

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS
ADVANCED GCE**

G453

PHYSICAL EDUCATION

**Principles and concepts
across different areas of Physical Education**

FRIDAY 24 JUNE 2011: Afternoon

DURATION: 2 hour 30 minutes

SUITABLE FOR VISUALLY IMPAIRED CANDIDATES

Candidates answer on the answer booklet.

OCR SUPPLIED MATERIALS:

**16 page answer booklet
(sent with general stationery)**

OTHER MATERIALS REQUIRED:

None

READ INSTRUCTIONS OVERLEAF

INSTRUCTIONS TO CANDIDATES

- **Write your name, centre number and candidate number in the spaces provided on the answer booklet. Please write clearly and in capital letters.**
- **Use black ink. Pencil may be used for graphs and diagrams only.**
- **Read each question carefully. Make sure you know what you have to do before starting your answer.**
- **Answer THREE questions, at least one of which must be from Section A.**

INFORMATION FOR CANDIDATES

- **The number of marks is given in brackets [] at the end of each question or part question.**
- **The quality of your written communication will be assessed in questions that are indicated accordingly (*).**
- **The total number of marks for this paper is 105.**

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SECTION A

Candidates must answer at least one question from Section A.

HISTORICAL STUDIES (OPTION A1)

- 1 (a) In the 1970's and 1980's state schools were affected by teachers' industrial action.**

Explain the impact of teachers' industrial action on the participation of young people in physical activity in the 1970's and 1980's. Describe THREE positive impacts of the National Curriculum for Physical Education in state schools today. [5]

- (b) Contrast pre-industrial social and cultural factors relating to popular recreation with post-industrial social and cultural factors relating to rational recreation. [5]**

- (c) Explain the comparatively low status of lawn tennis in public schools at the end of the nineteenth century and possible barriers to participation in tennis by young people today. [5]**

- (d)* Discuss the influence of public schools on the development of bathing and swimming at different stages during the nineteenth century. Evaluate how nineteenth century social and cultural factors continue to impact on participation and performance in bathing and swimming today. [20]**

[Total: 35]

SECTION A

COMPARATIVE STUDIES (OPTION A2)

2 (a) Explain the high status of Outdoor Education in Australian schools and why provision for Outdoor Education is different in the UK. [4]

(b) Describe the cultural values in Australia that can affect participation and performance in physical activity. Explain how ONE of these values stems from Australia's historic relationship with the UK. [5]

(c) If discrimination exists in society it may be evident in the sport of that society.

Discuss discrimination in high level sport in the USA. To what extent is the situation the same in sport in the UK? [6]

(d)* Compare the background and contemporary status of American football in the USA and Rugby Union in the UK. Evaluate the impact of commercialism on American football in the USA and Rugby Union in the UK. [20]

[Total: 35]

SECTION B

SPORTS PSYCHOLOGY (OPTION B1)

- 3 (a) Attributions for success or failure in sport are often given by performers and their coaches.**

Identify FOUR different types of attribution proposed by Weiner's attribution model and give a practical example for each type identified. [4]

- (b) Describe how goal setting can impact on participation and performance in sport. [5]**
- (c) Explain the causes and effects of evaluation apprehension on sports performance or lifestyle behaviours. [6]**
- (d)* Aggression is viewed by many as a negative response in sport but theories of why aggression occurs contradict each other.**

Evaluate critically theories of aggression that seek to explain why negative responses often occur in sporting situations. Use practical examples for the theories you evaluate. [20]

[Total: 35]

Section B

BIOMECHANICS (OPTION B2)

- 4 (a) What is meant by the terms ‘line of gravity’ and ‘base of support’?**

Use practical examples to show how a performer can maximise their stability. [4]

- (b) Explain how a performer generates spin on a ball and describe the effects of spin on the bounce of a ball. [5]**

- (c) Explain the factors that affect the moment of inertia of a performer.**

Describe how a sprinter uses this concept to improve the efficiency of the recovery phase of the stride action. [6]

- (d)* Explain the methods used to reduce the forces acting on a ski jumper whilst descending down the ski ramp before take off. Compare the ski jumper’s use of the Bernoulli Effect during flight with that of a Formula 1 car when racing and explain how its use improves the performance of each. [20]**

[Total: 35]

SECTION B

EXERCISE AND SPORT PHYSIOLOGY PAPER (OPTION B3)

5 (a) Describe the physiological adaptations that you would expect to occur to skeletal muscle after the completion of a maximum strength training programme. [4]

(b) During recovery the body returns to its pre-exercise state.

Describe the main processes involved in the lactacid component of the recovery process. [5]

(c) Outline and justify the advice you would give to an endurance performer about the content and consumption of the pre-competition meal. [6]

(d)* Fig. 1 shows the fitness test results for an 18 year old male student.

TEST	SCORE	FITNESS TEST RESULT
Resting heart rate	78bpm	Below average
Body fat	20%	Borderline overweight
Sit and reach test	-2	Below average
Sit-ups in one minute	19	Poor
Stationary Wall squat	22 seconds	Poor
12 minute run	1.4 miles	Poor

Fig. 1

Analyse the information in the table and determine which fitness components need to be improved. Devise an appropriate training programme and indicate how your programme will result in an improvement in the health and fitness of the student. [20]

[Total: 35]

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