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

PHYSICAL EDUCATION **9396/12**

Paper 1 **October/November 2011**

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.

This document consists of **4** printed pages.

UNIVERSITY of CAMBRIDGE International Examinations

[Turn over

Answer **all** questions.

Section A: Applied Anatomy and Physiology

1 **(a)** Complete a movement analysis of the knee and hip joint of the lead/front leg as it goes over the hurdle (Fig. 1.1). Your analysis should include the joint type, the movement occurring and the working muscle. [6]

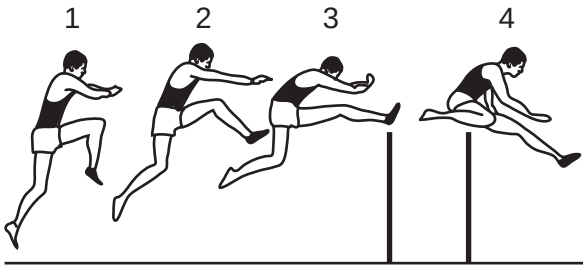

Fig. 1.1

(b) Compare the structure of the hip and shoulder joints in terms of both range of movement and stability. [5]

(c) Describe the cardiac cycle. How does the cycle change as heart rate increases? [6]

(d) Describe the pulmonary circulatory system. [4]

(e) **(i)** As exercise intensity increases more air needs to be ventilated.
Explain the process of neural control that results in an increase in ventilation. [5]

(ii) Explain how the mechanics of breathing changes during exercise in order to ventilate more air. [4]

[Total: 30]

Section B: Acquiring, Developing and Performing Movement Skills

2 **(a)** Giving examples of motor skills, explain the terms: *gross, fine, open, closed, high organisation and low organisation skills*. [6]

(b) There are a number of theories relating to the learning of motor skills in sport.
Using examples from sport, describe the operant conditioning theory of learning. [4]

(c) Identify and describe the three types of reinforcement required for the effective learning of motor skills. [3]

(d) Effective feedback can help when learning movement skills.
Define the terms *terminal and concurrent feedback* and give a practical example of each. [4]

(e) The level of arousal of a performer affects the acquiring and performing of movement skills.
What is meant by the term *arousal*?
Using Drive theory, show how the level of arousal can affect performance. [5]

(f) Explain the model of information processing in Fig. 2.1 that occurs when learning or performing a movement skill. [5]

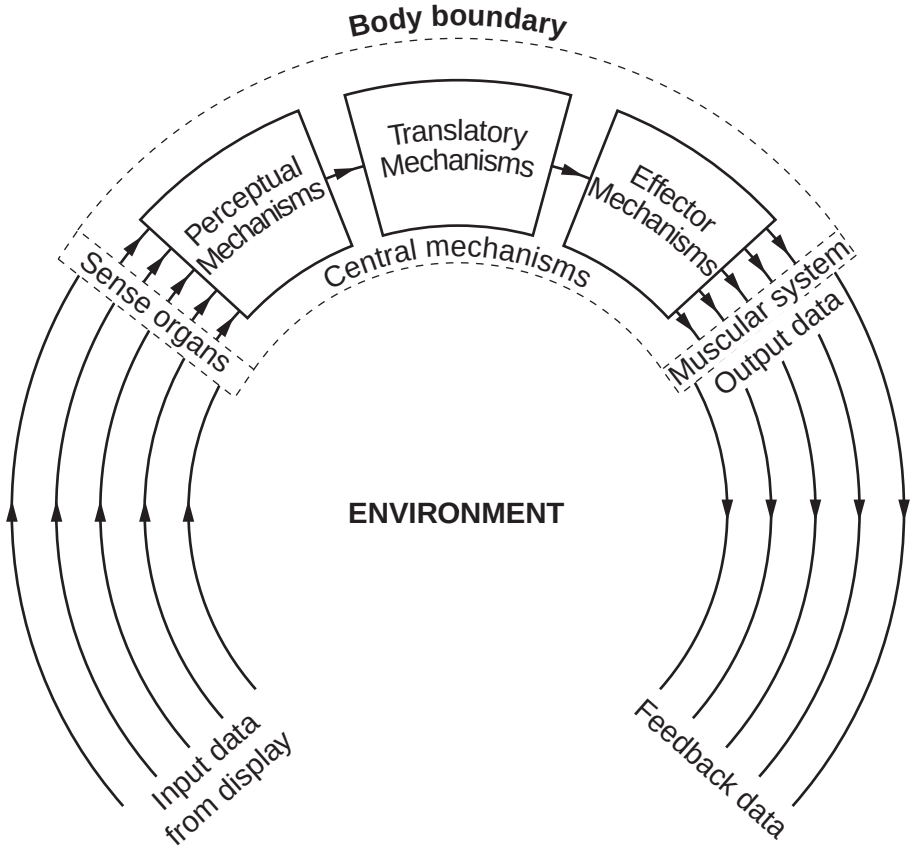

Fig. 2.1

(g) How does perception affect the learning and performance of physical activities? [3]

[Total: 30]

Section C: Contemporary Studies

3 **(a)** Play is considered to be a valuable activity for children.

(i) What are the characteristics of play? [4]

(ii) How do young children benefit from play? [3]

(b) Fig. 3.1 illustrates three of the characteristics of outdoor recreation.

OUTDOOR RECREATION
I
I
Active Leisure
I
I
Appreciation and respect for the natural environment
I
I
Adventure and risk to the individual

Fig. 3.1

(i) Explain the meaning of each of these three characteristics. [6]

(ii) Identify the factors that have allowed outdoor recreational activities to be available to people with disabilities. [4]

(c) Using a country of your choice, describe the policies and initiatives that are in place to achieve excellence in sport. [6]

(d) Many governments of the world are increasingly using sport and recreation to address community issues.

Describe how a community could benefit from sport and recreation provision. [7]

[Total: 30]