

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
GCSE

B453/01

PHYSICAL EDUCATION

**Developing Knowledge in Physical
Education**

TUESDAY 14 MAY 2013: Afternoon

DURATION: 1 hour
plus your additional time allowance

MODIFIED ENLARGED

Candidate forename		Candidate surname	
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Centre number						Candidate number				
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Candidates answer on the Question Paper.

OCR SUPPLIED MATERIALS:

None

OTHER MATERIALS REQUIRED:

None

READ INSTRUCTIONS OVERLEAF

INSTRUCTIONS TO CANDIDATES

- Write your name, centre number and candidate number in the boxes on the first page. 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).

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.
- The quality of written communication is assessed in the question marked with an asterisk (*).
- Any blank pages are indicated.

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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) _____

2) _____

3) _____

[3]

17 Describe FOUR examples of different personal protective equipment used in named physical activities.

1) _____

2) _____

3) _____

4) _____

[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) _____

2) _____

3) _____

[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 _____

Role of hamstrings _____

[4]

20 Describe THREE different types of feedback and give a practical example for each.

1) _____

2) _____

3) _____

[6]

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

_____ [5]

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

[4]

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

[3]

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

[4]

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

Overload

Specificity

Progression

Reversibility.

[illegible]

[6]

END OF QUESTION PAPER

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