



# Cambridge IGCSE™ (9–1)

CANDIDATE  
NAME

CENTRE  
NUMBER

--	--	--	--	--

CANDIDATE  
NUMBER

--	--	--	--



## PHYSICAL EDUCATION

0995/11

Paper 1 Theory

October/November 2021

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 or correction fluid.
- 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. Any blank pages are indicated.

1 One function of the skeleton is protection.

Identify **two** other functions of the skeleton.

1 .....

2 .....

[2]

2 (a) (i) Identify **two** components of fitness, other than speed, that may be required by a 100-metre sprinter during a race. Justify each of your answers.

component of fitness 1 .....

justification .....

.....

component of fitness 2 .....

justification .....

.....

[2]

(ii) Describe how to carry out a named test of speed.

name of test .....

description .....

.....

.....

.....

.....

.....

[4]

(iii) Suggest **three** reasons for carrying out a fitness test.

1 .....

.....

2 .....

.....

3 .....

.....

[3]

(b) High-Intensity Interval Training (HIIT) is a method of training that could benefit a 100-metre sprinter.

Describe **two** advantages and **two** disadvantages of using this method of training.

advantages

1 .....

2 .....

disadvantages

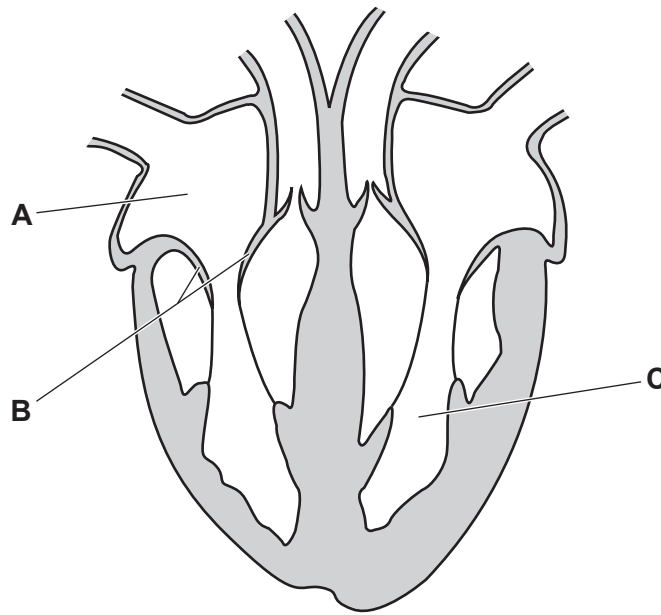
1 .....

2 .....

[4]

[Total: 13]

3 The diagram shows the human heart with structures labelled **A**, **B** and **C**.



(a) Identify the structures labelled **A**, **B** and **C**. Describe a different function of each structure.

**A** .....

function .....

**B** .....

function .....

**C** .....

function .....

[6]

(b) Describe **two** long-term effects of regular exercise on the heart.

1 .....

2 .....

[2]

[Total: 8]

4 (a) Define the term *fitness*.

.....  
..... [1]

(b) Suggest **two** lifestyle choices that can benefit health and fitness.

1 .....

.....

2 .....

..... [2]

(c) Explain how exercise and fitness can have **two** positive effects on each of the following:

physical health and well-being

1.....

.....

2 .....

.....

mental health and well-being.

1 .....

.....

2 .....

..... [4]

[Total: 7]

5 The photograph shows a swimmer performing the front crawl stroke.



(a) Identify **three** skill classification continua. Justify a classification of the front crawl stroke on each continuum.

continuum 1 ..... and .....

classification .....

justification .....

.....

.....

continuum 2 ..... and .....

classification .....

justification .....

.....

.....

continuum 3 ..... and .....

classification .....

justification .....

.....

.....

[6]

(b) Describe an example of each of the following characteristics of a skilled performance in a named physical activity.

physical activity .....

aesthetically pleasing .....

.....

coordinated .....

.....

goal-directed .....

.....

[3]

[Total: 9]

6 (a) Suggest **two** possible causes of a ligament injury in a named games activity.

games activity .....

1 .....

.....

2 .....

.....

[2]

(b) The RICE method can be used to treat ligament injuries.

Identify **two** components of the RICE method. Suggest a different benefit of each component.

component of RICE method 1 .....

benefit .....

.....

component of RICE method 2 .....

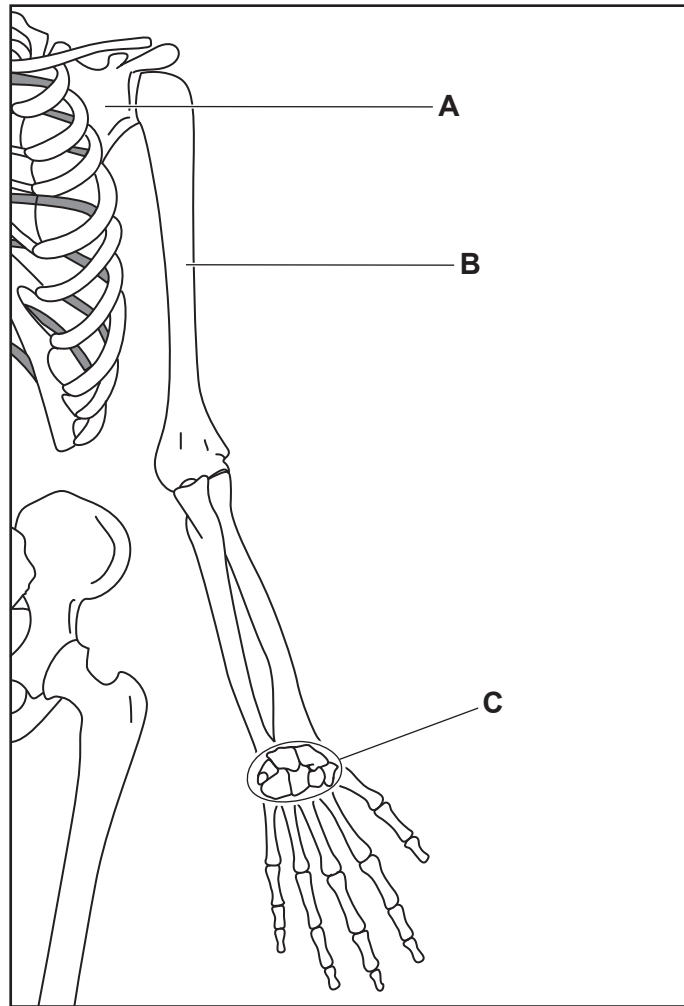
benefit .....

.....

[4]

[Total: 6]

7 The diagram shows part of the skeleton with bones labelled **A**, **B** and **C**.



Complete the table to state the name and the classification of the bones labelled **A**, **B** and **C**.

	name	classification
<b>A</b>		
<b>B</b>		
<b>C</b>		

[6]



- 8 (a) Identify the main type of respiration that would release energy throughout an endurance activity. State an equation for this type of respiration.

main type of respiration .....

equation

[3]

- (b) Explain why a performer can only sprint for short distances.

.....  
.....  
.....  
..... [2]

- (c) Explain how **two** factors, other than a cool down, can affect the recovery time of a performer.

1 .....

2 .....

..... [2]

[Total: 7]

9 Identify **two** forces that act on a ball when it is kicked and moves through the air. Describe how each force acts on the ball.

force 1 .....

description .....

.....

force 2 .....

description .....

.....

[4]

10 Describe, using a named physical activity, an exercise that would be appropriate for each of the following phases of a warm up.

physical activity .....

pulse raiser .....

.....

.....

.....

stretches .....

.....

.....

.....

familiarisation/ skill-related activities .....

.....

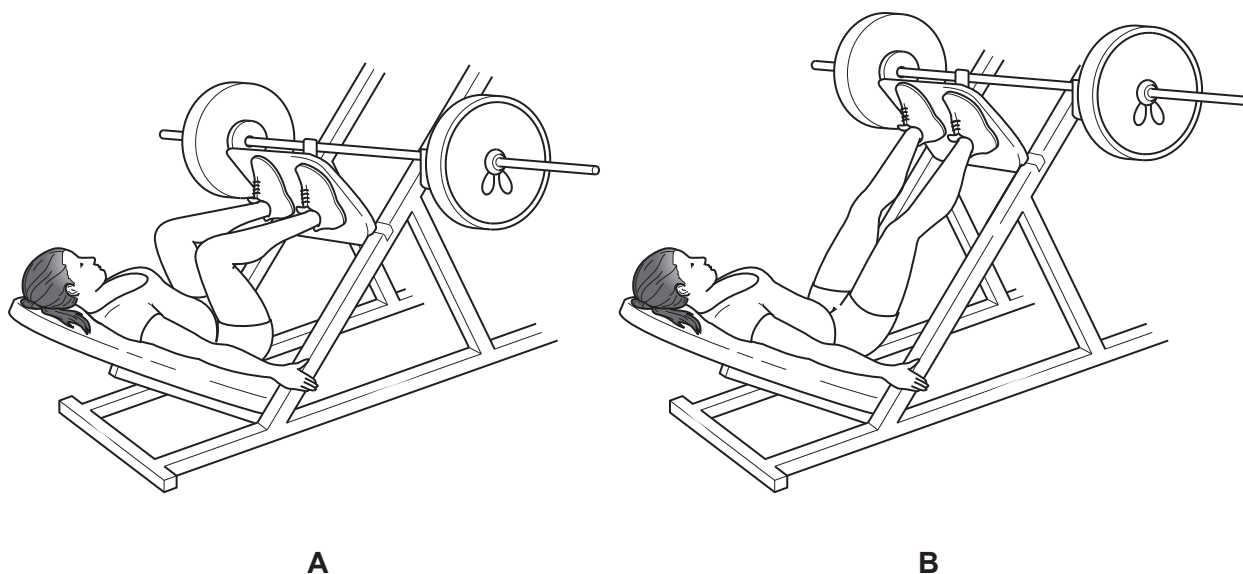
.....

.....

[3]

**BLANK PAGE**

- 11 The diagrams show a performer carrying out a weight-training exercise that includes movement at the knee joint.



- (a) Complete the table to identify the following:

the type of synovial joint at the knee	
the type of movement at the knee joint from <b>A</b> to <b>B</b>	
the agonist muscle causing the movement at the knee joint from <b>A</b> to <b>B</b>	
the antagonist muscle during the movement at the knee joint from <b>A</b> to <b>B</b>	
<b>two</b> bones that form the knee joint.	bone 1
	bone 2

(b) Suggest why a protein-rich diet is important when weight training.

.....  
.....  
.....  
..... [2]

(c) Fats are another component of a performer's diet.

Describe **one** function of fats.

.....  
..... [1]

[Total: 9]

12 The photograph shows rock climbers using an artificial wall.



(a) Describe how **three** strategies could reduce the real risk to rock climbers.

1 .....

.....

2 .....

.....

3 .....

.....

[3]

(b) Describe what is meant by the term *perceived risk*.

.....

..... [1]

(c) Describe **two** examples of perceived risks for a rock climber at the cognitive stage of learning.

1 .....

.....

2 .....

.....

[2]

[Total: 6]

13 (a) Describe a difference between skill and ability.

.....  
..... [1]

(b) Explain how **two** named factors can affect variations in skill level.

factor 1 .....  
explanation .....  
.....  
factor 2 .....  
explanation .....  
..... [4]

(c) Output is one stage of a basic information processing model.

Describe how **two** other named stages of a basic information processing model are used in a named physical activity.

physical activity .....  
stage 1 .....  
description .....  
.....  
stage 2 .....  
description .....  
..... [4]

(d) Performance of skills depends on memory.

Describe differences between short-term memory and long-term memory.

.....  
.....  
.....  
..... [2]

[Total: 11]

14 (a) Describe each of the following:

tidal volume .....

.....

minute ventilation .....

.....

vital capacity. ....

.....

[3]

(b) Describe the mechanics of breathing during inhalation.

.....

.....

.....

.....

.....

.....

.....

..... [4]

[Total: 7]

15 As part of their education, school children may receive different forms of extrinsic motivation to encourage participation in physical activity.

Suggest **two** examples of this type of motivation that schools may provide.

1 .....

2 .....

[2]

---

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge Assessment International Education Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at [www.cambridgeinternational.org](http://www.cambridgeinternational.org) after the live examination series.

Cambridge Assessment International Education is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which itself is a department of the University of Cambridge.