

# UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS General Certificate of Education Advanced Subsidiary Level and Advanced Level

PHYSICAL EDUCATION 9396/11

Paper 1 October/November 2012
2 hours 30 minutes

Additional Materials: Answer Booklet/Paper

#### **READ THESE INSTRUCTIONS FIRST**

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

You may use a soft pencil for any diagrams, graphs or rough working.

Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer all questions.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [ ] at the end of each question or part question.



#### Answer all questions.

### Section A: Applied Anatomy and Physiology

1 (a) Complete a movement analysis of the upward phase of a straddle jump, (Fig. 1.1), for both the hip and the elbow joint. Your analysis should include the articulating bones, the movement occurring and the working muscle.



Fig. 1.1

[6]

- **(b) (i)** The composition of muscle in terms of fibre type is largely genetically determined and can influence the activities in which people participate.
  - Identify two structural and two functional characteristics of a slow oxidative muscle fibre.
    [4]
  - (ii) Name and describe a physical activity a person with a high percentage of slow oxidative muscle fibres is most likely to take part in. [2]
- (c) Sketch a graph to show a typical heart rate response of a healthy 18 year old to a sub-maximal 10 minute warm-up training run with a 5 minute recovery period. [5]
- (d) During exercise a large percentage of the cardiac output is re-distributed to the working muscles.
  - Explain how this re-distribution of blood is achieved. [4]
- (e) Give the typical values for blood pressure at rest. Explain why blood pressure changes during exercise. [5]
- (f) Explain how the structure of the lungs aids the process of gaseous exchange. [4]

[Total: 30]

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## Section B: Acquiring, Developing and Performing Movement Skills

- 2 (a) Identify **three** characteristics of skilful performance in sport and for each characteristic give a practical example. [3]
  - (b) Different levels of arousal can affect the performance of movement skills.
    - Using the inverted U theory, explain how the different levels of arousal can affect the performance of a movement skill. [4]
  - (c) Explain how the psychological refractory period can affect reaction time when performing a movement skill.
  - (d) Using a practical example for each, describe extrinsic and intrinsic motivation in the learning of movement skills.
  - (e) Using practical examples explain what is meant by proactive, retroactive and bilateral transfer in the learning of movement skills. [5]
  - (f) Give an example of a motor programme related to the learning and performance of movement skills. Explain how motor programmes are formed. [5]
  - (g) Explain the cognitive theory of learning movement skills. [6]

[Total: 30]

## Section C: Contemporary Studies in Physical Education and Sport

- **3 (a)** The concepts 'Physical Education' and 'Sport' are complex.
  - (i) Describe two similarities and two differences between Physical Education and Sport. [4]
  - (ii) How can a teacher of Physical Education introduce the elements of sport to pupils in a Physical Education curriculum lesson? [4]
  - (b) Rock climbing is an example of an outdoor activity. Explain why Outdoor Education should be included in the school curriculum. [4]
  - **(c)** There is a view that sport is no longer in the hands of the players or spectators but in the hands of global television corporations.
    - (i) Explain some of the effects of media on sporting events. [6]
    - (ii) Explain how sport sponsorship is closely linked to the media. [6]
  - (d) More men take part in regular physical activity than women.

Suggest ways in which more women can be encouraged to take part in physical activity. [6]

[Total: 30]

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