



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

PHYSICAL EDUCATION

9396/13

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.



Answer **all** questions.

Section A: Applied Anatomy and Physiology

- 1 (a) Complete a movement analysis of the upward phase of a bench press (Fig. 1.1) for both the elbow and the shoulder joints. Your analysis should include the joint type, the movement occurring and the working muscle. [6]

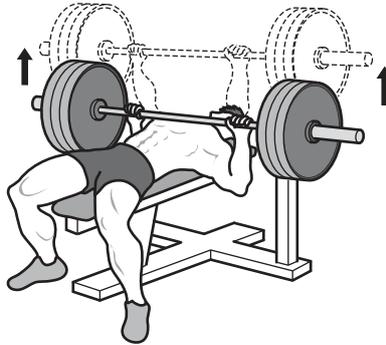


Fig. 1.1

- (b) Games such as football, netball and basketball can put a lot of strain on the knee joint. Identify **four** structures of the knee joint that provide stability. Explain why this joint is susceptible to injury when playing certain sports. [6]
- (c) When the body starts to exercise, heart rate increases. Explain the intrinsic and hormonal control of heart rate. [5]
- (d) Describe **two** mechanisms that help maintain venous return during exercise. [4]
- (e) Explain the role of haemoglobin and myoglobin in the transport of oxygen to the muscle cell. [4]
- (f) Explain the process of gaseous exchange between the alveoli and capillaries. How does the structure of the alveoli and the capillaries aid this process? [5]

[Total: 30]

Section B: Acquiring, Developing and Performing Movement Skills

- 2 (a) Using practical examples describe **four** different characteristics of skilful performance. [4]
- (b) Give **three** characteristics of an open skill. [3]
- (c) Motivation to learn movement skills can be affected by drive reduction.
Explain the concept of drive reduction. [4]
- (d) Bandura's observational learning theory is one way of describing the learning of movement skills and involves the following elements:
- Attention → retention → motor reproduction → motivation.
- Describe each of these elements of observational learning. [4]
- (e) Explain how the short term memory and the long term memory are used in performing movement skills. [4]
- (f) Using a practical example explain what is meant by closed loop control when learning or performing movement skills. [5]
- (g) How would a coach or teacher use their knowledge of schema theory in their coaching or teaching? [6]

[Total: 30]

Section C: Contemporary Studies

- 3 (a) (i)** Explain the term *leisure*. [4]
- (ii)** How can a school physical education programme help to prepare children to use their leisure time effectively? [3]
- (b) (i)** Explain why some elite performers are prepared to take illegal performance enhancing drugs. [5]
- (ii)** Identify the strategies which could be put into place to reduce the problem of drug taking in sport. [5]
- (c)** There is a suggestion that international sport should be free of politics.
Explain the reasons why a government may choose to become involved in international sport. [5]
- (d)** Explain the factors which may influence an individual's participation in sporting activity. [8]

[Total: 30]

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