

93501Q



NEW ZEALAND QUALIFICATIONS AUTHORITY  
MANA TOHU MĀTAURANGA O AOTEAROA

## New Zealand Scholarship Physical Education, 2004

2.00 pm Wednesday 10 November 2004

### QUESTION BOOKLET

This booklet contains Questions One–Four.

You must complete QUESTION ONE and TWO other questions from Questions Two–Four.

Write all your answers in the Answer Booklet 93501A.

Check that this booklet has pages 2–5 in the correct order and that none of these pages is blank.

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

#### Outcome Description

The student will critically evaluate information related to physical activity through the application of knowledge of biophysical principles and socio-cultural factors drawn from learning experiences in, through, and about movement.

#### Scholarship Criteria

The student will:

- critically evaluate information to demonstrate an holistic understanding of physical education, arising from both theoretical knowledge and practical application.

#### Scholarship with Outstanding Performance Criteria

In addition to meeting the criteria for Scholarship, the student will:

- demonstrate an exceptional level of sustained critical evaluation, showing outstanding breadth of knowledge and depth of understanding.

You are advised to spend three hours answering the questions in this booklet.

## QUESTION ONE (COMPULSORY): PHYSICAL ACTIVITY AND HEALTH

Read and consider the following quote:

‘We are, the generality of us, the first generation in history to require little, often scarcely any, physical activity in our everyday lives. We therefore have to deliberately introduce this ourselves, and commonly in an unhelpful environment.’

*Prof. John Morris, London School of Medicine, 2003.*

In this quote, Professor Morris expresses his opinion that the amount of incidental or functional physical activity that humans experience in their everyday lives has decreased to such an extent that it has become necessary to deliberately introduce some form of physical activity.

With respect to his opinion:

- (a) **Critically evaluate** the factors within contemporary societies that may influence the amount of incidental physical activity people undertake.
- (b) **Critically evaluate** the implications on health (both positive and negative) of deliberately introducing physical activity into our everyday lives.

Select and complete TWO questions from Questions Two–Four.

## QUESTION TWO: THE NATURE AND MANAGEMENT OF RISK

Consider the following statement:

Risk is what drives some people to participate in physical activities. Experiencing the dangers inherent in particular activities is what motivates people to attempt things like bungee jumping, white-water kayaking, abseiling, or even swinging on a rope. It is the perception of risk that creates the thrill for participants and adds to the sense of accomplishment once an activity has been successfully completed. The growth in the adventure tourism industry is proof that many people actively pursue and enjoy the risk associated with those activities. Risk is a necessary part of some activities, and we need to be careful not to wrap each participant in 'cotton wool' and kill off the very thing that is intrinsic to the nature of the activity.

**Critically evaluate** this statement in relation to both the nature of risk, and the principles of risk management. Use examples from your own experience to support your discussion.

### QUESTION THREE: REFLECTING ON TRENDS IN PHYSICAL ACTIVITY

Joseph Romanos, a prominent sportswriter in New Zealand, is concerned about the changing ethno-cultural mix of people who play sport, and the long-term effect this may have on both the quality of the sport played, and the place of sport in New Zealand society. For example, in his book, *The Judas Game: The Betrayal of New Zealand Rugby*, Romanos makes the following observation:

The face – more accurately, the colour of the face – of New Zealand rugby has changed dramatically over the past decades, and more especially since the game went professional in 1995. Whereas until about 1980, New Zealand rugby was generally, though not exclusively, a white man's game, the opposite is now the case.

These days ever more Māori and Pacific Island boys are taking up the game. On the face of it, that should be healthy for New Zealand rugby, because it is clearly now appealing to a segment of the population that was not nearly as committed to the game previously. However, there has been an exodus of white boys away from the game that is more than counterbalancing the incredible increase in brown-skinned players.

**Critically evaluate** the apparent trend that the ethno-cultural mix of participants playing sport in New Zealand is changing.

## QUESTION FOUR: MOVEMENT ANALYSIS

Consider the following scenario:

Moana, a researcher of human movement, was confused by some of the results she was getting from studying Volleyball players. During game play she observed that players spiking the ball often switched between jumping off one foot and jumping off two feet.

From her observations it looked like the jumping movements were similar. The player took a few steps, used the upswing of their arms to initiate the jump, their legs gave them power to elevate and, once high in the air, they were able to spike the ball. They achieved the same elevation and spiked the ball with the same force regardless of whether they had jumped off one foot or two feet.

In the laboratory, however, it became evident that the muscle activity in the legs of the players was different depending upon whether they jumped off one foot or two feet. Both the muscle activation sequence and magnitude differed between the two ways of jumping. Since the two ways of jumping looked the same, Moana was uncertain about why the muscle activity would be different. She suspected that the differences in muscle activity were related to differences between the biomechanics of each way of jumping.

**Critically evaluate** the jumping action by comparing and contrasting the biomechanics of the one-foot and two-foot take-off. You may use diagrams to help illustrate your evaluation.

Based on this, propose a feasible reason why the muscle activation and sequence would be different between the two methods of take-off.