

Personal Development, Health and Physical Education -Trial HSC 2010

Student number - _____

General Instructions

- Reading time – 5 minutes
- Working time – 3 hours
- Write using black or blue pen
- Write your Student Number at the top of each page.

Total marks – 100

Section I (Core 1 and Core 2); 75 marks

This section has two parts, Part A and Part B

Part A – 20 marks

- Attempt Questions 1–20
- Allow about 35 minutes for this part (**Answer sheet is at the back of the exam booklet**)

Part B – 55 marks

- Attempt all questions 21–22
- Allow about 1 hour and 30 minutes for this part

Section II (Option); 25 marks

- Attempt ONE questions from Questions 23–27
- Allow about 55 minutes for this section.

Section 1, Part A - Multiple Choice

(This section is valued at 20 marks. Allow approximately 35 minutes for this section)

Question 1 Australia's health status is gauged by certain indicators. These would include:

- A doctor visits per head of population, environmental awareness, education
- B fitness levels, mortality, how long we live
- C life expectancy, alcohol and drug consumption, morbidity
- D death rates in first 12 months of life, morbidity, life expectancy

Question 2 Which forms of cancer cause the highest mortality in Australia each year for males and females?

	Males	Females
A	Prostate	Breast
B	Lung	Lung
C	Lung	Breast
D	Prostate	Lung

Question 3 New cases of a particular disease, expressed as a percentage of total disease, in Australia, are reflected in the following table.

1928	1957	1983	1995	2006
1%	1%	2%	3%	7%

The disease is most likely:

- A Cardiovascular disease
- B Lung cancer
- C Diabetes
- D Influenza

Question 4 The incorrect information regarding cardiovascular disease in Australia would be:

- A CVD includes heart disease, stroke and vascular diseases.
- B CVD is the leading cause of death in Australian society.
- C CVD is a growing problem, causing more deaths than 10 years ago.
- D Males are at greater risk of CVD than females.

Question 5 The table below is a breakdown of costs associated with obesity in Australia.

Category	Cost of obesity
Lost wellbeing, disability and death	\$17.2 billion
Lost productivity	\$1.7 billion
Health system costs	\$873 million
Carer costs	\$804million
Welfare and tax costs	\$358million

What implication does this information have for the allocation of health funding?

- A It supports the need to increase funding for research into cardiovascular disease.
- B It supports the need to increase funding for treatment services targeting the ageing population
- C It supports the need to increase funding for treatment services targeting childhood obesity
- D It supports the need to increase funding for health promotion initiatives addressing behaviours linked to obesity.

Question 6 The identified priority areas for Australia's health were **not** based on:

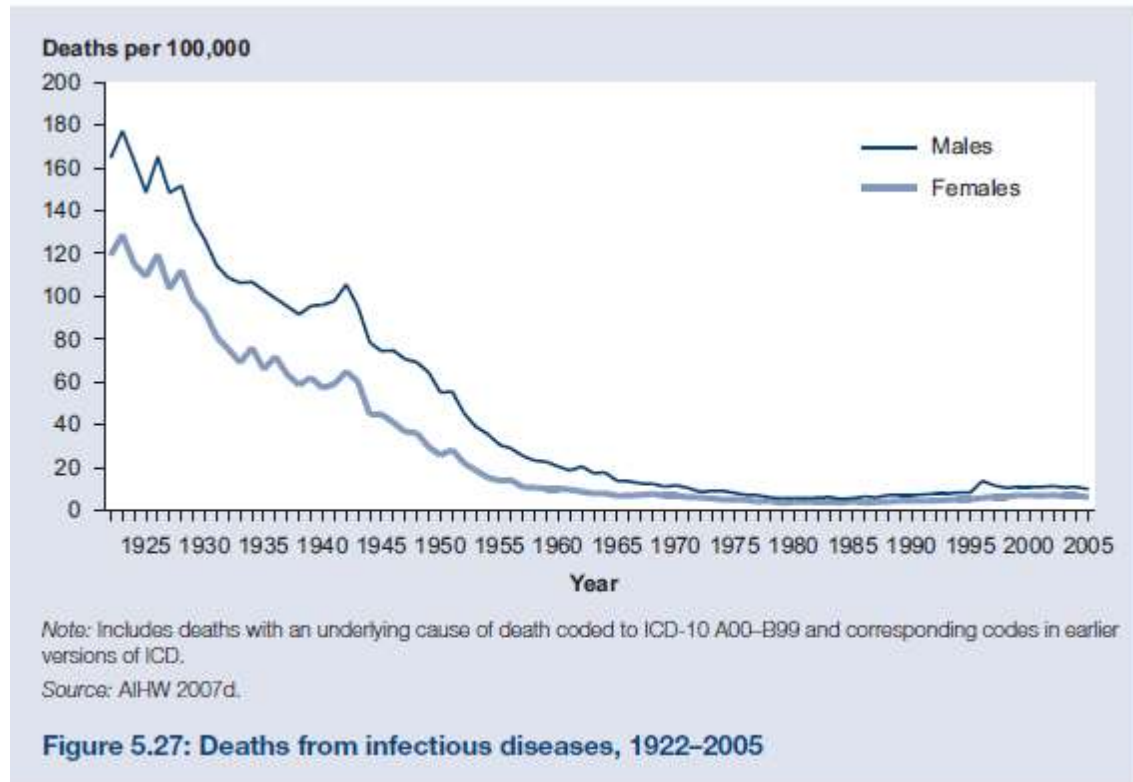
- A submissions to Government and cost effectiveness
- B prevalence of the condition and costs to the community.
- C priority population groups and potential for change
- D social justice principles and costs to individuals

- Question 7** Alternative health care in Australia includes:
- A reflexology, homeopathy, meditation
 - B hypnotherapy, physiotherapy, dentist
 - C dentist, general practitioner, radiology
 - D physiotherapy, meditation, radiology

- Question 8** What is the major reason why the health of Australians born overseas generally declines once they migrate to Australia?
- A Age
 - B Genetic factors
 - C Lifestyle choices
 - D Sociocultural factors

- Question 9** What is a limitation associated with relying on life expectancy data as the primary measure of health status?
- A Life expectancy rates are only accurate for a short period of time
 - B Life expectancy rates do not provide information about quality of life
 - C Life expectancy rates are disproportionately influenced by infant mortality rates
 - D Life expectancy rates are only applicable to people born in the year in which the data is collected.

Question 10 Refer to the table below.



The disease / condition referred to is most likely to be:

- A Infectious diseases
- B Heart related diseases
- C Accidents
- D All types of cancer

Question 11 An athlete is performing a simple task in front of a small crowd. Which of the following would be most correct?

- A performance level is most likely high
- B arousal level is most likely low
- C performance level is most likely low
- D arousal level is most likely high

- Question 12** A 5000m track runner is undefeated in competition and is always leading in races with one lap to go. In the final of the Olympics, she is suddenly in 4th place on the 'bell' lap. Which of the following is most likely?
- A She would be aroused by the fact that she had never lost this event before.
 - B She would be aroused by the crowd support.
 - C Her state anxiety would be fluctuating, with concern about never having been in this position.
 - D Her trait anxiety would be fluctuating, with concern about never having been in this position.

- Question 13** A 1500m swimmer uses a variety of energy systems during the event. She normally starts out quickly and then gets into a 'steady state'. In order of likely use, the athlete would use:
- A Aerobic glycolysis, alactacid system, anaerobic system
 - B Phosphocreatine system, anaerobic glycolysis, oxygen system
 - C Anaerobic system, ATP/PC, aerobic system
 - D Alactacid system, Phosphocreatine system, lactacid system

- Question 14** An athlete wishes to increase their power for a shot put event. The type of strength training that displays specificity for this event would include:

A	Low resistance	High repetitions	Quick action
B	Medium resistance	Low repetitions	Slow action
C	Low resistance	High repetitions	Slow action
D	Medium resistance	Low repetitions	Quick action

Question 15 An athlete holds a stretch and then asks a friend to push the joint slightly further under stress. The athlete then contracts against this extra stress. This would best be described as:

- A a ballistic stretch
- B an isometric stretch
- C a static stretch
- D a PNF stretch

Question 16 What is the fuel source for the alactacid energy system?

- A Lactic acid
- B Creatine phosphate
- C Carbohydrates
- D Carbohydrates, fats and proteins

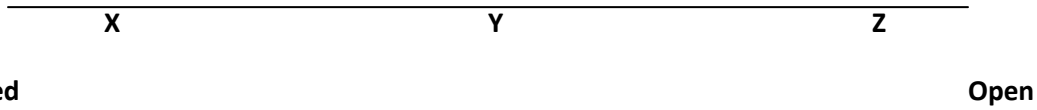
Question 17 What benefits have been identified when consuming some sports drinks during moderate to high intensity physical activities lasting longer than 1 hour?

- A Decreased heart rate and reduced absorption of water
- B Increased heart rate and increased levels of electrolytes
- C Delayed onset of fatigue and enhanced absorption of water
- D Delayed onset of fatigue and reduced levels of electrolytes

Question 18 Which of the following physiological measures is most different between a trained and an untrained person at rest?

- A cardiac output
- B lactate levels
- C ventilation rates
- D stroke volume

Question 19 The diagram represents a continuum on which skills can be classified ranging from closed to open.



Which movement skills are represented by X, Y, Z

- A X = putting in golf; Y= juggling balls; Z = surfing
- B X = putting in golf; Y= throwing darts; Z = serving in tennis
- C X = playing a badminton rally; Y= rowing; Z = high diving
- D X = playing a badminton rally; Y= throwing a javelin; Z = weightlifting

Question 20 An athlete is training for a 1000 metre bike riding event. Each week, she runs 10 kilometres in 47 minutes, and swims 2 kilometres in 30 minutes. This demonstrates a lack of application of which two principles of training?

- A Training thresholds and variety
- B Overload and specificity
- C Training thresholds and overload
- D Variety and reversibility

Section 1, Part B – Short Answer responses – (answer all questions).

This section is valued at 55 marks – allow approximately 95 minutes for this section.

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

Question 21 (Part 1)

Robert has just arrived in Australia and has found it extremely difficult to understand the funding arrangements in our health care system and the services available to him. He asks for your help:

- a) Explain how the funding of our health care system is achieved. **(3 marks)**

b) Outline how services and facilities are provided.

(3 marks)

c) What alternative health care products and services would be available?

(3 marks)

Question 21 (Part 2)

Choose one population group experiencing health inequity.

a) How was this group identified?

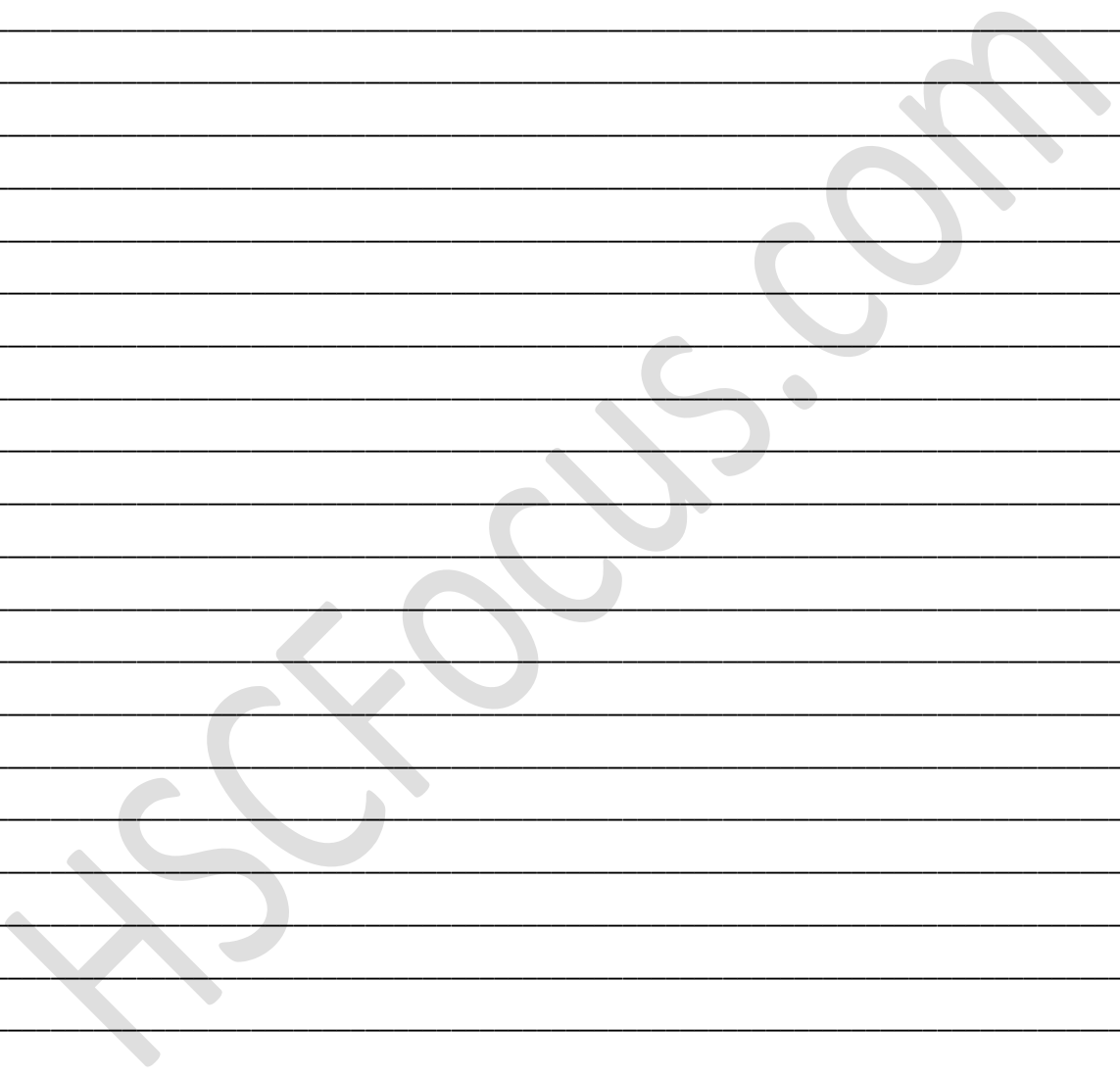
(3 marks)

b) Outline the nature and extent of the inequity.

(5 marks)

Question 21 (Part 3)

The Ottawa Charter can be seen in action in many health promotion initiatives. Choose one initiative, aimed at supporting one of Australia's health priorities, and examine how the Ottawa Charter action areas are integrally involved. **(10 marks)**



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Question 22

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

Question 22 (Part 1)

A 25 year old female work colleague, Sue, discovers that you have experience in fitness program design. She has not exercised for 'some time' and is keen to participate in the 2010 NSW Triathlon fun day in 12 weeks. This event includes a 1.5km swim, 80 km bike ride and 10 km run in one performance.

- a) How would you go about the task of helping Sue get ready for this event? What types of training and training methods would you use? **(6 marks)**

b) You decide to assess each girl on their ability to throw and catch a ball. You design a series of tests that you decide is fair. You conclude that the tests are valid, reliable and objective. Explain what each term refers to, and give details of three tests that would be suitable. **(8 marks)**

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c) The president of the netball club has stressed the importance of ‘the learning environment’ to all new coaches. What types of practice methods, feedback, and skill types would you focus on for the ‘beginners’ in your team and why? **(4 marks)**

Section 2 – Longer Response Question (Options)

This section is valued at 25 marks – allow approximately 55 minutes for this section.

Answer **ONE** question (between questions 23 – 26) in the booklet provided.

Answer **ALL** parts to the question attempted.

Question 23 Improving Performance

(a) What are the features of isotonic and isokinetic resistance training? **(4 marks)**

(b) Explain the role a sports psychologist has in preparing elite athletes for competition.

(12 marks)

(c) Analyse the influence of the phases of competition on an endurance athlete's training program. **(9 marks)**

Question 24 The Health of Young Australians

(a) What are the patterns of morbidity and mortality for young people? **(5 marks)**

(b) Explain the role of supportive networks in enabling young people to achieve better health. In your answer, refer to **ONE** area of concern you have studied. **(10 marks)**

(c) Analyse the social factors that impact on the health of young people. **(10 marks)**

Question 25 Equity and Health

(a) What are the characteristics of the social justice framework for addressing health inequities? **(5 marks)**

(b) Explain the role of funding in addressing health inequities. **(10 marks)**

(c) Analyse the factors influencing the health of rural communities. **(10 marks)**

Question 26 Sports Medicine

(a) Coaching children can be a very rewarding experience for parents and interested community members.

1 Examine three of the 'medical and other special considerations' that need to be considered when young people engage in sport, and explain how they would be managed. **(5 marks)**

2 Choose a sport.

You are the president of a local club in this sport. What sport policy, rules, ground and equipment issues would need to be considered to ensure the safe participation of children less than 10 years of age in your sport? **(5 marks)**

(b) You have been appointed as physiotherapist for an elite tennis player. This athlete has had a history of ankle injuries during their career.

1 Justify your decision to tape their ankle before each training session and each game. **(1 mark)**

2 Explain in detail how and why an ankle would be taped for prophylactic purposes. **(3 marks)**

3 During a game, the athlete injures the ankle. You respond and follow the 'normal assessment and treatment procedures'. Outline what you would do? **(3 marks)**

4 You are travelling with the player to play in the Mexican Open. The temperatures will be in the mid 40's, there will be high humidity and the city is at high altitude. What thermoregulatory issues will need to be considered? **(3 marks)**

(c) You have agreed to assist an elderly family friend (74 years of age) to increase their participation in physical activity. How would you go about this task and what special factors would need to be considered? **(5 marks)**

End of paper

Multiple Choice Answer Sheet –

(Circle most correct response)

Question				
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

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