

93501Q

NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

Scholarship 2005 Physical Education

2.00 pm Monday 14 November 2005
Time allowed: Three hours
Total marks: 24

QUESTION BOOKLET

There are four questions. Choose any **THREE** questions to complete.

You should write **ALL** your answers in Answer Booklet 93501A. Start each question on a **NEW** page. Number each question carefully. Each question is worth 8 marks.

Check that this booklet has pages 2–5 in the correct order.

YOU MAY KEEP THIS BOOKLET AT THE END OF THE EXAMINATION.

You have three hours to complete this examination.

Choose any **THREE** questions to complete. Each question is worth 8 marks.

QUESTION ONE

PHYSICAL ACTIVITY AND HEALTH

The following extract is taken from an article written by Dr Jenny Ross in the *Journal of Physical Education New Zealand* 2000.

The publication of the U. S. Surgeon General's (U. S. Department of Health and Human

...

1997) is for them to engage in thirty to sixty minutes of moderate physical activity per day.

Dr Jenny Ross, *Journal of Physical Education New Zealand* (2000), pp 99–100

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Critically evaluate the recommendations made by the U.S. Surgeon General and the New Zealand Ministry of Health in light of the diversity of reasons and goals people have for undertaking physical activity.

In your critical evaluation you should:

- Clarify if and why the recommendations may be problematic. This may involve you adopting a position with respect to the recommendations made.
- Evaluate the recommendations.
- Support your evaluation by considering the diversity of outcomes people seek from participating in physical activity, principles of training, the relationship between physical activity and hauora (well-being), the factors that influence participation, and your own experiences of physical activity.

QUESTION TWO

PHYSIOLOGICAL RESPONSES TO EXERCISE

Figure 1 shows an athlete running an 800 m race. Such a race represents a high-intensity form of physical activity that creates significant demands on the body to sustain high levels of energy output for around two minutes. Figure 2 shows a graph of the aerobic energy supply for such a race. On this graph, Line A depicts an estimate of the oxygen uptake that would be required, if it were possible, to sustain the exercise in a purely aerobic form. Line B depicts the actual oxygen uptake of the athlete. The graph also shows that after the race, oxygen consumption continues to be elevated even though the high demand for energy has finished.

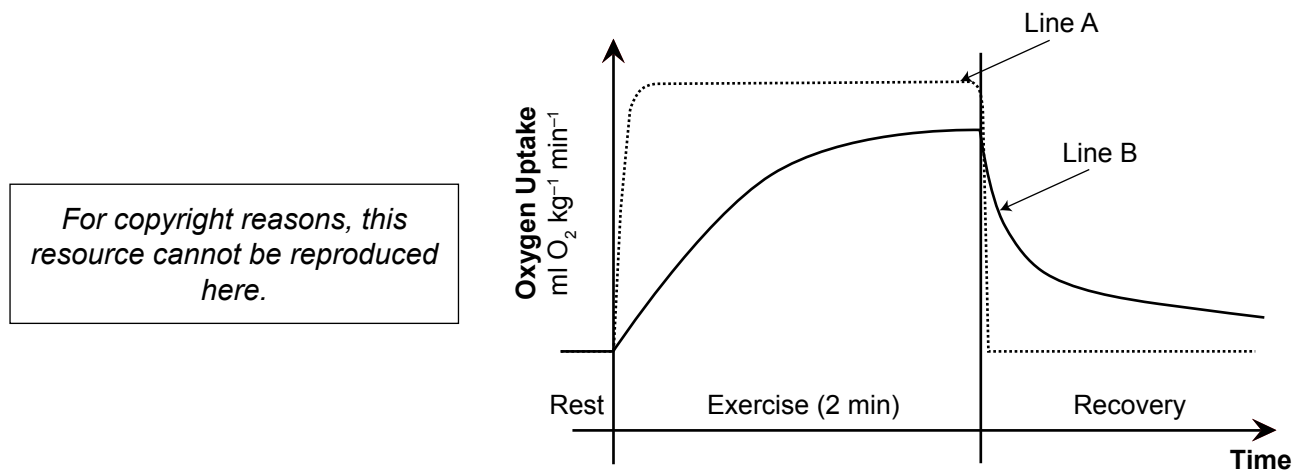


Figure 1

Figure 2

- (a) Given that Figure 2 shows that the aerobic component (Line B) is not sufficient to meet the energy demand (implied by Line A), **explain** how the athlete's body provides the energy required for the race. You may support your explanation with diagrams if you wish.
- (b) **Critically evaluate** why the athlete continues to have an elevated oxygen consumption after the race given that she has stopped running.

In your critical evaluation you should:

- Establish a reasoned argument on why the oxygen consumption is elevated.
- Support your argument by considering the possible factors that increase post-exercise oxygen consumption.
- Support your argument with examples from your own experience of physical activity.

QUESTION THREE

REFLECTING ON TRENDS IN PHYSICAL ACTIVITY

In 2004, the Minister of Health, Annette King, stated that New Zealand is facing an epidemic of obesity and diabetes. However, there are conflicting opinions about the cause of obesity, its prevalence in society, its connection to health, and whether or not it is actually an epidemic. For example, consider the following statements made by various experts about obesity in society.

Comparing 14-year-olds in a 1985 national survey with those in the 2002 national survey, the mean ...
the long-term health of our children.

– Associate Professor Robert Scragg, University of Auckland

It's not about being rich or well fed.
...
from the health system.

– Neville Rigby, Director, International Taskforce on Excessive Weight

The so-called 'obesity epidemic' is simply health
...
means to be healthy.

– Dr Bruce Ross, University of Auckland

Decades down the track we are
...
hold out false hope.

– Dr Naomi Crafti, Author

Most poor health can be traced to four main factors: genetics,
...
not just true for big people, it is true for everyone.

– Lynda Finn, Author

The reason obesity rates are soaring is obvious. Fewer
...
advertisements for foods high in sugar and fat.

– Dr Robyn Toomath, Wellington Hospital

There are, for instance, 245
...
just one, obesity, is ludicrous.

– Professor Glen Gaesser,
University of Virginia

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Critically evaluate the premise that New Zealand is facing an obesity epidemic.

In your critical evaluation you should:

- Define and explain what is meant by the term 'obesity'.
- Consider the diversity of views expressed in the above statements and discuss why the claim that there is an obesity epidemic may be problematic.
- Adopt a position with respect to obesity as a trend in New Zealand society.
- Support your position with a reasoned argument.

QUESTION FOUR

TEACHING AND LEARNING SKILLS

Consider the following skill acquisition scenario:

As part of his senior physical education course, Mike has been teaching tennis to a group of year 9 students. For several weeks the students have practised a variety of different skills in a series of one-hour lessons. After a warm-up, Mike uses a carefully-selected range of drills so that the students get to practise each of the skills he has been teaching. A typical lesson would have students start by practising forehands, then, in turn, working on backhands, the volley, and the serve. Mike structures his teaching this way because he wants the students to get sufficient practice on each skill in order to achieve a good level of mastery. When the students practise this way, they seem to get better, and Mike can see that they are performing each of the skills pretty well. However, when the students attempt to play an actual game of tennis they get confused and seem to lose the skills they had previously demonstrated. Mike wonders why this is happening. He is unsure if he is failing to give enough practice or rushing them into a game before the skills are established. Perhaps his students just need more time, or it could be that they are practising the wrong things.

Critically evaluate how Mike in the above scenario has structured the practice conditions so that his students can learn to play the game of tennis.

In your critical evaluation you should:

- Evaluate how Mike has structured the practice conditions and consider if and why his students are having difficulty playing an actual game.
- Support your evaluation by considering the nature and development of skill, as well as the factors that influence the learning of skill.
- Establish a reasoned argument on how lessons could be structured.
- Support your argument with reference to instructional models and examples you may have experienced in your own learning.