

**Tuesday 14 May 2013 – Afternoon**

**GCSE PHYSICAL EDUCATION**

**B453/01 Developing Knowledge in Physical Education**

\* B 4 2 6 7 4 0 6 1 3 \*

Candidates answer on the Question Paper.

**OCR supplied materials:**

None

**Duration: 1 hour**

**Other materials required:**

None



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 the most effective way of learning physical activity skills?
  - (a) Reading a book on how to pass in hockey
  - (b) Training hard using plyometrics for rugby
  - (c) Through trial and error practice of serving in tennis
  - (d) Having a thorough health screening check before exercise[1]
  
- 2 Which one of the following is an example of a hinge joint?
  - (a) The elbow joint
  - (b) The shoulder joint
  - (c) The spinal column
  - (d) The hip joint[1]
  
- 3 Which one of the following best describes a prime mover in muscle movement?
  - (a) The muscle which produces the joint movement
  - (b) The muscle which counteracts the agonist
  - (c) The muscle which stabilises the joint
  - (d) The muscle which is attached to the ligaments[1]
  
- 4 Which one of the following is an example of the media encouraging participation in physical activities?
  - (a) Phoning into a local sports' radio station
  - (b) Reading the sports' section in a newspaper
  - (c) Following your team's results on the internet
  - (d) Playing tennis after watching Wimbledon on TV[1]

5 Which one of the following is an example of private enterprise provision?

- (a) The council-run swimming pool
- (b) The gym that tries to make as much profit as possible
- (c) The rugby club's youth team
- (d) The British Olympic Association

[1]

6 Which one of the following is an example of minimising risks in a leisure centre gymnasium?

- (a) Let someone else work on the equipment after 20 minutes
- (b) Always work at maximum effort
- (c) Wear a brightly coloured top when training
- (d) Store the weights away when you have finished

[1]

7 Which one of the following is an example of sponsorship?

- (a) Paying to watch a football match
- (b) The government pays for a new swimming pool
- (c) A rugby club paying one of their players
- (d) A local business pays to run a netball tournament

[1]

8 Which one of the following is **not** a function of the skeleton?

- (a) To protect internal organs
- (b) To provide the lungs with a blood supply
- (c) To give the body its shape
- (d) To provide leverage for muscle movement

[1]

9 Which one of the following is a good reason for setting goals when participating in physical exercise?

- (a) To increase anxiety levels
- (b) To move on to other interests
- (c) To challenge beyond your capabilities
- (d) To try to work as hard as you can

[1]

- 10 Which one of the following is an example of the best role model for learning physical activity skills?
- (a) A parent who is good at playing and teaching sports
  - (b) A friend who is not into sports but is willing to try
  - (c) A sports coach who wants to win by whatever means possible
  - (d) A top quality newspaper's sports coverage [1]
- 11 Which one of the following is the correct way to lift heavy exercise equipment?
- (a) Bending your legs rather than your back
  - (b) Bending your arms and your back
  - (c) Keep your legs and back straight
  - (d) Keeping your back bent and your arms straight [1]
- 12 Which one of the following describes the vascular shunt mechanism?
- (a) The body shunting air into the lungs
  - (b) The pushing action of muscles to aid bowel movement
  - (c) The redistribution of blood to the working muscles
  - (d) An increase in stroke volume to pump blood around the body [1]
- 13 Frequency is one of the FITT principles for training effectively.  
Which one of the following is an example of the frequency aspect of the FITT principle?
- (a) Training at 70% of maximum heart rate
  - (b) Training three times a week
  - (c) Training with few rest intervals
  - (d) Training by using a variety of methods [1]

14 Which one of the following best describes circuit training?

- (a) Travelling to different venues to train
- (b) Training using the perimeter of the games pitch for running
- (c) A series of exercises or skill activities which are repeated
- (d) Exercises that are aerobic and involve dance movements

[1]

15 Which one of the following is a long-term effect of exercise on the muscular system?

- (a) An increase in tidal volume in muscles
- (b) A decrease in blood flow to muscle fibres
- (c) An increase in muscle fatigue
- (d) An increase in tolerance to lactic acid

[1]

**SECTION B**

Answer **all** questions.

- 16** Identify **three** ways in which a school may promote a healthy lifestyle.

1) .....

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2) .....

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3) .....

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[3]

- 17** Describe **four** examples of different personal protective equipment used in named physical activities.

1) .....

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2) .....

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3) .....

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4) .....

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[4]

- 18 Using examples for each, describe **three** ways of using extrinsic motivation to encourage young people to lead an active and healthy lifestyle.

1) .....

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2) .....

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3) .....

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[6]

- 19 Identify the type of joint found at the knee. Explain the role of the quadriceps and the hamstrings in flexing the knee.

Type of joint .....

Role of quadriceps .....

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Role of hamstrings .....

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[4]

- 20 Describe **three** different types of feedback and give a practical example for each.

1) .....

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2) .....

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3) .....

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[6]

- 21 Explain how the SMART principle of goal-setting can help someone stick to an exercise programme.

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[5]

- 22 Describe tendonitis and suggest one way in which this might be avoided.

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[4]

- 23 When does the build-up of lactic acid occur? Identify **two** effects of the build-up of lactic acid.

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..... [3]

- 24 Explain how government initiatives can promote active and healthy lifestyles.

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10

**25\*** Describe an exercise programme which includes the training principles of:

## Overload

## Specificity

## Progression

### Reversibility.

**END OF QUESTION PAPER**

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