

BOARD OF STUDIES
NEW SOUTH WALES

2007

**HIGHER SCHOOL CERTIFICATE
EXAMINATION**

Personal Development, Health and Physical Education

General Instructions

- Reading time – 5 minutes
- Working time – 3 hours
- Write using black or blue pen
- Write your Centre Number and Student Number at the top of pages 9 and 13

Total marks – 100

Section I Pages 2–16

60 marks

This section has two parts, Part A and Part B

Part A – 20 marks

- Attempt Questions 1–20
- Allow about 40 minutes for this part

Part B – 40 marks

- Attempt Questions 21–22
- Allow about 1 hour and 10 minutes for this part

Section II Pages 17–18

40 marks

- Attempt TWO questions from Questions 23–27
- Allow about 1 hour and 10 minutes for this section

Section I

Part A – 20 marks

Attempt Questions 1–20

Allow about 40 minutes for this part

Use the multiple-choice answer sheet for Questions 1–20.

- 1 Which of the following is a non-modifiable risk factor for breast cancer in Australian women?
- (A) Sun exposure
(B) Family history
(C) Tobacco smoking
(D) Alcohol consumption
- 2 Which population group experiences a higher incidence of cardiovascular disease, injury, respiratory diseases and cancer than the general Australian population?
- (A) Women
(B) People with disabilities
(C) Australians born overseas
(D) Aboriginal and Torres Strait Islander peoples
- 3 What cancers have the highest incidence in males and females in Australia?

	<i>Male</i>	<i>Female</i>
(A)	lung	lung
(B)	prostate	breast
(C)	prostate	lung
(D)	lung	breast

4 Who is responsible for the funding of Medicare?

- (A) State government
- (B) Local government
- (C) Federal government
- (D) Private health insurance

5 Why has alternative health care increased in popularity?

- (A) It focuses on cure rather than prevention.
- (B) It is cheaper and faster than traditional medicine.
- (C) It adopts a holistic approach and is increasingly accepted by doctors.
- (D) It is based on scientific research and is more reliable than traditional medicine.

6 Which of the following identifies the current trends for melanoma in Australia?

	<i>Morbidity</i>	<i>Mortality</i>
(A)	decreasing	decreasing
(B)	increasing	decreasing
(C)	decreasing	increasing
(D)	increasing	increasing

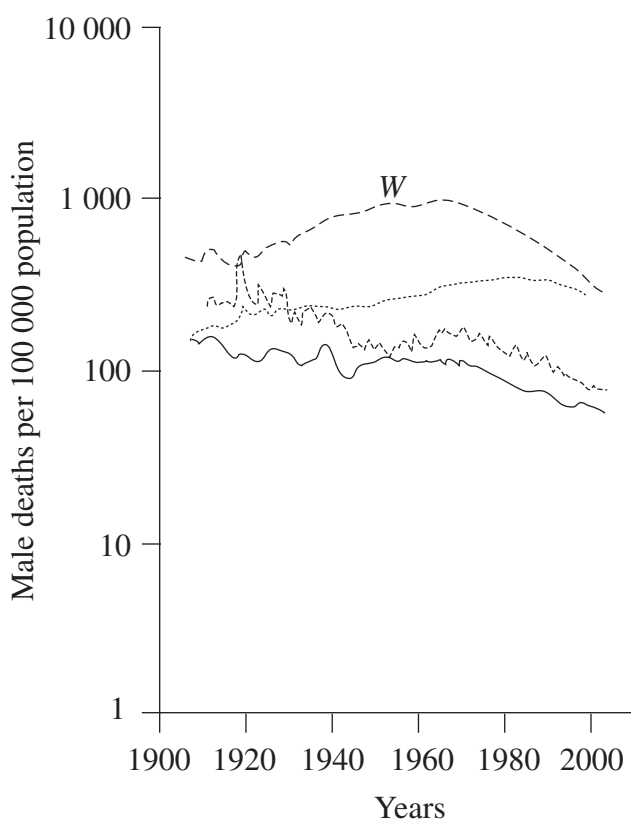
7 Which characteristic of the new public health approach to health promotion makes it more effective than the individual lifestyle approach?

- (A) Focus on curing illness and disease
- (B) Emphasis on research and treatment
- (C) Recognition of the social determinants of health
- (D) Reliance on individuals to change their behaviour

8 Which action areas of the Ottawa Charter does the QuitLine telephone counselling service demonstrate?

- (A) Developing personal skills and reorienting health services
- (B) Building healthy public policy and developing personal skills
- (C) Reorienting health services and strengthening community action
- (D) Strengthening community action and building healthy public policy

- 9 If Australians increased their level of vigorous physical activity each week, what changes in health status would result?
- (A) Increased life expectancy and decreased incidence of breast cancer
 (B) Decreased life expectancy and decreased incidence of colon cancer
 (C) Increased life expectancy and increased prevalence of cardiovascular disease
 (D) Decreased life expectancy and decreased prevalence of cardiovascular disease
- 10 The graph shows the death rates for the four major causes of mortality in Australian males from 1907 to 2004. One of these causes is labelled W.



Australian Institute of Health and Welfare

Which risk factors were likely to have contributed to the causes of the mortality rate represented by W?

- (A) Overweight, high alcohol intake, high fibre diet, high blood pressure
 (B) High blood cholesterol, physical inactivity, exposure to UV rays, overweight
 (C) Tobacco smoking, exposure to UV rays, unprotected sexual activity, high fat diet
 (D) Tobacco smoking, high blood pressure, physical inactivity, high blood cholesterol

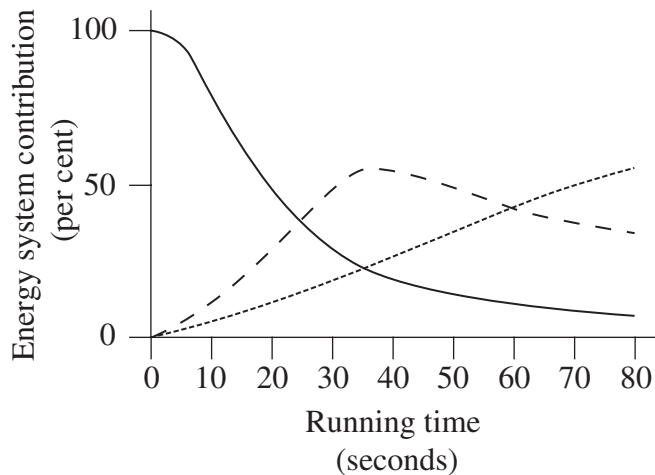
- 11** Which part of the cyclic learning process involves gathering and understanding information about a skill prior to performance?
- (A) Perceiving
 - (B) Feedback
 - (C) Deciding
 - (D) Acting
- 12** What is necessary for the immediate re-synthesis of Adenosine Triphosphate (ATP) during a long-jump event?
- (A) Phosphocreatine (PC)
 - (B) Lactic acid
 - (C) Glycogen
 - (D) Oxygen
- 13** An athlete has been achieving personal best performances in training but is anxious and under-performs in competitions.
- Which of the following would best assist the athlete to improve his performance in competitions?
- (A) Setting long-term performance goals
 - (B) Training more frequently and at a higher intensity
 - (C) Mental rehearsal and progressive relaxation exercises
 - (D) Constant monitoring of his mistakes by the coach during training
- 14** Which of the following is a discrete, closed and self-paced skill?
- (A) Batting in cricket
 - (B) Throwing a javelin
 - (C) Riding a surfboard
 - (D) Receiving a tennis serve

- 15** What types of feedback are provided by an athlete's kinaesthetic sense?
- (A) Delayed and external feedback
 - (B) Internal and concurrent feedback
 - (C) Internal feedback and knowledge of results
 - (D) Concurrent feedback and knowledge of results
- 16** What type of stretching is an athlete performing when completing a series of high kicks during a warm up?
- (A) Ballistic
 - (B) Isometric
 - (C) PNF
 - (D) Static
- 17** A panel of football coaches observes games of football and the coaches judge each player on their performance.
- Which types of judging criteria are the coaches using?
- (A) Objective and personal
 - (B) Subjective and personal
 - (C) Objective and prescribed
 - (D) Subjective and prescribed
- 18** In the cognitive stage of skill acquisition, which practice methods would best suit a performer learning a gymnastic routine?
- (A) Massed and part
 - (B) Massed and whole
 - (C) Distributed and part
 - (D) Distributed and whole

- 19 Which of the following represents the physiological adaptations to stroke volume as a result of an aerobic training program?

	<i>At rest</i>	<i>Maximal effort</i>
(A)	Decrease	Increase
(B)	Decrease	Decrease
(C)	Increase	Decrease
(D)	Increase	Increase

- 20 The graph represents the relationship between running time and energy system contribution.



What is the cause of fatigue of the dominant energy system at 40 seconds running time?

- (A) Dehydration
- (B) Increased lactic acid
- (C) Depletion of glycogen
- (D) Depletion of Phosphocreatine (PC) stores

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Personal Development, Health and Physical Education

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Centre Number

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Student Number

Section I (continued)

Part B – 40 marks

Attempt Questions 21–22

Allow about 1 hour and 10 minutes for this part

Answer the questions in the spaces provided.

In your answers you will be assessed on how well you:

- demonstrate an understanding of health and physical activity concepts
- apply the skills of critical thinking and analysis
- illustrate your answer with relevant examples
- present ideas in a clear and logical way

Marks

Question 21 — Health Priorities in Australia (20 marks)

(a) Define the following terms.

3

<i>mortality</i>
<i>morbidity</i>
<i>life expectancy</i>

Question 21 continues on page 10

Question 21 (continued)

- (b) Explain why some Australians may choose to take out private health insurance. **5**

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Question 21 continues on page 11

Question 21 (continued)

- (c) Analyse how building healthy public policy can address TWO national health priority areas you have studied. **12**

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Question 21 continues on page 12

Question 21 (continued)

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End of Question 21

Personal Development, Health and Physical Education

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Student Number

Section I — Part B (continued)

In your answers you will be assessed on how well you:

- demonstrate an understanding of health and physical activity concepts
- apply the skills of critical thinking and analysis
- illustrate your answer with relevant examples
- present ideas in a clear and logical way

Marks

Question 22 — Factors Affecting Performance (20 marks)

- (a) Explain how characteristics of the learner and the learning environment affect the acquisition of skill.

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Question 22 continues on page 14

Question 22 (continued)

The table shows a training program for an active 18-year-old who is preparing to participate in a 14-kilometre running event.

Each session begins with a 10–15 minute warm up, including stretching, and concludes with a 10-minute cool down.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<i>Week 1</i>	Jog 25 min 70% max heart rate	Rest day	Circuit 40 min 70–85% max heart rate	Jog 25 min 70% max heart rate	Rest day	Touch football 40 min 75–90% max heart rate	Rest day
<i>Week 2</i>	Cycle 30 min 75% max heart rate	Jog 30 min 75% max heart rate	Rest day	Circuit 40 min 75–85% max heart rate	Rest day	Touch football 40 min 75–90% max heart rate	Jog 35 min 75% max heart rate
<i>Week 3</i>	Rest day	Jog 35 min 75% max heart rate	Circuit 45 min 75–85% max heart rate	Rest day	Jog 35 min 80% max heart rate	Touch football 40 min 75–90% max heart rate	Rest day
<i>Week 4</i>	Swimming 35 min 75% max heart rate	Jog 35 min 80% max heart rate	Rest day	Circuit 45 min 75–85% max heart rate	Boxercise 45 min 80% max heart rate	Touch football 40 min 75–90% max heart rate	Jog 35 min 80% max heart rate
<i>Week 5</i>	Jog 40 min 80% max heart rate	Rest day	Circuit 50 min 75–85% max heart rate	Jog 40 min 80% max heart rate	Rest day	Touch football 40 min 75–90% max heart rate	Swimming 40 min 80% max heart rate
<i>Week 6</i>	Rest day	Jog 50 min 80% max heart rate	Circuit 50 min 80% max heart rate	Rest day	Jog 45 min 70% max heart rate	Rest day	Event

Question 22 continues on page 15

Question 22 (continued)

- (b) Evaluate how the principles of training have been used in this training program for the running event.

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Question 22 continues on page 16

Personal Development, Health and Physical Education

Section II

40 marks

Attempt TWO questions from Questions 23–27

Allow about 1 hour and 10 minutes for this section

Answer each question in a SEPARATE writing booklet. Extra writing booklets are available.

In your answers you will be assessed on how well you:

- demonstrate an understanding of health and physical activity concepts
 - apply the skills of critical thinking and analysis
 - illustrate your answer with relevant examples
 - present ideas in a clear and logical way
-

	Marks
Question 23 — The Health of Young People (20 marks)	
(a) Outline how geographic location can affect the health of young people.	3
(b) Describe how young people's lives today are different from the lives of young people in previous generations.	5
(c) Analyse a health promotion program designed to enhance the health of young people. Refer to ONE area of concern you have studied.	12
Question 24 — Sport and Physical Activity in Australian Society (20 marks)	
(a) Outline how cultural backgrounds can affect participation in physical activity.	3
(b) Describe how the media coverage given to particular sports reflects how sport is valued in society.	5
(c) Analyse how Australia's participation in international competition affects national identity.	12

Please turn over

In your answers you will be assessed on how well you:

- demonstrate an understanding of health and physical activity concepts
 - apply the skills of critical thinking and analysis
 - illustrate your answer with relevant examples
 - present ideas in a clear and logical way
-

	Marks
Question 25 — Sports Medicine (20 marks)	
(a) Outline the impact pregnancy may have on female athletes' participation in sport.	3
(b) Describe the procedure for the immediate management of a sprained ankle.	5
(c) Analyse the injury management procedures necessary for an athlete who is recovering from a hamstring injury.	12
 Question 26 — Improving Performance (20 marks)	
(a) Outline the signs that identify an overtrained athlete.	3
(b) Describe how overload techniques can be applied in resistance training.	5
(c) Analyse how phases of competition, altitude training, and acclimatisation can be used to enhance an athlete's performance.	12
 Question 27 — Equity and Health (20 marks)	
(a) Outline how intersectoral collaboration can contribute to the success of health promotion strategies.	3
(b) Describe how mediating and advocating processes improve health for disadvantaged groups.	5
(c) Analyse how a social justice framework can address the factors influencing the health of a disadvantaged population.	12

End of paper