

Paper Reference(s)

3827/01

Edexcel GCSE

Physical Education (Short Course)

Paper 1

Friday 21 May 2010 – Afternoon

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 of the following statements gives the correct definition of **fitness**?

- A** A form of physical activity done primarily to improve one's health and physical fitness
- B** The ability to meet the demands of the environment
- C** The range of movement possible at a joint, the greater the range the fitter the individual
- D** A capability of the heart, blood, lungs and muscles to function at optimum efficiency

(1)

2. Which of the following statements relates to the principle of overload in training?

- A** Making the body work harder to increase fitness
- B** Making the body work too hard resulting in injury
- C** To continue training despite injury to increase fitness
- D** Having a regular training session where the performer runs with weights

(1)

3. Which of the following statements describes an isotonic muscle contraction?

- A** Muscle contraction with no physical movement
- B** A constant state of tension in the muscle even when 'at rest'
- C** Muscle contraction resulting in movement
- D** When a muscle relaxes to allow another muscle to contract

(1)

4. Which of the following demonstrates the effective use of power?
- A A weight lifter slowly lifting a 5KG weight
 - B A tennis player serving an 'Ace' so his opponent cannot return the ball
 - C A gymnast holding a handstand
 - D A sprinter **hearing** the starter's gun and responding by starting to move out of the blocks immediately
-
- (1)**

5. Athlete's foot is:
- A an increase in foot size as a result of over training
 - B a virus
 - C a fungus
 - D an injury associated with long distance runners
-
- (1)**

6. In which of the following situations should the recovery position be used?
- A After a hard training session
 - B As part of rehabilitation training after injury
 - C When a performer is injured and unconscious but breathing
 - D When a performer is injured and has pulled a muscle
-
- (1)**

Questions 7 to 10 relate to the benefits of physical activity. For each question match the statement to the correct benefit of physical activity.

- A physical
- B mental
- C social
- D physical and social

7. Increased fitness is a benefit of physical activity. (1)
8. Improvement in health is a or mental benefit of physical activity. (1)
9. Providing opportunity to work as a team is a benefit of physical activity. (1)
10. Physical activity can lead to stress relief. This is a benefit of physical activity. (1)
-

11. Which of the following, A, B, C or D, is 'correct' and provides a valid explanation of the following statement?

‘As people age their reasons for exercising change.’

- A This is a false statement because as people get older they **only** exercise to improve their health.
 - B This is a false statement because people may still want to improve their fitness, their health or meet others.
 - C This is a true statement because as people get older they **only** exercise to improve their health.
 - D This is a false statement because as people get older they **only** exercise to meet new people. (1)
-

12. Which of the following, A, B, C or D, is 'correct' and provides a valid explanation of the following statement?

'Losing weight makes you look better, therefore feel better.'

- A This is a true statement because whatever your starting weight, if you lose weight you will look better.
- B This is a false statement because there is no link between how you look and how you feel.
- C This is a false statement because if someone is at the right weight, losing weight will not make them look or feel better. Being underweight is potentially damaging to your health.
- D Statements A, B and C are all incorrect.

(1)

Questions 13 to 15 relate to the components of health-related exercise. Match each performer with the **most** relevant component of health-related exercise required for the activity described.

- A Muscular endurance
- B Flexibility
- C Muscular strength
- D None of the components identified in A, B or C

13. Weight lifter lifting heavy weight

(1)

14. Rower eight minutes into the race

(1)

15. Golfer taking a putt

(1)

Questions 16 to 18 relate to the components of skill-related fitness. Match each performer with the **most** relevant component of skill-related fitness required for the activity described.

- A Agility
- B Power
- C Muscular endurance
- D None of the components identified in A, B or C

16. A gymnast running across the floor in preparation for a vault (1)

17. A high jumper at take off (1)

18. A goalkeeper diving to save a deflected shot on goal (1)

19. Which of the following statements about the principles of training is correct?

- A Specificity means making sure that the training matches the needs of the individual.
- B Moderation is one of two principles which, if correctly applied, should reduce the chance of injury.
- C The principle of progression means getting better at your sport.
- D Overload is working the body too hard during a training session.

(1)

20. Which of the following statements would give the correct threshold of training for a 16-year old swimmer?

- A Maximum heart rate (200bpm) multiplied by 60% and 80%
- B 204bpm multiplied by 60% and then 80% divided by swimmer's age (16)
- C Resting heart rate multiplied by 60%, giving a range of 100–200bpm
- D 60% to 80% of the swimmer's maximum heart rate (220 – age)

(1)

Questions 21 to 26 relate to the effects of exercise and regular training on body systems. For each question read the statements and decide whether A, B, C or D is correct.

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

21.

Statement 1	Statement 2
An immediate effect of exercise on the respiratory system is an increase in the rate and/or depth of breathing.	Over time this will lead to a drop in the resting respiratory rate.

(1)

22.

Statement 1	Statement 2
An immediate effect of exercise on the circulatory system is a drop in resting heart rate.	The drop in resting heart rate means that the performer can increase their maximum cardiac output during exercise.

(1)

23.

Statement 1	Statement 2
An effect of regular training and exercise on the circulatory system is increased capillarisation.	Increased capillarisation means that oxygen can be transported to the muscles more efficiently.

(1)

24.

Statement 1	Statement 2
An immediate effect of exercise on the circulatory system is a drop in blood pressure.	The drop in blood pressure means that the performer will be more relaxed when performing.

(1)

25.

Statement 1	Statement 2
An effect of regular training and exercise on the skeletal system is development of bone so that bones become stronger.	A long term health benefit of increased bone strength is a reduction in the likelihood of suffering from coronary heart disease.

(1)

26.

Statement 1	Statement 2
An immediate effect of exercise on the muscular system is fatigue due to increased oxygen levels.	Regular training can lead to an increase in muscle strength.

(1)

27. Which of the following statements explains the term **optimum weight**?

- A Being in the right weight range to make weight loss easy
- B Weighing the right amount based on what you would like to weigh
- C Being at the right weight for your size and for the activities you do
- D Statements A, B and C are all incorrect

(1)

28. Which of the following statements is correct?

- A Javelin is an anaerobic activity which requires the use of oxygen.
- B The marathon is an aerobic activity. Carbohydrates will be used to provide most of the performer's energy throughout the race.
- C Swimming long distances is an anaerobic activity as you cannot breathe and therefore cannot use oxygen whilst swimming.
- D Fats and carbohydrates provide energy during the 100m sprint event.

(1)

Questions 29 to 31 relate to the use of rules in sport. For each question identify the reason for the specific rules.

- A To restrict what the players can do so the referee has power in the game
- B To increase excitement
- C To make sure a winner can be identified
- D To increase safety

29. Group 1:

- In hockey players must not lift their stick over the heads of other players.
 - In boxing a boxer is only allowed to use his gloves to make contact with his opponent, so using the elbows or a head butt is not allowed.
- (1)**

30. Group 2:

- In the long jump event in athletics, the jump is measured from the nearest break in the landing area made by any part of your body to the front edge of the take off board.
 - In football a 'goal' is scored by depositing the ball into the opponent's goal.
- (1)**

31. Group 3:

- In netball players have three seconds between catching the ball and making a pass.
 - In basketball a team in possession of the ball must attempt a field goal within 24 seconds after gaining possession of the ball.
- (1)**
-

Questions 32 to 35 relate to the use of safety equipment in sport. For each question read the statements and decide whether A, B, C or D is correct.

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

32.

Statement 1	Statement 2
Shin guards are used in sports such as football and hockey. They protect the performer from cuts, bruises and blows.	Cuts should be treated using R.I.C.E.

(1)

33.

Statement 1	Statement 2
Gum shields should not be worn in sports such as rugby and hockey in case they are swallowed whilst the player is being tackled.	Gum shields are used to protect the teeth in activities such as boxing.

(1)

34.

Statement 1	Statement 2
Landing mats are placed on the floor around trampolines so that spotters are not required.	Landing mats can be used as a safe landing area when practising rotational movements in gymnastics to reduce the risk of injury.

(1)

35.

Statement 1	Statement 2
Buoyancy aids such as life vests reduce the risk of drowning.	If someone has been in cold water for a long period of time they could be suffering from dehydration and hypothermia.

(1)

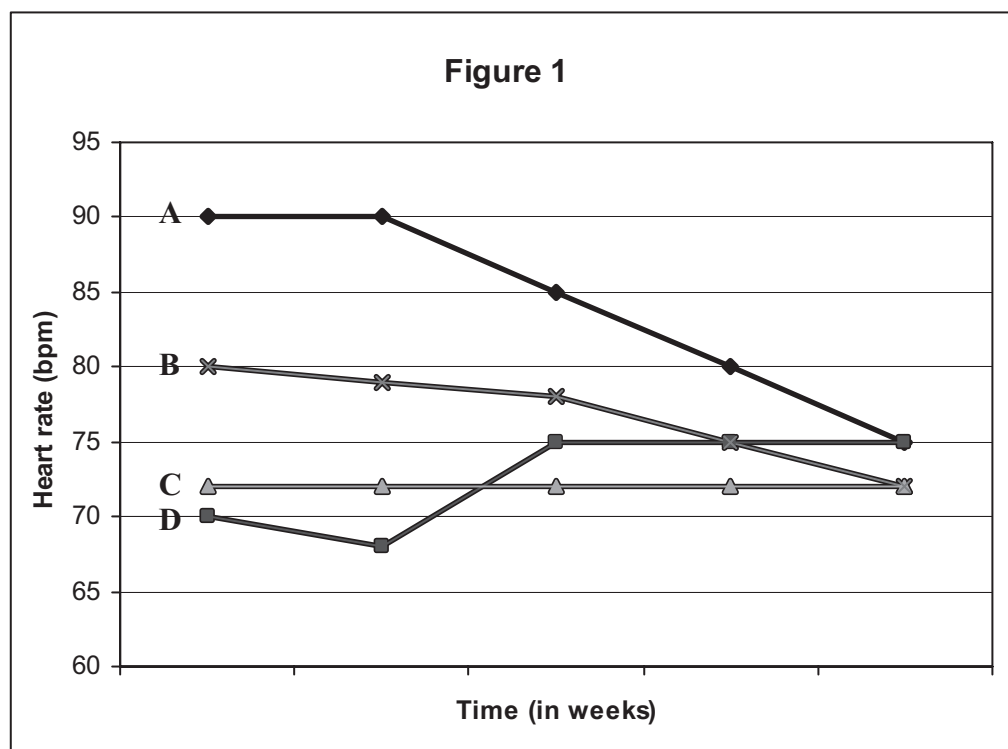
36. Fitness sessions should always start with a warm up. Which of the following describes the order of activities you would expect in a warm up?
- A Pulse raise activity, jogging, stretching, main activity
 - B Mobility exercises, intense drills, stretching
 - C Pulse raise, stretching, drills associated with main activity
 - D None of the statements A, B or C answers the question

(1)

37. Which of the following identifies a benefit of a warm up rather than cool down?
- A Removes lactic acid to reduce chance of muscle soreness
 - B Slow reduction in heart rate
 - C Reduction in chance of injury
 - D None of the statements A, B or C identifies a benefit of a warm up

(1)

38. The graph in **Figure 1** shows resting heart rate values recorded over a number of weeks for four different performers who are in training. Which performer, A, B, C or D, shows signs of experiencing reversibility?



(1)

Questions 39 and 40 relate to the following methods of training.

- A Continuous training
- B Fartlek training
- C Circuit training
- D Cross training

39. Which method of training is being described?

‘Exercises are completed for a set period of time. The performer moves from one station to the next until all are completed, at which point the performer may start again’

(1)

40. Which method of training would be most suitable for a marathon runner?

(1)

TOTAL FOR PAPER: 40 MARKS

END