



THE SCOTS SCHOOL ALBURY

Student Number

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2013

HIGHER SCHOOL CERTIFICATE
TRIAL EXAMINATION

Personal Development, Health & Physical Education

General Instructions

- Reading Time - 5 minutes.
- Working Time - 3 hours.
- Write using blue or black pen.
- Write your student number on every page.

Total Marks (100)

Section I

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 - 28
- Allow about 1 hour and 10 minutes for this part

Section 2

40 Marks

- Attempt **TWO** questions from 29 - 33
- Allow about 1 hour and 10 minutes for this section
- Answer each question in a **SEPARATE** booklet

This paper must not be removed from the examination room

Objective Response Question Answer Grid

Instructions for answering objective response questions

- Complete your answers in either black or blue pen.
- Select the alternative A, B, C or D that best answers the question. Fill in the response oval completely.

Sample: $2 + 4 =$ (A) 2 (B) 6 (C) 8 (D) 9
 A ○ B ○ C ○ D ○

If you think you have made a mistake, put a cross through the incorrect answer and fill in the new answer.

A ● B ~~○~~ C ○ D ○

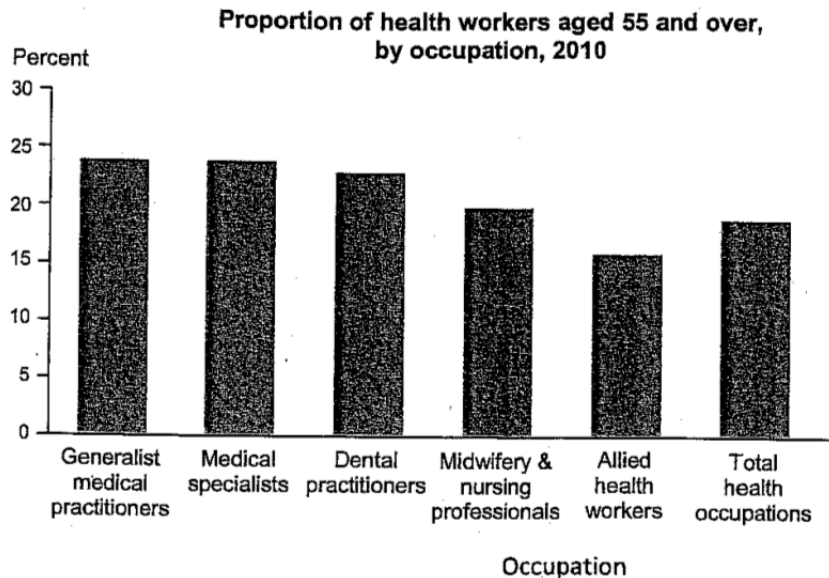
*If you change your mind and have crossed out what you consider to be the correct answer, then indicate the correct answer by writing the word **correct** and drawing an arrow as follows.*

A ~~○~~ B ~~○~~ ^{correct} C ○ D ○

1.	A ○	B ○	C ○	D ○
2.	A ○	B ○	C ○	D ○
3.	A ○	B ○	C ○	D ○
4.	A ○	B ○	C ○	D ○
5.	A ○	B ○	C ○	D ○
6.	A ○	B ○	C ○	D ○
7.	A ○	B ○	C ○	D ○
8.	A ○	B ○	C ○	D ○
9.	A ○	B ○	C ○	D ○
10.	A ○	B ○	C ○	D ○
11.	A ○	B ○	C ○	D ○
12.	A ○	B ○	C ○	D ○
13.	A ○	B ○	C ○	D ○
14.	A ○	B ○	C ○	D ○
15.	A ○	B ○	C ○	D ○
16.	A ○	B ○	C ○	D ○
17.	A ○	B ○	C ○	D ○
18.	A ○	B ○	C ○	D ○
19.	A ○	B ○	C ○	D ○
20.	A ○	B ○	C ○	D ○

SECTION I**Part A – 20 Marks****Attempt Questions 1- 20****Answer questions on the grid provided****Allow about 40 minutes for this part**

1. Observe the graph below.

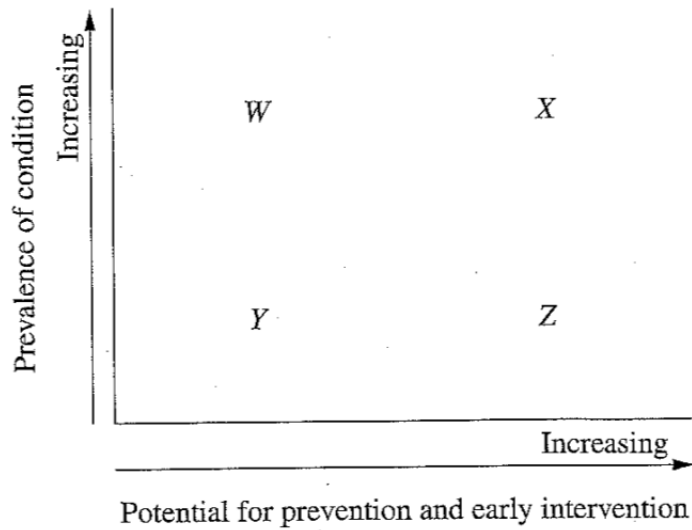


Which of the following best describes the impact of a growing and *ageing* Australian population on the health service workforce?

- (A) More of these health professions can now become volunteers when they retire
- (B) There will be too many health professionals and not enough jobs as they become older
- (C) There is a potential for shortages of health professionals, together with their expertise
- (D) There will be less demand for health professionals as individuals adopt health-promoting behaviours
2. Which of the following best describes current trends in *health status* for the Australian population?
- (A) Mortality rates decreasing for cancer and cardiovascular diseases; prevalence increasing for dementia and diabetes
- (B) Mortality rates increasing for cancer and cardiovascular diseases; prevalence increasing for dementia and diabetes
- (C) Mortality rates increasing for cancer and diabetes; prevalence decreasing for dementia and diabetes
- (D) Mortality rates increasing for cardiovascular diseases and dementia; no change in prevalence for dementia and diabetes

3. If the federal government increases tax on the sale of tobacco, to which Ottawa Charter action area would this relate?
- (A) Building healthy public policy
 - (B) Reorienting health services
 - (C) Strengthening community action
 - (D) Developing personal skills
4. What is an advantage of using complementary and alternative health care approaches?
- (A) They are all covered by Medicare
 - (B) They support the holistic view of healthcare
 - (C) They all use high levels of technology
 - (D) They have a comparatively higher cost than traditional medicine
5. Which risk factor has been linked to both heart disease and cancer?
- (A) Obesity
 - (B) Mental illness
 - (C) Osteoporosis
 - (D) Hypertension
6. Which of the following is a benefit of emerging treatments and technologies in health care?
- (A) Early detection of disease
 - (B) Reduced cost for health care
 - (C) Improved access to dental care
 - (D) Improved participation in screening procedures

7. Four health conditions identified as *W*, *X*, *Y* and *Z* are shown in the following graph.



Which of these conditions is most likely to be identified as a health priority issue?

- (A) *W*
 - (B) *X*
 - (C) *Y*
 - (D) *Z*
8. The criteria used to determine Australia's priority health issues are:
- (A) Social justice principles, potential for prevention and morbidity rates
 - (B) Priority population groups, life expectancy and social justice principles
 - (C) Cost to individual and communities, mortality rates and social justice principles
 - (D) Social justice principles, priority population groups and prevalence of condition
9. Which of the following are factors that protect against preventable chronic disease?
- (A) Maintaining a healthy weight range, not smoking, eating healthily, having regular health checks
 - (B) Maintaining a healthy weight range, not smoking, hypertension, having regular mammograms
 - (C) Maintaining a healthy blood pressure, being male, eating healthily, maintaining a healthy weigh range
 - (D) Maintaining a healthy weight range, not smoking, exercising regularly, being over the age of 40 years

10. Peripheral vascular disease is a cardiovascular disease affecting:

- (A) The arteries
- (B) The skeletal muscles
- (C) Blood vessels in the limbs
- (D) Blood vessels in the pancreas

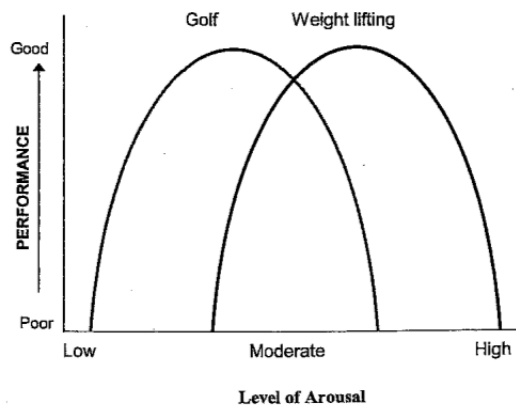
11. Which of the following is correct of the *alactacid energy system*?

	Source of fuel	Duration that the system can operate	By-products of energy production
(A)	ATP	about 30 seconds at near maximal effort	Lactic acid
(B)	Glucose	2 to 3 hours of intermittent exercise	Carbon dioxide and water
(C)	ATP	4 to 6 hours of intermittent exercise	Carbon dioxide and water
(D)	Creating phosphate	about 10 seconds at maximal effort	Nil

12. Receiving a medal for winning in sport is an example of which types of *motivation*?

- (A) Positive and intrinsic
- (B) Positive and extrinsic
- (C) Negative and intrinsic
- (D) Negative and extrinsic

13. Observe the following image.



Which statement best describes this variation in optimal *arousal* levels?

- (A) Optimal arousal is the same for all athletes, regardless of the sport
- (B) Optimal arousal is dependent on both trait and state anxiety
- (C) A higher level of arousal is usually needed for a less complex task
- (D) A higher level of arousal is usually needed for a more complex task

14. Which of the following is a benefit of *carbohydrate loading*?

- (A) Increased capacity to store ATP
- (B) Raised anaerobic threshold
- (C) Improved ability to resynthesise lactic acid
- (D) Increased storage of glycogen in muscle cells

15. Which of the following examples of appropriate *recovery strategies* are correctly identified?

	Physiological	Neural	Tissue damage	Psychological
(A)	Meditation	Cryotherapy	Cool down	Hydration
(B)	Cool down	Massage	Cryotherapy	Relaxation
(C)	Hydrotherapy	Relaxation	Hydration	Cryotherapy
(D)	Cryotherapy	Hydration	Meditation	Massage

16. Which of the following is most important when acquiring a *complex skill*?

- (A) Heightened level of motivation
- (B) Predominance of fast twitch muscle fibres
- (C) Competence in assembling sub-routines
- (D) Self-confidence in executing gross motor skills

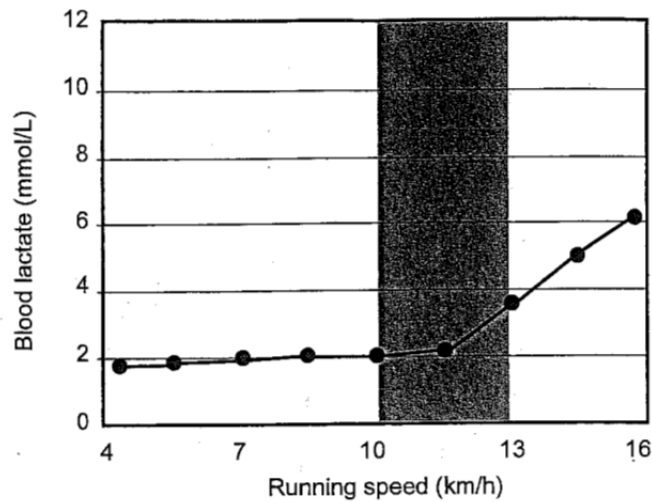
17. Which type of *feedback* results from proprioception?

- (A) Internal
- (B) Delayed
- (C) External
- (D) Knowledge of results (KR)

18. Where will learning *strategic* and *tactical* skills be most beneficial?

- (A) During the autonomous stage of skill acquisition
- (B) During the associative stage of skill acquisition
- (C) During the cognitive stage, as this focuses on what to do
- (D) Through the entire skill learning process

19. Observe the chart below.



How will performance be affected as a result of the changes that begin to occur in the shaded area?

- (A) Performance will improve due to blood flow delivering more oxygen to working muscles
- (B) Performance will deteriorate due to an increasing concentration of blood lactate
- (C) Performance will improve due to rises in haemoglobin levels
- (D) Performance will improve due to rises in blood lactate levels

20. Which of the following nutritional consideration would be most appropriate for an athlete competing in a marathon?

	Pre-performance	During Performance	Post-Performance
(A)	Sports drink 20 minutes prior to race	Regular hydration	Water and foods high in free fatty acids
(B)	High protein meal 20 minutes prior to race	Liquid carbohydrate supplement	Water and carbohydrate-rich foods
(C)	Carbohydrate loading	Protein bars	Water and foods high in fat
(D)	Carbohydrate loading	Regular hydration	Water and carbohydrate-rich foods

END OF PART A

SECTION I

Part B – 40 Marks

Attempt Questions 21 - 28

Allow about 1 hour and 10 minutes for this section

Answer questions in spaces provided. These spaces provide guidance for the expected length of response.

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

- Demonstrate knowledge and understanding of health and physical activity concepts relevant to the question
 - Apply the skills of critical thinking and analysis
 - Communicate ideas and information using relevant examples
 - Present a logical and cohesive response
-

Marks

Question 21 (4 Marks)

Identify the risk and protective factors for cardiovascular disease.

4

Marks

Question 22 (4 Marks)

Describe the measures of epidemiology.

4

Question 23 (4 Marks)

Explain the reasons for growth of complementary and alternative health products and services.

4

Question 25 (4 marks)

Explain the physiological adaptations that occur to cardiac output and stroke volume in response to regular aerobic training.

4

Question 26 (4 marks)

Discuss how progressive overload and variety could be applied to an aerobic training program.

4

Question 27 (4 marks)

Describe **TWO** psychological strategies that can be used to enhance motivation and manage the anxiety of an athlete.

4

Question 28 (8 marks)

Analyse how different types of feedback can be used at the different stages of skill acquisition.

8

SECTION 2**40 Marks****Attempt TWO questions from Questions 29 - 33****Allow about 1 hour and 10 minutes for this section**

- Answer questions in the booklets provided.
- Start each question in a **SEPARATE** booklet.
- Label each booklet with the question number.

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

- Demonstrate knowledge and understanding of health and physical activity concepts relevant to the question
- Apply the skills of critical thinking and analysis
- Communicate ideas and information using relevant examples
- Present a logical and cohesive response

Marks**Question 29 – The Health of Young People (20 marks)**

- | | | | |
|----|------|---|-----------|
| a) | (i) | Outline the patterns of <i>mortality</i> and <i>morbidity</i> for young people. | 3 |
| | (ii) | Explain the influence of prevailing <i>youth cultures</i> on the nature of young people's lives. | 5 |
| b) | | Critically analyse how skills in attaining better health can assist young people's health status. | 12 |

Question 30 – Sport and physical Activity in Australian Society (20 marks)

- | | | | |
|----|------|--|-----------|
| a) | (i) | How can an individual's <i>cultural identity</i> impact on their participation in physical activity and sport? | 3 |
| | (ii) | Explain why different forms of physical activity are associated with each <i>gender</i> . | 5 |
| b) | | Analyse the relationship between sport in the 19 th century and sport in today's society. | 12 |

Question 31 – Sports Medicine (20 marks)

- | | | | |
|----|--|--|-----------|
| a) | | Describe how hard tissue injuries are managed. | 3 |
| b) | | Explain the procedure used to assess the nature and extent of a sporting injury. | 5 |
| c) | | Examine the rehabilitation procedures that are used to manage injury and discuss both the physiological and psychological indicators that an athlete is ready to return to play. | 12 |

Question 32 – Improving Performance (20 marks)

- | | | |
|----|--|-----------|
| a) | Outline how technology has been used to improve performance in a specific sporting event. | 3 |
| b) | Explain how plyometrics and short interval training can be used as a part of an anaerobic training program. Refer to specific examples to explain your answer. | 5 |
| c) | Analyse the importance of breaking a training year into phases and sub-phases, and examine the use of peaking and tapering to maximise sports performance. | 12 |

Question 33 – Equity and Health (20 marks)

- | | | |
|----|---|-----------|
| a) | Describe how <i>access to services</i> may impact on a person's health | 3 |
| b) | Examine the action of <i>enabling</i> to improve health. | 5 |
| c) | Critically analyse the characteristics of an effective health promotion strategy. | 12 |

END OF EXAMINATION