

---

**PHYSICAL EDUCATION**

**9396/11**

Paper 1

**October/November 2018**

**2 hours 30 minutes**

No Additional Materials are required.

---

**READ THESE INSTRUCTIONS FIRST**

An answer booklet is provided inside this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer paper ask the invigilator for a continuation booklet.

Answer **all** questions.

Electronic calculators may be used.

You may lose marks if you do not show your working or if you do not use appropriate units.

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



---

This document consists of **5** printed pages, **3** blank pages and **1** Insert.

Answer **all** questions.

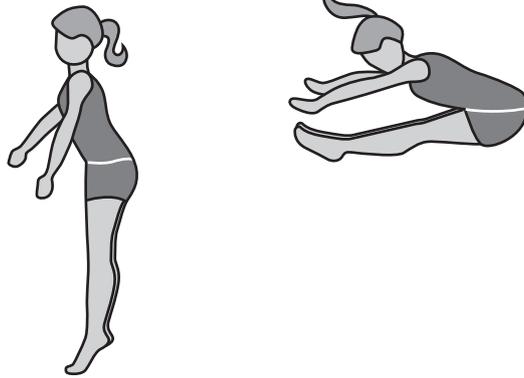
**Section A: Applied anatomy and physiology**

1 (a) Describe a sporting example of each of the following types of movement at a named ball and socket joint.

- flexion
- extension
- abduction
- adduction

[4]

(b) The diagrams show a performance of a pike jump.



**A**

**B**

Identify the items 1–5 in the table to describe a movement analysis of the hip and shoulder joints from position **A** to position **B**. Your analysis should include the type of muscle contraction, the type of movement occurring and the main agonist.

	type of muscle contraction	type of movement occurring	main agonist
hip joint	1	2	3
shoulder joint		4	5

[5]

(c) When a performer starts to exercise their heart rate increases.

Explain the neural and hormonal regulation of this increase in heart rate.

[6]

(d) Name and describe **three** mechanisms that maintain venous return.

[6]

(e) The vital capacity of the lungs is the sum of the following lung volumes.

- tidal volume
- expiratory reserve volume
- inspiratory reserve volume

Describe the effect of exercise on each of these **three** lung volumes. [3]

(f) (i) Explain the process of gaseous exchange between the alveoli and capillaries. [2]

(ii) Explain how the structure of the alveoli and the capillaries improve the efficiency of gaseous exchange. [4]

[Total: 30]

**Section B: Acquiring, developing and performing movement skills**

2 (a) Skilful performances:

- are goal directed
- follow a technical model
- are aesthetically pleasing.

Explain, using sporting examples of movement skills, what is meant by each of these characteristics. [3]

(b) There are a number of different theories concerning the learning of motor skills in sport.

(i) Describe, using a sporting example, the operant conditioning theory of learning. [4]

(ii) Coaches will use reinforcement as part of operant conditioning to improve skill levels.

Use examples to distinguish between the different types of reinforcement. [3]

(c) Explain, using an example from a sport-specific skill, what is meant by *open-loop control*. [3]

(d) (i) Describe the characteristics of short-term memory. [5]

(ii) Suggest how a coach can ensure that important information is stored in a performer's long-term memory. [4]

(e) Describe the characteristics of the associative and autonomous phases of learning. [2]

(f) Motivation is often used in the learning and performance of movement skills.

(i) Describe the different types of motivation. [2]

(ii) Suggest how motivation can benefit the learning and performance of movement skills. [4]

[Total: 30]

**Section C: Contemporary studies in physical education and sport**

- 3 (a) (i)** Describe how physical education differs from outdoor recreation. [3]
- (ii)** Outline the differences between association football (soccer) as a recreational activity and as a sport. [6]
- (b)** Describe the policies, provision and administration in place to ensure that excellence in sport is achieved in a country of your choice. [6]
- (c) (i)** Explain the benefits of regular participation in physical activity for an individual. [4]
- (ii)** Outline the possible barriers to participation in sport for people with disabilities. [5]
- (d)** Many elite sports are now commercialised and seen as a form of entertainment.
- Discuss the suggestion that an increase in the commercialisation of sport has been beneficial for both the performers and the sport. [6]

[Total: 30]





**BLANK PAGE**

---

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge International Examinations Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at [www.cie.org.uk](http://www.cie.org.uk) after the live examination series.

Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.