

2015 HIGHER SCHOOL CERTIFICATE EXAMINATION

Personal Development, Health and Physical Education

General Instructions

- Reading time 5 minutes
- Working time 3 hours
- Write using black pen

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 21–28
- Allow about 1 hour and 10 minutes for this part

Section II Pages 17–18

40 marks

- Attempt TWO questions from Questions 29–33
- Allow about 1 hour and 10 minutes for this section

Section I 60 marks

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 the main benefit of emerging treatments and technologies in health care?
 - (A) Reduced costs for health care
 - (B) Reduced dental health problems
 - (C) Improved early detection and screening procedures
 - (D) Improved waiting times for surgery in public hospitals
- 2 An individual is required to perform a discrete, open and externally paced skill.

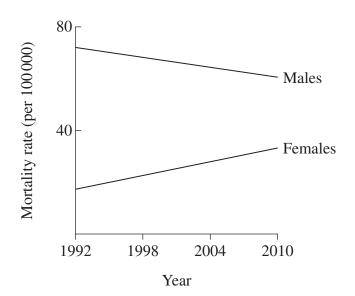
Which of the following would meet this description?

- (A) Putting in golf
- (B) Running 800 m
- (C) Throwing a discus
- (D) Returning a tennis serve
- **3** What is the most appropriate advice to give people who are making a decision about an alternative health care service or product?
 - (A) Investigate the credibility of the service, product and practitioner
 - (B) Cease the conventional medication and medical advice they have been receiving
 - (C) Combine alternative health care services with complementary health care products
 - (D) Seek recommendations from friends and family who have experienced success with alternative health care services and products

4	Which of the following best defines the process of <i>metastasis</i> ?			
	(A)	Scanning to locate a tumour		
	(B)	Cells dividing and multiplying		
	(C)	Malignant cells invading body tissue or organs		
	(D)	Differentiating between different types of cancers		
5		physiological adaptation that is likely to occur from progressively overloading a gth-training program is an increase in		
	(A)	muscle hypertrophy.		
	(B)	cardiac muscle capacity.		
	(C)	muscle contraction speed.		
	(D)	the number of fast twitch muscle fibres.		
6		t type of feedback occurs when an athlete receives a score at the conclusion of a nastics routine?		
	(A)	Intrinsic		
	(B)	Concurrent		
	(C)	Knowledge of results		
	(D)	Knowledge of performance		
7	Med	itation techniques are used by some patients while undergoing chemotherapy for er.		
	Wha	t type of approach to treatment is this?		
	(A)	Diversionary		
	(B)	Pain management		
	(C)	Alternative health care		
	(D)	Complementary health care		

- **8** Why is an adequate intake of vitamins important in an athlete's diet?
 - (A) They are energy rich nutrients.
 - (B) They act as catalysts to assist energy metabolism.
 - (C) They increase the oxygen carrying capacity of the blood.
 - (D) They restore bone density when used with load bearing exercise.
- 9 In which action area of the Ottawa Charter does the Pharmaceutical Benefits Scheme (PBS) belong?
 - (A) Developing personal skills
 - (B) Reorienting health services
 - (C) Building healthy public policy
 - (D) Strengthening community action
- 10 What is the cause of fatigue for the alactacid system?
 - (A) Lack of essential amino acids
 - (B) Lack of muscle glycogen stores
 - (C) Inability to re-synthesise phosphate creatine
 - (D) Inability to convert carbohydrates to glycogen
- Which combination of factors has contributed most to a decreasing smoking rate in Australia?
 - (A) Taxation and increased prevalence of lung cancer
 - (B) Targeted legislation and health promotion campaigns
 - (C) Education programs and participation in organised sport
 - (D) Public perceptions of smoking and decreased access to tobacco products
- How could a coach use a circuit training program to develop the aerobic capacity and strength of her athletes?
 - (A) By increasing the time allowed for the circuit to be completed
 - (B) By increasing the resistance and the time at each of the stations
 - (C) By decreasing the time allowed for the circuit to be completed
 - (D) By decreasing the resistance and the time at each of the stations

- Which of the following is a sociocultural determinant that explains the increased risk of respiratory diseases for some Australians?
 - (A) Being unemployed
 - (B) Affordability of medical care
 - (C) Exposure to smoking in the family
 - (D) Presence of hazardous chemicals at work
- Which of the following would be a suitable weight training plan for enhancing the performance of an endurance athlete?
 - (A) Low repetition numbers with long recovery periods between sets
 - (B) Low repetition numbers with short recovery periods between sets
 - (C) High repetition numbers with slow speed and long recovery periods between sets
 - (D) High repetition numbers with fast speed and short recovery periods between sets
- 15 The graph shows the mortality rate (1992–2010) for a preventable chronic disease in Australia.

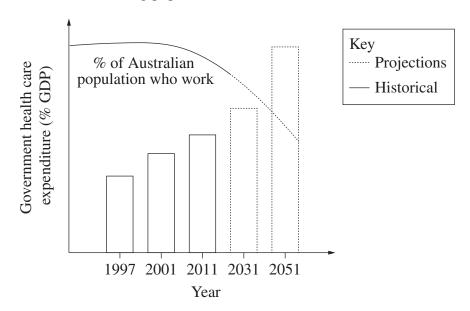


Which of the following is most likely to be the preventable chronic disease represented in the graph?

- (A) Obesity
- (B) Lung cancer
- (C) Type 2 diabetes
- (D) Colorectal cancer

- **16** Why is cryotherapy an effective post-exercise recovery procedure?
 - (A) It dilates blood flow and reduces muscle soreness.
 - (B) It dilates blood flow and increases dispersal of waste.
 - (C) It constricts blood flow and decreases dispersal of waste.
 - (D) It constricts blood flow and reduces an inflammatory response.
- Which combination of factors is most likely to account for the difference in life expectancy of females and males in Australia today?
 - (A) Males are less likely to engage in unsafe behaviours and less likely to visit a doctor regularly.
 - (B) Females are less likely to engage in unsafe behaviours and more likely to visit a doctor regularly.
 - (C) Males are more likely to work in lower risk occupations and more likely to participate in organised physical activity.
 - (D) Females are more likely to work in lower risk occupations and less likely to participate in organised physical activity.

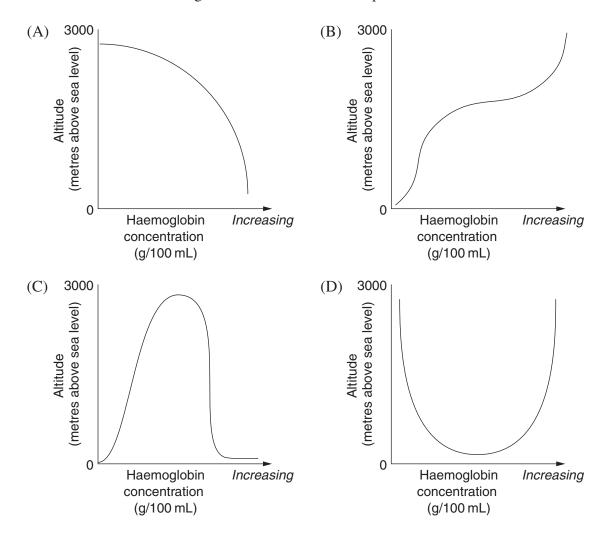
18 The graph summarises historical and projected data for Australian health care expenditure and the Australian working population.



Which major health care issue does the graph predict?

- (A) Funding for new and emerging medical technologies required by working Australians
- (B) Funding for health care in an increasing ageing population
- (C) Increasing demand for health care by the long-term unemployed
- (D) Increasing prevalence of non-communicable disease in the Australian working population

Which of the following graphs is most likely to represent an athlete's haemoglobin concentration while training at different altitudes for up to four weeks?



20 The table shows scores achieved by an athlete undertaking a series of tests to assess the same performance outcome. Each test was administered five times under the same conditions.

	Test 1	Test 2	Test 3	Test 4
Scores	10, 10, 6, 4, 0	8, 8, 4, 4, 2	10, 8, 6, 4, 4	6, 6, 6, 6, 4
Total	30	26	32	28

Which test is likely to have been the most reliable?

- (A) *Test 1*
- (B) *Test 2*
- (C) *Test 3*
- (D) Test 4

Personal Development, Health and Physical Education

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Student Number

Section I (continued)

Part B – 40 marks Attempt Questions 21–28 Allow about 1 hour and 10 minutes for this part

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

Extra writing space is provided on page 16. If you use this space, clearly indicate which question you are answering.

Write your Centre Number and Student Number at the top of this page.

Please turn over

Question 21 (3 ma	arks)	
What are the advar	ntages to Australians of having a public health care system?	
Question 22 (4 ma	arks) h services in Australia have been reoriented to address ONE health	
promotion initiativ	7e.	

Question 23 (5 marks)
Why is it important for governments to prioritise health issues?

Question 24 (8 marks)

To what extent is access to he Australians?	alth care facilities	and services equitable	e for all
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			•••••
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Question 25 (3 marks)	
How can flexibility improve athletic performance?	3
Question 26 (4 marks)	
Explain how different types of motivation can affect an athlete's performance.	4

Question 27 (5 marks)

Why are both objective and subjective performance measures appropriate in the assessment of an athletic performance?	

Question 28 (8 marks)
Why is it important for an athlete to develop the elements of performance?

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Section II

40 marks

Attempt TWO questions from Questions 29–33 Allow about 1 hour and 10 minutes for this section

Answer both questions in the Section II Writing Booklet. Extra writing booklets are available.

Your answers 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

Question 29 — The Health of Young People (20 marks)

- (a) How do perceptions of self-identity and self-worth affect the health of young people?
- (b) To what extent can young people enjoy better health by developing their resilience, coping and health literacy skills?

Question 30 — Sport and Physical Activity in Australian Society (20 marks)

- (a) How has Australian sport been changed in order to suit the needs of the media? 8
- (b) To what extent are the social constructions of gender reinforced AND challenged in sport?

Please turn over

-17 -

Question 31 — Sports Medicine (20 marks)

- (a) Why do iron deficiency and lower bone density affect female athletes? 8
- (b) To what extent do specific sports' policies promote safe participation? 12

Question 32 — Improving Performance (20 marks)

- (a) How does planning for performance differ for elite and amateur athletes?
- (b) Evaluate the effectiveness of processes used to identify and manage an overtrained athlete.

Question 33 — Equity and Health (20 marks)

- (a) How can generalisations about Australians who experience health inequalities be challenged?
- (b) Explain the characteristics of an effective and sustainable health promotion strategy.

End of paper