

# 2014 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 Black pen is preferred

#### 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 terms describes the level of illness in a given population?				
	(A)	Mortality			
	(B)	Morbidity			
	(C)	Prevalence			
	(D)	Health status			
2	Whi	ch type of skin cancer is most closely linked to increased mortality?			
	(A)	Solar keratosis			
	(B)	Basal cell carcinoma			
	(C)	Malignant melanoma			
	(D)	Squamous cell carcinoma			
3	Wha	at is the purpose of epidemiology?			
	(A)	To identify causes and patterns of disease in a population			
	(B)	To track hospital admission rates and ambulance response times			
	(C)	To determine how health care budgets are managed by governments			
	(D)	To monitor prescription medicines being administered by doctors to their patients			
4		ch of the following is an example of reorienting health services as specified in the wa Charter?			
	(A)	Redirecting services from cure to prevention			
	(B)	Redirecting services from private to public health care			

(C) Allowing health service professionals to focus on curing ill health

(D) Supporting individuals to identify personal networks and services

- 5 Which of the following has contributed most to the declining prevalence of cardiovascular disease (CVD) in Australia?
  - (A) Improved community awareness and treatment of CVD
  - (B) Improved nutritional quality of food consumed by Australians
  - (C) Increased levels of organised sport participation and exercise by those at risk of CVD
  - (D) Increased numbers of alternative health professionals and volunteers working with those at risk of CVD
- **6** How do Medicare and the Pharmaceutical Benefits Scheme support the principles of social justice?
  - (A) They are funded by the Australian government to supply health care services.
  - (B) They provide resources only to those most in need of health services and treatment.
  - (C) They allocate resources according to the needs of the population in order to promote equality of health outcomes.
  - (D) They empower individuals and communities to be involved in planning and decision making to achieve good health.
- Which of the following is an environmental determinant that best explains why Indigenous Australians have a shorter life expectancy than non-Indigenous Australians?
  - (A) The types of illness Indigenous Australians develop are more likely to result in death.
  - (B) Traditional forms of medicine are no longer widely used by Indigenous Australians.
  - (C) Indigenous Australians are less likely to have access to primary health care and adequate treatment.
  - (D) Indigenous Australians have higher rates of unemployment so they cannot afford to visit the doctor regularly.
- **8** What major considerations do governments and health authorities take into account when prioritising health issues?
  - (A) The burden of illness in the community and the potential for reducing this burden
  - (B) The cost of illness to the community and the socioeconomic capacity of the affected community
  - (C) The mortality rate and the ability to deal with mortality in a community
  - (D) The morbidity rate and the number of health services already available for a community

- **9** What is the most likely consequence of a growth in the percentage of aged people in the Australian population?
  - (A) Higher demand for medical services provided by hospitals
  - (B) Better research into the effects of medication for aged people
  - (C) Increased revenue from private patients in Australia's health care sector
  - (D) More employment opportunities for aged people in the health care sector
- 10 For a health promotion strategy to be classified as strengthening community action, it must
  - (A) focus on a targeted health promotion for those most at risk.
  - (B) focus policy direction and public discussion on the health promotion strategy.
  - (C) facilitate participation from all government departments for the health promotion strategy.
  - (D) facilitate the funds and infrastructure for the health promotion strategy to be carried through successfully.
- A coach tells the squad that a strong performance in its next match will result in individuals being selected for a representative team.

What type of motivation is this?

- (A) Positive and intrinsic
- (B) Positive and extrinsic
- (C) Negative and intrinsic
- (D) Negative and extrinsic
- What is cardiac output?
  - (A) The volume of blood ejected by the heart per minute
  - (B) The volume of blood sent to the lungs for oxygenation
  - (C) The volume of deoxygenated blood returning to the heart
  - (D) The volume of blood sent by the left ventricle of the heart during each contraction

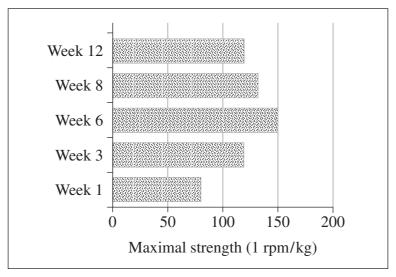
In basketball, players can be awarded a 'free throw' whereby they are allowed to attempt a shot without any defenders.

Which set of motor skills is used in a basketball free throw?

- (A) Closed and fine
- (B) Closed and gross
- (C) Open and fine
- (D) Open and gross
- 14 Which group of physical skills is best acquired using massed practice?
  - (A) Skills learnt in an open environment
  - (B) Skills that require extensive external feedback
  - (C) Skills that require a high degree of coordination
  - (D) Skills that have a distinctive beginning and end
- Which of the following would be suitable for enhancing the performance of an autonomous athlete?
  - (A) Self-paced and distributed practice
  - (B) Closed skills and delayed feedback
  - (C) Distributed practice and delayed feedback
  - (D) Concurrent feedback and tactical development
- Which of the following will occur when an endurance athlete competes in an event lasting two and a half hours?
  - (A) The metabolism of fat will decrease.
  - (B) Fat will be the only fuel source metabolised.
  - (C) The metabolism of protein will remain constant during the event.
  - (D) The metabolism of glycogen will decrease towards the end of the event.
- Which of the following recovery techniques is an effective neural strategy?
  - (A) Cooling of muscles to allow repair
  - (B) Focusing the mind to overcome pain
  - (C) Relaxing muscles that have been fatigued or damaged
  - (D) Adopting a nutrition plan to replace lost fluids and nutrients

18 The graph shows results of testing an athlete's strength for competition. These strength levels were recorded at the start of training (Weeks 1–3), right before competition (Week 6) and after a break from training (Weeks 8–12).

**Strength Testing Results** 



Which principle of training has the athlete displayed from Weeks 6 to 12?

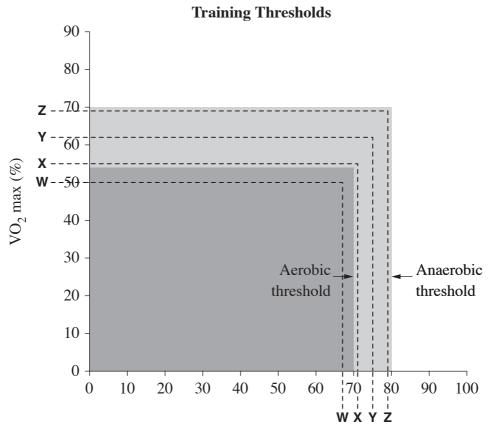
- (A) Peaking
- (B) Overload
- (C) Reversibility
- (D) Progressive overload
- 19 The table below shows an athlete's adaptations from training that occurred over 14 weeks.

Adaptation	Result
% slow-twitch muscle fibre	Increase
Aerobic capacity	Increase
Number of capillaries	Increase
Anaerobic capacity	No change

Which is the most likely method of training to have been undertaken?

- (A) Circuit training
- (B) Fartlek training
- (C) Resistance training
- (D) Continuous training

20 The graph shows training thresholds for aerobic and anaerobic conditioning.



Exercise intensity (% max heart rate)

Acknowledgement: Brian J. Sharkey and Steven E. Gaskill, Fitness and Health, 6th edition, p.101, Figure 6.1, Human Kinetics, Champaign, IL, 2007. Reproduced by permission of Human Kinetics

Which exercise intensity indicates the greatest potential for gain in aerobic conditioning?

- (A) **W**
- (B) **X**
- (C) Y
- (D) **Z**

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# Personal Development, Health and Physical Education



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 marks)	
Outline TWO groups most at risk of cardiovascular disease in Australia.	3
Question 22 (4 marks)	
What are the responsibilities of each of the three levels of government for the delivery of health services in Australia?	4

# Question 23 (5 marks)

OTHER than Aboriginal and Torres Strait Islanders.	

5

8

# Question 24 (8 marks)

Explain why individuals, communities and governments should work in partnership on health promotion initiatives. Provide examples.				

Question 23 (3 marks)	
Outline the post-performance dietary considerations of an endurance athlete.	3
Question 26 (4 marks)	
How do anxiety and arousal differ in terms of their effect on athletic performance?	4

# Question 27 (5 marks)

Compare the two anaerobic energy systems.	5

# Question 28 (8 marks)

How can the skill and performance attributes of athletes be validly and reliably appraised?

8

Section I Part B extra writing space			
If you use this space, clearly indicate which qu	estion yo	ou are answering.	
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-	<del>- 16 - </del>	© 2014 Board of Studies, Teaching and Educational Standards NSW	

# 2014 HIGHER SCHOOL CERTIFICATE EXAMINATION

# Personal Development, Health and Physical Education

### **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.

In your answers 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

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

- (a) How does the health status of young people compare with that of other age groups in the Australian population?
- (b) To what extent have social actions and public policies affected the health of young people in Australia?

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

- (a) How have physical activity and sport influenced the lives and identity of Indigenous Australians?
- (b) Assess the consequences for specific Australian sports when a business focus is adopted.

#### Please turn over

-17-

In your answers 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

## **Question 31 — Sports Medicine** (20 marks)

- (a) To what extent is taping effective in preventing sports injuries?
- (b) Justify the rehabilitation procedures used to manage specific sporting injuries. 12

# **Question 32** — **Improving Performance** (20 marks)

- (a) How do different types of training improve performance in various sports?
- (b) Justify how each of the periodisation phases is used when planning a training year.

### **Question 33** — **Equity and Health** (20 marks)

- (a) Describe the benefits of enabling, mediating and advocating processes that work towards improving the health of disadvantaged Australians.
- (b) Evaluate the impact of the media and Australian government interventions on health inequities experienced by different population groups.

### End of paper