Physical Education PHED1

Unit 1 Opportunities for and the Effects of Leading a Healthy and Active Lifestyle

Tuesday 19 May 2009 9.00 am to 11.00 am

For this paper you must have:
• a 12-page answer book.

Time allowed
• 2 hours

Instructions
• Use black ink or black ball-point pen.
• Write the information required on the front of your answer book. The Examining Body for this paper is AQA. The Paper Reference is PHED1.
• Answer all questions.
• Do all rough work in your answer book. Cross through any work that you do not want to be marked.

Information
• The marks for questions are shown in brackets.
• The maximum mark for this paper is 84.
• In Section B, you will be marked on your ability to:
  – use good English
  – organise information clearly
  – use specialist vocabulary where appropriate.
SECTION A

Answer all questions.

There are 12 marks for each question.

1. In order to perform to their potential, long jumpers must use their muscles and bones efficiently.

(a) Figure 1 shows a long jumper during the take-off phase of his jump.

Figure 1

© John Garrett/DK

Copy Table 1 into your answer book and complete it using Figure 1 to identify:

(i) the joint actions involved at the hip and ankle of the take-off leg as the performer leaves the board, (2 marks)

(ii) the names of the main agonists working at the knee and ankle. (2 marks)

Table 1

<table>
<thead>
<tr>
<th>Joint</th>
<th>(i) Joint Action</th>
<th>(ii) Main Agonist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hip</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ankle</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(b) Name, sketch and label the lever system operating at the ankle of the take-off foot. (3 marks)

(c) When a performer is running, blood is redirected to the working muscles. Explain how this redistribution of blood is achieved. (3 marks)

(d) How does running assist the venous return mechanism? (2 marks)
2 Performers in team games such as netball need to be suitably prepared to meet the demands of the game.

(a) (i) In order to play netball effectively, performers need to be fit. What do you understand by the term fitness? (1 mark)

(ii) Discuss whether you must be healthy in order to be fit. (2 marks)

(b) (i) Netball players should have a suitably balanced diet for their sport. What do you understand by the term balanced diet? (1 mark)

(ii) What are the advantages and disadvantages of a netball player having a diet rich in fat? (4 marks)

(c) How is breathing rate regulated by the body to meet the increasing demands of exercise during a game of netball? (4 marks)

Turn over for the next question
3 Figure 2 shows a performer in a springboard diving event. Both springboard and highboard diving are Olympic events.

Figure 2

Figure 2 has been omitted due to third-party copyright restraints.

(a) The skill of springboard diving can be classified according to various skill continua. Classify springboard diving according to the following four continua and justify each of your choices.

- Open to closed
- Self-paced to externally paced
- Discrete to continuous
- Gross to fine

(b) Performers have to learn the various techniques involved in springboard diving. One form of learning is through operant conditioning.

Describe operant conditioning theory and give an example of how a diving coach may use it to improve learning.

(c) Springboard divers often train using trampolines. Explain how a coach can ensure that practising on a trampoline assists the learning of skills in diving.
4 In games such as badminton, performers use information processing to make decisions.

(a) (i) State four types of sensory information used in badminton. (3 marks)

(ii) Perception is part of an information processing system. Briefly explain each of the three processes that occur as part of perception. (3 marks)

(b) When playing badminton, the shuttlecock occasionally hits the top of the net during a rally and the receiver has to adjust their response. This causes a delay before the final response can be made. Explain why this occurs. (3 marks)

(c) In order to improve a badminton player’s performance, a coach may set goals. Explain why these goals need to be realistic, specific and time-based. (3 marks)

5 The National Curriculum for Physical Education is compulsory in state schools today.

(a) What are the main aims of the National Curriculum for Physical Education? (4 marks)

(b) Military drill was one of the first forms of physical activity to be included in state schools in the early 20th century. What were the characteristics and purposes of military drill? (4 marks)

(c) By 2007 there were nearly 350 Sports Colleges in England. What are the main aims of these Sports Colleges? (4 marks)

6 In the United Kingdom (UK), the majority of participants in sporting activities do so through a club structure.

(a) People can participate in sport and physical recreation using both public and private sector facilities.

(i) Explain the difference between the public and private sectors. (1 mark)

(ii) How and why has the relationship between these two sectors changed in recent years? (3 marks)

(b) Most clubs in the UK are run by volunteers. What are the characteristics and goals of this voluntary sector? (3 marks)

(c) Over the last 20 years, women’s participation in activities such as aerobics, resistance training and yoga has grown. Suggest reasons for this growth. (5 marks)
SECTION B

Answer this question.

There are 12 marks for this question.

7 You have been asked to help with the fitness training and coaching of a group of performers within an AS level Physical Education class.

(a) Describe the various ways that flexibility can be improved and, using examples, explain the benefits to the performer of improved flexibility.

(b) What are the different forms of feedback available to a performer and, using examples, explain how these different forms of feedback may help a performer improve? (12 marks)

END OF QUESTIONS
There are no questions printed on this page
There are no questions printed on this page