

Paper Reference(s)

3827/01

Edexcel GCSE

Physical Education (Short Course)

Paper 1

Friday 16 May 2008 – Morning

Time: 45 minutes

Materials required for examination

Multiple Choice Answer Sheet
HB pencil
Eraser

Items included with question papers

Nil

Instructions to Candidates

Use an HB pencil. Do not open this booklet until you are told to do so.

Before the test begins:

Check that the answer sheet is for the correct test: 'GCSE Physical Education (Short Course) Answer Sheet', and that it contains your candidate details.

How to answer the test:

For each question, choose the right answer, A, B, C or D and mark it in HB pencil on the answer sheet.



For example, the answer C would be marked as shown.

Mark only **one** answer for each question. If you change your mind about an answer, rub out the first mark **carefully**, then mark your new answer.

Answer **all** the questions. There are **40** questions in this paper.

Do any necessary calculations and rough work in this booklet.
You must not take this booklet or the answer sheet out of the examination room.

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Answer ALL questions by selecting the letter A, B, C or D on the Answer Sheet.

Each question is worth 1 mark.

1. Which statement gives the definition of health?

- A** The ability to meet the demands of the environment.
- B** A state of mental well being and not merely the absence of disease and infirmity.
- C** The absence of disease.
- D** A state of complete mental, physical and social well being and not merely the absence of disease and infirmity.

(1)

2. Which of the situations in the following statements causes an increase in breathing rate?

- A** A long term benefit of exercise.
- B** A poor level of fitness.
- C** An immediate effect of exercise.
- D** An effect of regular training.

(1)

3. Which of the following gives a balanced diet to maintain body requirements when undertaking an exercise programme?

- A** Carbohydrates, fibre, vitamins, minerals, water, protein.
- B** Water, carbohydrates, protein.
- C** Fats, carbohydrates, fibre, vitamins, minerals, water, protein.
- D** Carbohydrates, proteins, water, vitamins, minerals.

(1)

4. Which of the following statements correctly identifies the effects of smoking on sports performers?
- A Carbon dioxide in cigarette smoke reduces oxygen available to the muscles.
 - B Haemoglobin prefers carbon monoxide so more oxygen is carried out of the lungs.
 - C Cardiovascular endurance is not affected by smoking, but speed is, so the sprinter cannot run as fast.
 - D Recovery in endurance athletes is slower as a reduced amount of oxygen gets to the muscles due to carbon monoxide in cigarette smoke.

(1)

5. Which of the following is used to balance competition?
- A Same body type.
 - B Same sex.
 - C Same task.
 - D Same day.

(1)

Figure 1 shows an image of a twisted ankle.



Figure 1

6. What type of injury is a twisted ankle?
- A Fracture.
 - B Deep bruising.
 - C Strain.
 - D Sprain.

(1)

7. Which of the following sports injuries would be treated using RICE?

- A Fracture.
- B Concussion.
- C Sprain.
- D Hypothermia.

(1)

The statements below are all examples of the benefits of exercise. To answer questions 8 – 10 match the statements to the categories of benefits.

- A It gives me something to do while I mix with my friends.
- B It can improve fitness and it gives me greater muscle definition.
- C It makes me feel less tense and better about my health.
- D I enjoy the competition and it can lead to weight loss.

8. Which statement identifies two mental benefits of exercise?

(1)

9. Which statement identifies both a mental AND physical benefit of exercise?

(1)

10. Which statement identifies two physical benefits of exercise?

(1)

The following are components of health-related exercise and skill-related fitness.

- A Muscular endurance, cardiovascular endurance, agility, reaction time.
- B Muscular endurance, flexibility.
- C Power, speed.
- D Reaction time, agility.

To answer questions 11 – 13, select one of the letters A, B, C or D for the correct combination of fitness requirements.

11. Which list, A, B, C or D would be most relevant to a long distance runner?

(1)

12. Which list, A, B, C or D would be most relevant to a games player?

(1)

13. Which list, A, B, C or D would be most relevant to a 100m sprinter?

(1)

The following statements A, B and C relate to the components of health-related exercise or skill-related fitness.

- A** This is an aspect of skill-related fitness. It is the ability of the body to keep going for long periods of time without tiring.
- B** This is an aspect of health-related exercise. It is the ability to use two or more body parts together.
- C** This is an aspect of health-related exercise. It is the ability to use muscles many times without getting tired.
- D** None of the statements.

To answer questions 14 – 16 match the following components of fitness to the statements given in A, B or C. Use D if the correct answer is not included in A, B or C.

- 14.** Which statement correctly describes muscular endurance? **(1)**
 - 15.** Which statement correctly describes cardiovascular endurance? **(1)**
 - 16.** Which statement correctly describes co-ordination? **(1)**
-

The following statements A, B, C and D list some of the components of health-related exercise and/or skill-related fitness.

- A** Flexibility, Balance, Speed.
- B** Power, Reaction Time, Cardiovascular Endurance.
- C** Agility, Speed, Reaction Time.
- D** Speed, Reaction Time, Power.

The swimmer shown in Figure 2 relies on skill-related components of fitness in order to perform well.



(Source: alanbircher.com)

Figure 2

- 17.** Which statement A, B, C or D lists aspects of skill-related fitness that are most relevant to a swimmer competing in a single length race? **(1)**
-

Questions 18 – 22 relate to the principles of training and examples of how they are used in a personal exercise programme (PEP). For each question read the statement and decide whether A, B, C or D is correct.

- A The **explanation** and the **example** match the stated principle.
- B Only the **explanation** matches the stated principle.
- C Only the **example** matches the stated principle.
- D The **explanation** matches the example, but **not the stated principle**.

	Principle	Explanation	Example from PEP	
18.	Overload	Gradually increasing the amount of work I do	Instead of training once a week I increased this to four times	(1)
19.	Specificity	Making the training match the demands of the sport	I'm weak at breaking free from my opponent to get into space so I worked on my speed	(1)
20.	Moderation	Doing the right amount of training, not too much, not too little	I'm not very fit so I only train once a week	(1)
21.	Progression	Training more than I would normally do	I used to lift 20KG but increased this to 50KG	(1)
22.	Reversibility	Stopping the loss of fitness by increasing training	I was lifting 30KG but after my break in training could only manage 20KG	(1)

The following are all methods of training:

- A circuit
- B fartlek
- C interval
- D cross

23. Which training method is being described in the box below?

I include five short sprints every 3 or 4 minutes over a 30-minute run, and include sprinting up hills. It is important that I vary my pace throughout the run, allowing time for recovery during the run as well as afterwards.

(1)

The following statements are taken from a performer's Personal Exercise Programme (PEP):

- A I include five short sprints every 3 or 4 minutes and include sprinting up hills.
- B although my training session lasts for about 30-minutes
- C it is important that I vary my pace throughout the run
- D allowing time for recovery during the run as well as afterwards.

24. Which statement A, B, C or D shows that the performer is working anaerobically?

(1)

Questions 25 – 29 relate to the immediate effects of exercise, the effects of regular training and the long term benefits of exercise.

For each question read the statements and decide whether A, B, C or D is correct.

- A The **description** matches the type of effect/benefit **AND** the **system** affected is correct.
- B Only the **description** matches the stated type of effect/benefit.
- C The **description** matches the **system affected**, but **not the stated type of effect/benefit**.
- D There are no links.

	Type of effect/benefit	Description of effect	System affected	
25.	Immediate effect of exercise	An increase in muscle size/strength (hypertrophy)	Circulatory & Muscular	(1)
26.	Long term benefit	Less risk of osteoporosis	Skeletal	(1)
27.	Effect of regular training	Increased heart rate	Respiratory	(1)
28.	Immediate effect	Drop in resting blood pressure	Circulatory	(1)
29.	Immediate effect of exercise	Increased heart rate	Muscular	(1)

The following words relate to body type:

- A mesomorph
- B somatotype
- C ectomorph
- D endomorph

For questions 30 and 31 read the statements and decide whether A, B, C or D is correct.

30. Tend to be very muscular and good at explosive, powerful events. (1)
31. These performers have a very slim build. They tend to be tall and thin and perform in endurance events. (1)
-

Questions 32 – 35 relate to possible sports injuries/conditions and preventative measures that can be taken to reduce the chance of injury.

For each question read the statements and decide whether A, B, C or D is correct.

- A Both statements are true
- B Statement 1 is true, statement 2 is false
- C Statement 1 is false, statement 2 is true
- D Both statements are false.

	Statement 1	Statement 2	
32.	A fracture is a soft tissue injury	If a performer has a fracture they should be placed in the recovery position	(1)
33.	Concussion occurs due to dehydration	The risk of dehydration can be reduced by drinking water	(1)
34.	DRABC outlines the steps you should take if a performer collapses	The D stands for diet, you should check what the performer has eaten	(1)
35.	Strains and sprains can happen if performers do not warm up properly	The warm up should physically and mentally prepare the performer for exercise	(1)

Figure 3 shows Jared's heart rate values before, during and after one of his training sessions.

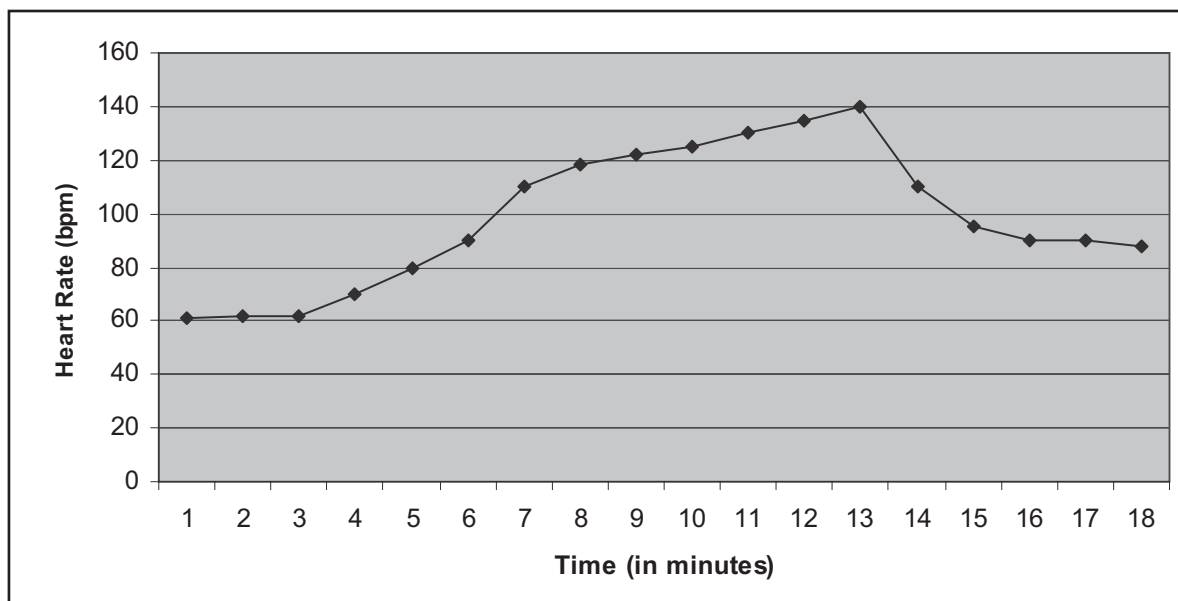


Figure 3

Use Figure 3 to answer questions 36 – 38.

Select one of the statements A, B, C or D to answer questions 36 – 38.

- A Both parts of the statement are true.
- B The first part of the statement is true.
- C The second part of the statement is true.
- D Both parts of the statement are false.

	First Part of Statement	Second Part of Statement	
36.	Jared's resting heart rate was between 60 and 65 bpm	He started exercising at the start of minute 7	(1)
37.	Jared was working at the greatest intensity during minutes 8 – 11	He stopped working after the 13th minute	(1)
38.	Jared made a full recovery by the end of the timed session	You can tell how fit someone is by measuring their heart rate during exercise	(1)

39. Different sporting activities present different amounts of risk.

Select the statement A, B, C or D that places the activities in order of risk, with the greatest risk first.

- A Dance, Trampolining, Hockey, Badminton.
- B Badminton, Dance, Trampolining, Hockey.
- C Hockey, Badminton, Dance, Trampolining.
- D Trampolining, Hockey, Badminton, Dance.

(1)

The following are all different types (classes) of drugs that athletes might take to try to improve their performance. All of these drugs have harmful side effects.

- A Diuretics.
- B Narcotic analgesics.
- C Stimulants.
- D Anabolic steroids.

40. Which of these drugs can lead to dehydration?

(1)

TOTAL FOR PAPER: 40 MARKS

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