

Please check the examination details below before entering your candidate information

Candidate surname

Other names

Centre Number

Candidate Number

--	--	--	--	--

--	--	--	--	--

## Pearson BTEC Level 1/Level 2 Tech Award

**Tuesday 9 January 2024**

Morning (Time: 1 hour 30 minutes)

Paper  
reference

**BSP03**

### Sport

**COMPONENT 3: Developing Fitness to Improve Other Participants Performance in Sport and Physical Activity**

**You do not need any other materials.**

Total Marks

### Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided  
– *there may be more space than you need.*

### Information

- The total mark for this paper is 60.
- The marks for **each** question are shown in brackets  
– *use this as a guide as to how much time to spend on each question.*

### Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

P77691RA

©2024 Pearson Education Ltd.  
1/1/1/1



P 7 7 6 9 1 R A 0 1 1 6

  
Pearson

Answer all questions. Write your answers in the space provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

Jakub is a weightlifter. Weightlifters require good levels of fitness.

- 1 (a) Which **one** of the following is the main component of fitness required by weightlifters?

(1)

- A Aerobic endurance
- B Agility
- C Reaction time
- D Muscular strength

Jakub is a weightlifter so he needs good levels of power.

- (b) Describe what is meant by the term 'power'.

(1)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



DO NOT WRITE IN THIS AREA

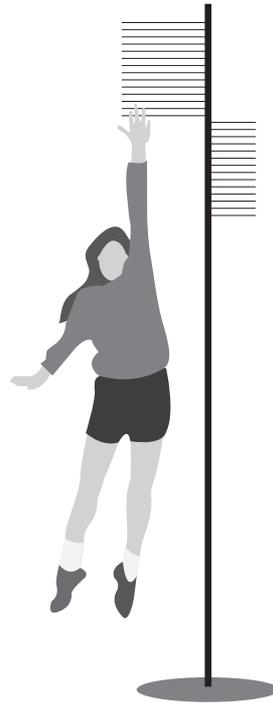
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Power can be tested using several different fitness tests.

(c) Which test is being shown in **Figure 1**?

(1)



**Figure 1**

- A** Vertical jump test
- B** Standing broad jump test
- C** Illinois agility run test
- D** Stork stand test



P 7 7 6 9 1 R A 0 3 1 6

Jakub's coach has suggested two new training methods to increase Jakub's strength.

(d) Complete **Table 1** by:

- (i) Stating **two** types of training method to increase strength
- (ii) Describing **each** training method you have stated.

(i) Training method	(ii) Description of training method
(1)	(1)
(1)	(1)

**Table 1**

Jakub needs to improve his muscular strength.

(e) What calculation would Jakub's coach use to work out the exercise intensity Jakub should be working at?

(1)

Jakub's coach compares Jakub's fitness testing results to normative data.

(f) Explain what is meant by 'normative data'.

(2)

**(Total for Question 1 = 10 marks)**



Sophie is an 18-year-old tennis player.

2 (a) Identify the fitness tests shown in pictures **A** and **B**.

(2)

Draw a straight line to match **each** picture to the correct fitness test.

**Picture**

**Fitness test**

A



●Grip dynamometer

●Yo-Yo test

(Source: © Shutterstock/Watchares Hansawek)

B



●One-minute press-up

●One-minute sit-up

Tennis players need to have good levels of coordination.

(b) Give **one** reason why Sophie should have **good** levels of coordination.

(2)

.....  
.....  
.....  
.....



Sophie uses the Illinois agility run test to test her agility.

**Table 2** shows the normative test data for the Illinois agility run test.

Gender	Category				
	Excellent	Above average	Average	Below average	Poor
Male	<15.2 seconds	15.2–16.1 seconds	16.2–18.1 seconds	18.2–19.3 seconds	>19.3 seconds
Female	<17.0 seconds	17.0–17.9 seconds	18.0–21.7 seconds	21.8–23.0 seconds	>23.0 seconds

**Table 2**

Sophie's time was 22.3 seconds.

- (c) (i) Using **Table 2**, identify the category that Sophie is in for the Illinois agility run test.

(1)

- (ii) Explain **one** training method for agility Sophie would use to improve her performance in tennis.

(2)

Sophie uses a range of different training methods to avoid boredom and to help maintain her motivation.

- (d) State the additional principle of training Sophie is using.

(1)



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Sophie's aerobic endurance and muscular endurance fitness test results are poor.

(e) Complete **Table 3** by:

- (i) Naming **one** training method to improve **each** of these components of fitness
- (ii) Describing **each** type of training method you have named.

Component of fitness	(i) Training method	(ii) Description of training method
Aerobic endurance	(1)	(1)
Muscular endurance	(1)	(1)

**Table 3**

**(Total for Question 2 = 12 marks)**



Norman is 65 years old and has started to go to his local gym.

3 (a) Identify the correct method for working out Norman's maximum heart rate. (1)

- A 140 – age
- B 180 – age
- C 220 – age
- D 260 – age

Norman's personal trainer uses Norman's maximum heart rate to help design his training programme.

(b) State what 'bpm' stands for. (1)

Norman completes a lifestyle and physical activity history questionnaire before he starts training.

(c) Explain why it is important that Norman completes a lifestyle and physical activity history questionnaire. (2)

.....

.....

.....

.....

Norman's personal trainer explains that he needs to cool down at the end of each session.

(d) Explain **one** component of a cool down. (2)

.....

.....

.....

.....



Norman wants to increase his flexibility. His personal trainer uses the sit and reach test to measure his current levels of flexibility.

(e) Explain **one** advantage and **one** disadvantage of the sit and reach test.

(4)

Advantage

.....

.....

.....

.....

Disadvantage

.....

.....

.....

.....





DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

**BLANK PAGE**  
**QUESTION 4 BEGINS ON THE NEXT PAGE**



Helena is a student who competes in long-distance running. Helena's coach wants to know what her attitude is towards competing.

4 (a) State what is meant by 'attitude'. (1)

.....

Helena's coach finds out that her motivation to improve has dropped.

(b) (i) State **two** benefits of increasing Helena's motivation. (2)

1 .....

.....

2 .....

.....

(ii) State **two** examples of extrinsic motivation. (2)

1 .....

2 .....

Helena's coach chooses the Harvard step test to measure aerobic endurance.

(c) Explain **two** pre-test procedures for the Harvard step test. (4)

1 .....

.....

2 .....

.....



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(d) Describe how **two** pieces of equipment are used to administer the Harvard step test.

(4)

1 .....

.....

.....

2 .....

.....

.....

Helena would like to know what her body composition is.

(e) Name **one** test that measures body composition.

(1)

.....

Helena undertakes a training programme set by her coach. The long-term effect of this training method is cardiac hypertrophy.

(f) Explain what is meant by 'cardiac hypertrophy'.

(2)

.....

.....

.....

.....

**(Total for Question 4 = 16 marks)**





DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Handwriting practice area with 25 horizontal dotted lines.

**(Total for Question 5 = 6 marks)**

**TOTAL FOR PAPER = 60 MARKS**



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

**BLANK PAGE**

