



**General Certificate of Education
Advanced**

534/01

PHYSICAL EDUCATION – PE4

A.M. WEDNESDAY, 30 January 2008

(1³/₄ 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) Describe **two** methods of developing flexibility you have used to improve performance in your chosen practical activities. [2]
- (ii) Using the **two** methods of flexibility training you selected in 1(b)(i), outline **one** potential advantage and **one** potential disadvantage of each. [4]
- (c) What physiological adaptations could take place as a result of a structured flexibility programme? [4]

2. "Hydration and nutrition are essential elements in maintaining high levels of performance in any endurance event."
- (a) What dietary constituent generally makes up the largest proportion of a sportspersons' diet? [1]
- (b) Explain why both reduced food **and** fluid intake could have a detrimental effect on an athlete's performance. [4]
- (c) Explain how the level of fitness, exercise intensity and duration of exercise all affect food fuel usage during physical activity. [6]

3. "Performance profiling is used to develop individual training programmes for athletes."
- (a) (i) Outline how a performance profile can be developed for an activity of your choice. [4]
- (ii) Explain how information from the performance profile in 3(a)(i) could be used to develop a training programme for your chosen activity. [4]
- (b) Identify the physiological adaptations which can occur from following your long-term training programme in 3(a)(ii) **and** explain how these adaptations could improve an individual's performance. [6]

4. Government health figures indicate that approximately 1.7 million children will be obese in the UK by 2010.

Explain the potential health risks to these children in later life and the lifestyle choices they could make to reduce this trend. [14]