A

## AQA

## Surname

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Centre Number $\qquad$
Candidate Number $\qquad$
Candidate Signature $\qquad$
I declare this is my own work.

## GCSE

PHYSICAL EDUCATION

## Paper 1 The human body and movement in physical activity and sport

## 8582/1

Time allowed: 1 hour 15 minutes
At the top of the page, write your surname and other names, your centre number, your candidate number and add your signature.
[Turn over]

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For this paper you must have:

- a ruler.


## INSTRUCTIONS

- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- Answer ALL questions.
- You must answer questions in the spaces provided. Do not write on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- 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 78.
- 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



Answer ALL questions.

Only ONE answer per question is allowed.
For each question 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.


## $0 \mid 1$

Which ONE of these components of fitness is measured by the Ruler Drop Test? [1 mark]

O A Agility
0
B Balance

0
C Coordination

0
D Reaction time
[Turn over]

## $0 \mid 2$

Which ONE of these is the correct pathway of air? [1 mark]


A Mouth/nose - trachea - bronchi bronchioles - alveoli

B Mouth/nose - bronchi - bronchioles trachea - alveoli

C Mouth/nose - trachea - bronchioles bronchi - alveoli

D Mouth/nose - bronchioles - bronchi trachea - alveoli

\section*{| 0 | 3 |
| :--- | :--- |}

Which ONE of these is the MAIN function of a flat bone? [1 mark]


A Allow movement
0
B Blood cell production

0
C Mineral storage
0
D Protection of vital organs
[Turn over]

## $0 \mid 4$

Which ONE of these blood vessels transports oxygenated blood back to the left atrium? [1 mark]

O A Aorta

O B Pulmonary artery


C Pulmonary vein


D Vena cava
$\square$
Which ONE of these pairs of muscles are used when BREATHING IN during exercise? [1 mark]

0A Sternocleidomastoid and abdominals

B Sternocleidomastoid and deltoids

O C Sternocleidomastoid and intercostalsD Sternocleidomastoid and pectorals

## 9

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[Turn over]

## 0.6 .1

Define muscular endurance.
Use an example of a sporting action in your answer. [2 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$


## 0.6 .2

Justify why muscular endurance is an important component of fitness needed for a games player to perform effectively. [4 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
[Turn over]


017
FIGURE 1 shows a spirometer trace for a person at rest. FIGURE 1

Lung
volume
in litres


| 0 | 7 |
| :--- | :--- |

Identify lung volumes $A$ and $B$ in FIGURE 1. [2 marks]

A

B $\qquad$


## 0.7 .2

In FIGURE 1, what would happen to lung volume A during exercise? [1 mark]

## 0.7 . 3

Justify your answer to QUESTION 7.2. [2 marks]
[Turn over]

0.7 .4

Define inhalation and describe how it takes place at rest.

Refer to the intercostal muscles, rib cage and diaphragm in your answer. [4 marks]

Definition

Description
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

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[Turn over]

## $0 \mid 8$

FIGURE 2 shows a person performing a wall sit.

## FIGURE 2



## 

Identify the type of muscular contraction taking place in the legs in FIGURE 2. [1 mark]

0.8 . 2 Justify your answer to QUESTION 8.1. [1 mark]
[Turn over]
$\boxed{2}$

## 0.9 .1

Name TWO major muscles that allow the foot to move at the ankle. [2 marks]

1 $\qquad$
$\qquad$
2 $\qquad$

| 0 | 9 |
| :--- | :--- |

Name TWO bones found at the elbow. [2 marks]
1

2
2


## 0.9 .3

Name the type of synovial joint at the elbow. [1 mark]

\section*{| 0 | 9 |
| :--- | :--- |}

Name THREE structures of a synovial joint that help to prevent injury. [3 marks]

1 $\qquad$

2 $\qquad$

3 $\qquad$
[Turn over]

## 10

Michael is starting a 12 -week training programme.

## 1. 0.1

State FOUR reasons why Michael should test his levels of fitness BEFORE starting his 12 -week training programme. [4 marks]

1
$\qquad$
$\qquad$
2 $\qquad$

3 $\qquad$
$\qquad$
$\qquad$


## [Turn over]

IIIIII

### 1.0. 2

Identify FOUR long-term effects of exercise. [4 marks]
1 $\qquad$
$\qquad$
$\qquad$
2 $\qquad$

3 $\qquad$

4 $\qquad$
$\qquad$
$\qquad$


## 1. 0.3

Explain how Michael would apply the FITT principle to bring about an improvement in his fitness levels. [3 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
[Turn over]


## 1. 0.4

State TWO parts that Michael should include in a warm up before a training session. [2 marks]

1

2 $\qquad$
$\qquad$
$\qquad$

## 1. 0.5

Explain FOUR reasons why Michael should warm up before taking part in a training session. [4 marks]

1 $\qquad$
$\qquad$
$\qquad$
2 $\qquad$
$\qquad$
$\qquad$
3 $\qquad$
$\qquad$
$\qquad$
4 $\qquad$
$\qquad$
$\qquad$
[Turn over]
17

### 1.1. 1

Define circumduction.
Use an example of a sporting action in your answer. [2 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$

| 1 | 1 |
| :--- | :--- |

Name the TYPE of joint where circumduction can take place. [1 mark]


### 1.2. 1

What is the role of the valves in the veins? [1 mark]

### 1.2. 2

Identify TWO features of the structure of arteries. Explain how each feature helps the arteries to perform their function. [4 marks]

Feature 1

Feature 2
$\qquad$
[Turn over]
5

## $1 \mid 3$

FIGURE 3 shows a basketball player in two different positions ( $A$ and $B$ ) as they perform the jump shot.

Use FIGURE 3 to help you answer QUESTIONS 13.1 to 13.3.

FIGURE 3


A


B

Identify the joint action taking place at the KNEE as the basketball player moves from $A$ to $B$. [1 mark]

| 13 | 2 |
| :--- | :--- |

Identify the main agonist at the KNEE as the basketball player moves from A to $B$. [1 mark]

\section*{| 1 | 3 |
| :--- | :--- |}

Identify the type of muscle contraction that is taking place at the KNEE as the basketball player moves from A to B. [1 mark]

## $1 \mid 4$

FIGURE 4 shows a gymnast performing a cartwheel.
FIGURE 4


Identify the plane and axis when the gymnast in FIGURE 4 is performing a cartwheel. [2 marks]

## Plane

Axis $\qquad$
$\qquad$


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[Turn over]

## $1 \mid 5$

FIGURE 5 shows a shot putter in two different positions ( $A$ and $B$ ) as they release the shot.

## FIGURE 5



| 15 | 1 |
| :--- | :--- |

Identify the class of lever used at the ELBOW as it moves from A to B. [1 mark]
1.5. 2

Draw a fully labelled diagram to show the class of lever identified in QUESTION 15.1. [2 marks]

## 16

Justify the importance of speed AND flexibility for a footballer. [6 marks]
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
[Turn over]


## 1 7

Analyse how BOTH aerobic AND anaerobic exercise can be used in interval training to help improve performance in a team game. [9 marks]
$\qquad$
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[Turn over]

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[Turn over]

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$\qquad$

END OF QUESTIONS

$\qquad$

## 43

$\qquad$

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| For Examiner's Use |  |
| :---: | :---: |
| Question | Mark |
| 1 to 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |
| 15 |  |
| 16 |  |
| 17 |  |
| TOTAL |  |

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