

**Wednesday 23 May 2012 – Afternoon**

**GCSE PHYSICAL EDUCATION**

**B453** Developing Knowledge in Physical Education

Candidates answer on the Question Paper.

**OCR supplied materials:**

None

**Other materials required:**

None

**Duration:** 1 hour



Candidate forename		Candidate surname	
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Centre number						Candidate number				
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**INSTRUCTIONS TO CANDIDATES**

- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer **all** the questions.
- Section A – candidates should only circle one answer per question.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- Do **not** write in the bar codes.

**INFORMATION FOR CANDIDATES**

- The number of marks is given in brackets [ ] at the end of each question or part question.
- The total number of marks for this paper is **60**.
- Your quality of written communication is assessed in the question marked with an asterisk (\*).
- This document consists of **12** pages. Any blank pages are indicated.

**Section A**

Answer **all** questions. Please **circle** one answer per question.

- 1** Which one of the following is a role of the British Olympic Association (BOA)?
- (a) It selects the Great Britain team for the Olympics
  - (b) It provides equipment for all competitors
  - (c) It sponsors individual athletes
  - (d) It designs the Olympic Village for athletes' accommodation [1]
- 2** Which one of the following best describes the role of tendons?
- (a) They attach bones to bones
  - (b) They attach ligaments to muscles
  - (c) They attach muscles to muscles
  - (d) They attach muscles to bones [1]
- 3** Which one of the following minimises the risks associated with performing physical activities in a sports hall?
- (a) Making sure you wear a minimum amount of jewellery
  - (b) Making sure equipment is stored away when not in use
  - (c) Making sure all who participate are not obese
  - (d) Making sure drinks are always available [1]
- 4** Which one of the following is a long term effect of exercise on the lungs?
- (a) An increase in lung volume
  - (b) A decrease in tidal volume
  - (c) An increase in stroke volume
  - (d) A decrease in rate of recovery [1]

- 5 Which one of the following might lead to keeping your joints healthy?
- (a) Eat lots of carbohydrates
  - (b) Get plenty of sleep
  - (c) Maintain a healthy body weight
  - (d) Do exercise classes in bare feet [1]
- 6 Which one of the following is an example of extrinsic motivation for an official in a physical activity?
- (a) Enjoying umpiring a tennis game
  - (b) Sponsorship for the players in a basketball game
  - (c) Payment for refereeing in a football game
  - (d) Feeling proud to be so important as a netball umpire [1]
- 7 Which one of the following is an example of trial and error when learning movement skills?
- (a) Following the instructor's moves in an exercise class
  - (b) Trying to perfect the right technique when practising badminton
  - (c) Getting a reward by a coach for serving well in a tennis match
  - (d) Watching a video of a sprinter to learn the sprint start [1]
- 8 Which one of the following muscle groups is worked the hardest when performing a high jump?
- (a) Deltoid
  - (b) Quadriceps
  - (c) Latissimus dorsi
  - (d) Trapezius [1]
- 9 Which one of the following is a function of the skeletal system?
- (a) To remove synovial fluid
  - (b) To produce vitamins
  - (c) To remove lactic acid
  - (d) To produce red blood cells [1]

- 10** Which one of the following is an effect of a successful campaign to promote participation in physical activities?
- (a) Encourages people to be interested in physical activities
  - (b) Gives television entertainment at home
  - (c) Warns people against taking drugs
  - (d) Sponsors elite sports' players
- [1]**
- 11** Which one of the following best describes fartlek as a type of exercise?
- (a) A weight training method with strength and power
  - (b) A continuous and varied training method with speed and endurance
  - (c) A bounding and hopping method with power and flexibility
  - (d) A continuous and fixed training method with stamina and endurance
- [1]**
- 12** Which one of the following is an example of mental preparation when performing physical activities?
- (a) A performer choosing the appropriate equipment in circuit training
  - (b) A netball player shooting effectively
  - (c) A tennis player concentrating on the ball as the opponent hits it
  - (d) A coach showing incorrect movements in gymnastics
- [1]**
- 13** Which one of the following is an example of personal protective equipment in a physical activity?
- (a) A football coach providing water bottles during a game
  - (b) A hockey player carrying a light hockey stick
  - (c) An aerobics performer changing their socks after the class
  - (d) A rugby player wearing a gum shield
- [1]**

- 14** Which one of the following best describes overload as a principle of training in physical activities?
- (a) The body works harder than normal with stress and discomfort
  - (b) Performance can deteriorate if training stops
  - (c) There should be variety in training methods to reduce boredom
  - (d) Training should be relevant to your chosen physical activity
- [1]

- 15** Which one of the following explains the role of an antagonist in muscle movement?
- (a) The movement of the antagonist is also the prime mover
  - (b) The movement of the agonist is countered by the action of the antagonist
  - (c) The movement of the agonist is joined in the same direction as the antagonist
  - (d) The movement of the antagonist is helped by the synergist
- [1]

[15 marks]

**Section B**

Answer **all** questions.

**16** Describe **three** potential hazards that are associated with performing physical activities on a public playing field.

- 1) .....
- .....
- 2) .....
- .....
- 3) .....
- ..... **[3]**

**17** Give **three** short-term effects of physical activity on the respiratory system.

- 1) .....
- 2) .....
- 3) ..... **[3]**

**18** The FITT principle for exercise and training identifies that frequency, intensity, time and type are the important factors.

Describe how you would plan an exercise programme by using these factors of the FITT principle.

- .....
- .....
- .....
- .....
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- .....
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- .....
- .....
- ..... **[4]**

19 Identify where synovial fluid is found and explain its function.

Synovial fluid is found .....

Function .....

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..... [4]

20 A key process in physical education is to learn and develop skills and techniques.

Describe **three** methods that might be used to learn skills and techniques.

1) .....

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2) .....

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3) .....

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..... [6]

21 Describe how lactic acid affects the ability of the body to maintain physical activity.

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22 Explain, using practical examples, how an active lifestyle can be good for the health of muscles.

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25\* Explain the short term **and** long term effects that regular exercise has on the heart.

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..... [6]

[45 marks]

[Paper total: 60 marks]

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