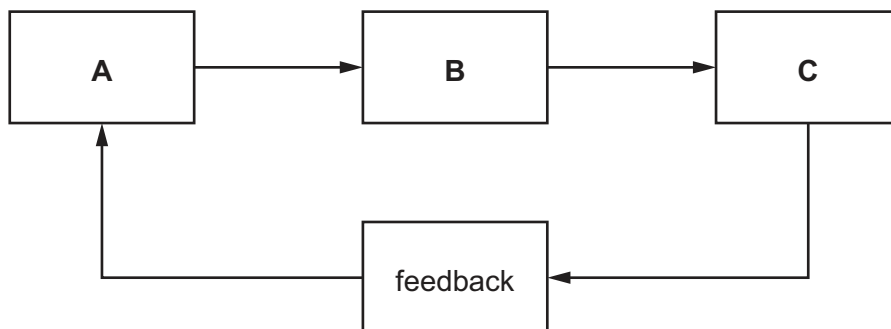
justification

.....

[2]



(c) The diagram shows a basic information processing model with stages **A**, **B** and **C** labelled.



(i) Identify the stages of the diagram labelled **A**, **B** and **C**.

A

B

C

[3]

(ii) Describe **one** difference between short-term memory and long-term memory.

.....

..... [1]

[Total: 12]

13 Complete the table by identifying the components of health and well-being described in each statement.

statement	component of health and well-being
ability to mix with other people	
all body systems work well	
feeling good	
able to carry out everyday tasks	

[4]



14 The photograph shows performers during a cross-country race.



(a) Describe **three** possible disadvantages for a cross-country performer from taking performance enhancing drugs (PED).

- 1
-
- 2
-
- 3
-
- [3]

(b) Describe a different effect of **two** named PEDs for a cross-country performer.

- PED 1
- effect
-
- PED 2
- effect
-
- [4]





(c) Describe the role of sports organising bodies in preventing and reducing the use of PEDs.

.....

.....

.....

.....

.....

..... [3]

[Total: 10]

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