
PHYSICAL EDUCATION

9396/13

Paper 1

October/November 2015

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 **4** printed pages and **1** insert.

Answer **all** questions.

Section A: Applied Anatomy and Physiology

- 1 (a) Fig. 1.1 shows a tennis player performing a forehand stroke.

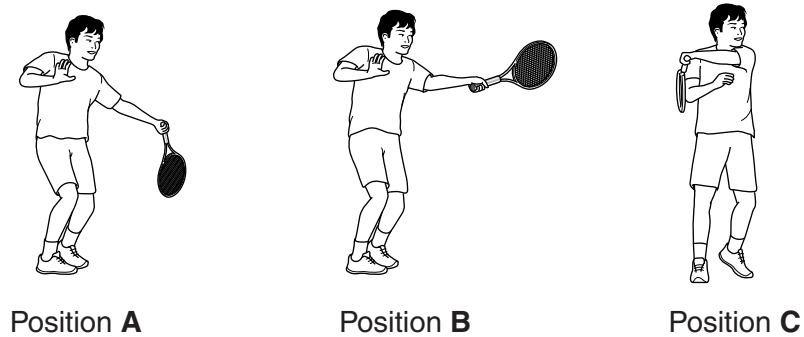


Fig. 1.1

Identify items 1–6 in the table below to describe a movement analysis of the **shoulder**, **elbow** and **wrist** joints of the racket arm as they move from position **A** to position **C**. Your analysis should include the type of movement occurring and the main agonist muscles involved in the movement.

	type of movement	main agonist
shoulder joint	1	2
elbow joint	3	4
wrist joint	5	6

[6]

- (b) Describe the characteristics of fast glycolytic muscle fibres.

[6]

(c) Fig. 1.2 shows how the heart rate changes prior to, during and after exercise.

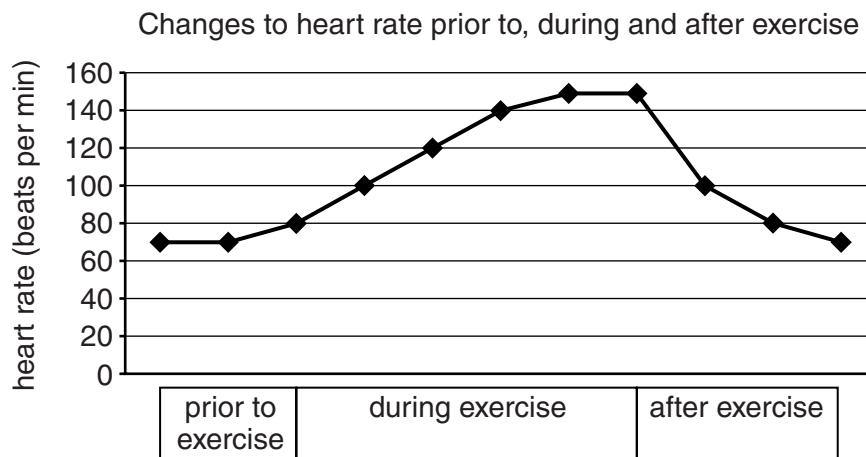


Fig. 1.2

Explain how these changes to heart rate occur. [6]

(d) Describe the factors that cause blood pressure to increase during intense exercise. [4]

(e) (i) Which **three** lung volumes form the vital capacity? [1]

(ii) How do each of these volumes change during exercise? [3]

(f) Explain how exercising at altitude affects the respiratory system. [4]

[Total: 30]

Section B: Acquiring, Developing and Performing Movement Skills

2 (a) When learning skills, a performer progresses from motor abilities through fundamental motor skills to skill learning. Use a practical example to explain this progression. [4]

(b) Fig. 2.1 shows Bandura's model of observational learning.

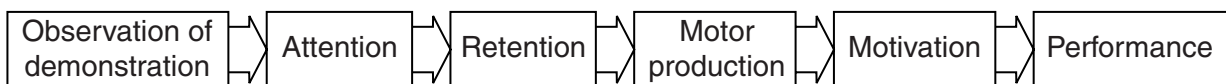


Fig. 2.1

Explain how the terms attention, retention, motor production and motivation help the process of learning through a demonstration. [6]

(c) (i) Schmidt's Schema Theory is based on performers using four sources of information to modify their motor programmes. List these **four** sources of information. [4]

(ii) Explain how a coach can help schema to develop. [4]

- (d) (i) Define the terms *movement time*, *response time* and *reaction time*. [3]
- (ii) What strategies could a performer use to achieve a faster response time? [4]
- (e) (i) Name and describe the characteristics of the second and third phases of learning. [2]
- (ii) What strategies could a coach use to help a performer progress from the second phase to the third phase of learning? [3]
- [Total: 30]

Section C: Contemporary Studies in Physical Education and Sport

- 3 (a) (i) Using suitable examples, explain what is meant by the terms *outdoor education* and *outdoor recreation*. [4]
- (ii) State the educational and recreational values and qualities that a child might gain when participating in outdoor and adventurous activities. [6]
- (b) (i) Suggest reasons why governments try to increase participation in physical activities. [4]
- (ii) Using a country of your choice, describe **four** initiatives that have been used by organisations to increase participation. [4]
- (c) Describe the possible causes of violence by players during a sporting event. [6]
- (d) Discuss the positive and negative effects that the media may have on sporting events. [6]
- [Total: 30]

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