



**GENERAL CERTIFICATE OF SECONDARY EDUCATION**  
**PHYSICAL EDUCATION**

**B453**

Developing Knowledge in Physical Education

Candidates answer on the Question Paper

**OCR Supplied Materials:**  
None

**Other Materials Required:**  
None

**Tuesday 26 January 2010**  
**Afternoon**

**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 clearly in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure that you know what you have to do before starting your answer.
- Answer **all** the questions.
- Section A – candidates should only circle one answer per question.
- Do **not** write in the bar codes.
- Write your answer to each question in the space provided, however additional paper may be used if necessary.

**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 an example of intrinsic motivation when learning physical activity skills?
- (a) Enjoyment of the activity.
  - (b) Pleasing your parents.
  - (c) Trying to win a competition for the cup.
  - (d) Receiving a badge for swimming a width. [1]
- 2 Which of the following bones meet to form the elbow joint?
- (a) Femur and pelvis.
  - (b) Humerus and femur.
  - (c) Humerus, radius and ulna.
  - (d) Humerus, tibia and fibula. [1]
- 3 Which one of the following best describes the role of tendons?
- (a) They attach muscles to bones.
  - (b) They attach muscles to muscles.
  - (c) They attach bones to bones.
  - (d) They attach ligaments to bones. [1]
- 4 Which one of the following is a long term effect of a healthy, active lifestyle?
- (a) Heart rate increases.
  - (b) Muscles increase in temperature.
  - (c) Blood flow is slower.
  - (d) Stroke volume increases. [1]

- 5 How would you minimise the risks associated with a fitness centre when exercising?
- (a) Eat plenty of carbohydrates.
  - (b) Check that all equipment is working properly.
  - (c) Always try hard in all exercises.
  - (d) Record fitness progress in your training diary. [1]
- 6 Which one of the following best describes aerobic training?
- (a) Long intervals of slow work.
  - (b) Short intervals of slow work.
  - (c) Long intervals of fast work.
  - (d) Short intervals of fast work. [1]
- 7 Local authorities attempt to encourage more participation in physical activities. Which one of the following is a local authority facility?
- (a) Leisure centre swimming pool.
  - (b) Private gym club.
  - (c) Rugby club.
  - (d) Premier League football club's training ground. [1]
- 8 Which one of the following is an example of a media promotional campaign to promote a healthy, active lifestyle?
- (a) TV advertisement for high energy drinks.
  - (b) Radio advertisement for sportswear.
  - (c) Leaflets on a balanced diet in the local library.
  - (d) Newspaper report on a death caused by smoking. [1]

- 9 Which one of the following is a potential hazard whilst participating in a physical activity in an outdoor adventure area?
- (a) Slippery rocks.
  - (b) Cutting your leg on a sharp stone.
  - (c) Concussion by banging your head.
  - (d) Exhaustion because of walking too far. [1]
- 10 Which one of the following is the best description of the specificity training principle whilst weight training?
- (a) Increase the weights lifted for each training session.
  - (b) Concentrate on training muscles in the upper body.
  - (c) Lifting your maximum weight for one repetition.
  - (d) Using all free weights rather than machines. [1]
- 11 Which one of the following is an example of the skeleton as a support structure?
- (a) Producing red blood cells.
  - (b) Storing minerals.
  - (c) Producing calcium for strong bones.
  - (d) Helping with correct posture. [1]
- 12 Which one of the following would be a good example of personal protective equipment to reduce the risk of injury if participating in a physical activity?
- (a) A gum shield in hockey.
  - (b) A post protector in rugby.
  - (c) A crash-barrier for the crowd.
  - (d) Well-fitting training shoes. [1]

- 13** Which one of the following is the best example of a 'SMART' goal set to improve performance of an official in a physical activity?
- (a) To learn the rules of the game and to give the right decisions in the next match.
  - (b) To get fitter and to keep up with the run of play.
  - (c) To learn the signal for offside by this time next week.
  - (d) To talk to the players after the game to get feedback on performance of the official. [1]
- 14** Which of the following movements best describes flexion around a joint?
- (a) Lowering your body using your arms in the press-up position.
  - (b) Bending backwards at the hip whilst standing.
  - (c) Turning your hand around so that the palm is facing upwards.
  - (d) Squeezing your ankles together whilst lying on the floor. [1]
- 15** Which of the following would you recommend to prevent inflammation of the joints during or after physical activity?
- (a) Rub massage oil into your joints before and after exercise.
  - (b) Use carbo-loading to increase energy levels.
  - (c) Stretch your muscles thoroughly before exercise.
  - (d) Do not do too much activity at any one time. [1]

[15 marks]

**Section B**

Answer **all** questions.

**16** Identify **four** types of feedback.

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..... [4]

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

Describe, using practical examples, **three** methods that might be used to learn and develop skills and techniques.

1 .....

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21 Describe the training method of plyometrics. What type of physical activities is plyometrics particularly good for?

Description .....

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Type of physical activity .....

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..... [4]

22 Describe the roles of **both** the International Olympic Committee and the British Olympic Association.

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23 Explain the function of synovial fluid in joints.

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..... [3]



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