

534/01

PHYSICAL EDUCATION – PE4

P.M. WEDNESDAY, 13 June 2007

(1¾ hours)

ADDITIONAL MATERIALS

In addition to this examination paper, you will need a 12 page answer book.

INSTRUCTIONS TO CANDIDATES

Answer **all** the questions.

INFORMATION FOR CANDIDATES

Mark allocations are shown in brackets.

Candidates will be assessed on their quality of written communication.

Answer **all** the questions.

1. (a) Describe a recognised fitness test to measure an individual's flexibility. [1]
 - (b) (i) Outline **three** physiological factors that can **restrict** flexibility. [3]
 - (ii) Identify and describe **three** methods of **improving** flexibility. [3]
 - (c) Explain the physiological adaptations that could take place as a result of a structured flexibility programme. [4]

2. (a) (i) What is the Glycaemic Index of foods? [1]
 - (ii) How could knowledge of the Glycaemic Index be of potential benefit to an individual undertaking a weight control programme? [3]
 - (b) (i) Explain the benefits of regular exercise within a weight control programme. [4]
 - (ii) Describe in detail the methods that could be used to monitor the effects of a weight control programme. [4]

3. "VO₂ max is the measure of aerobic power and a high VO₂ max is beneficial in any endurance activity."
 - (a) Identify and describe a laboratory test to measure VO₂ max. [2]
 - (b) (i) How can the use of a heart rate monitor be beneficial to an individual training to improve his/her VO₂ max? [3]
 - (ii) Outline the physiological adaptations you would expect to find after an individual has undertaken an aerobic training programme. [4]
 - (c) Explain the procedures that have to be considered when fitness testing for a sporting activity of your choice. [4]

4. "Heart disease, cancers and strokes are becoming more prevalent in Britain."

Explain the influences that have caused such a rise and the individual lifestyle choices that can help prevent further increases in these diseases. [14]