

2000 HSC Notes from the Examination Centre Personal Development, Health and Physical Educational

Board of Studies 2001

Published by
Board of Studies NSW
GPO Box 5300
Sydney NSW 2001
Australia

Tel: (02) 9367 8111
Fax: (02) 9262 6270
Internet: <http://www.boardofstudies.nsw.edu.au>

Schools, colleges or tertiary institutions may reproduce this document, either in part or full, for bona fide study purposes within the school or college.

ISBN 0731347978

Job Number 2000738

Personal Development, Health And Physical Education

Introduction

In 2000, 9520 candidates presented for the HSC examination in 2 Unit Personal Development, Health and Physical Education. This was an increase on the 9356 candidates who presented for the examination in 1999.

All of the core questions consisted of two parts, with part (a) in each question being allocated 5 or 6 marks and part (b) in each question being allocated 9 or 10 marks. This structure allowed candidates to demonstrate their breadth and depth of knowledge in relation to a variety of syllabus concepts.

The majority of candidates (approximately 6300) elected to answer the option question on The Art and Science of Coaching. The responses reflected the fact that the vast majority of schools had elected to study this option. This reflects the established trend of previous years.

There were approximately 170 candidates who attempted to answer more than one option question in Section III. Most of these candidates answered at least 3 additional questions. This represents a significant increase from 1999.

Written Paper

Section I – Multiple-Choice (Questions 1 – 20)

The table below provides, for each question, the percentage of candidates who chose each response in the multiple-choice questions. The correct answer for each question is marked in the table with the symbol *.

The overall mean of 11.42 reflects that this set of multiple-choice questions contained some easy questions. This was particularly true of questions 3, 6, 13, 14, and 19. Questions 10 and 11 proved to be challenging questions for most candidates with only the most able candidates selecting the correct response.

Question 1 was the most problematic of this set of multiple-choice questions. Due to the variations in quantitative data related to morbidity it was decided to accept both A and D as correct responses.

Question	% Response A	% Response B	% Response C	% Response D	% Correct
1	30.54 *	60.67	5.15	3.51 *	34.05
2	54.80 *	17.67	20.00	7.32	54.82
3	7.58	6.18	80.41 *	5.75	80.41
4	9.64	15.97	62.44 *	11.80	62.44
5	13.56	30.69	3.89	51.76 *	51.76
6	4.28	0.80	78.77 *	16.08	78.77
7	14.86	60.54 *	1.29	23.18	60.54
8	31.02 *	59.29	4.73	4.83	31.02
9	20.43	2.78	58.02 *	18.67	58.02
10	24.84	33.93	18.01 *	23.03	18.01
11	43.06	18.85 *	15.54	22.39	18.85
12	19.03	8.23	5.71	66.89 *	66.89
13	13.61	83.34 *	2.22	0.71	83.34
14	85.69 *	10.03	1.74	2.46	85.69
15	5.99	71.29 *	17.46	5.08	71.29
16	11.82	36.12 *	26.21	25.72	36.12
17	11.71	13.41	13.61	61.11 *	61.11
18	9.00	34.67	9.80	46.41 *	46.41
19	74.28 *	14.29	7.34	3.92	74.28
20	12.35	2.41	68.00 *	17.18	68.00

Section II – Core Questions

Question 21 and 22

Core 3: Analysis and Management of Community Health

Both of these Core questions had a similar structure. Part (a) required candidates to ‘outline’ an issue for 5 marks and then in part (b) provide far more detail by ‘discussing’ an issue for 10 marks. The two questions provided a broad coverage of Core 3 content and linked relevant concepts. The syllabus content covered included:

- Managing the major causes of sickness and death
- Social determinants
- Major causes of sickness and death
- Cost of ill health to the Australian community
- Health promotion and health promotion initiatives
- Ottawa charter for health promotion

The questions enabled all candidates to gain some marks. However, better candidates were provided with the opportunity to demonstrate their breadth and depth of understanding of content and the relationships that exist between related syllabus concepts.

The following comments describe the significant aspects of candidates' responses to the Core 3 questions.

In Question 21 part (a), better candidates clearly understood what a policy was and how the implementation of policies designed to manage environments could reduce the impact of risk factors related to major causes of sickness and death. These candidates were able to provide relevant and specific examples.

In Question 21 part (b), higher order responses were able to use relevant syllabus terminology to identify a range of social determinants. For each of these determinants, candidates were able to clearly explain the impact on lifestyle and the incidence of two major causes of sickness and death.

Poorer responses in this part of the question were able to refer to risk factors only. These candidates were not able to then make links to social determinants.

Part (a) of Question 22 provided many responses that were simplistic outlines of the cost of ill health to the Australian community. The better candidates were able to demonstrate clear links between costs of ill health and the impacts on the community.

Part (b) of Question 22 was challenging for candidates as it required candidates to demonstrate their understanding of the relationship between the Ottawa Charter and health promotion initiatives.

Better candidates were able to list the principles of the Ottawa Charter, discuss the nature of each principle and provide several relevant examples of health promotion initiatives that are based on each principle. These candidates were also able to use relevant syllabus terminology accurately and in context. Better candidates were also able to provide a historical context for the Ottawa Charter and its influence on health promotion in Australia as a way of framing their response.

Some common problems emerged from this question. These problems included:

- poor knowledge of the Ottawa Charter and its principles.
- poor understanding of related examples to highlight each of the principles.
- listing health promotion initiatives without links to the Ottawa Charter.

Question 23 and 24

Core 4: Movement Skill and Performance

Both of these core questions had a similar structure. Part (a) required candidates to 'describe' and 'outline' an issue for 5-6 marks. In Part (b) candidates were required to provide far more detail by 'discussing' an issue for 9-10 marks. The two questions provided an adequate coverage of Core 4 content and linked relevant concepts. The syllabus content covered included:

- Hereditary factors
- Types of muscle contractions
- Basis of strength training
- Ergogenic aids and performance
- Major factors affecting skill acquisition
- Stages of skill acquisition

As with Questions 21 and 22, these questions gave most candidates access to some marks. However, better candidates were provided with the opportunity to demonstrate their breadth and depth of understanding of content and the relationships that exist between related syllabus concepts within Core 4.

The following comments describe the significant aspects of candidates' responses to the Core 4 questions.

Most candidates dealt with Question 23 part (a), quite well. Better responses described how somatypes, muscle fibre contraction and gender could influence success in particular sports.

The majority of candidates found Question 23 part (b) difficult. Most candidates were able to provide a relevant discussion of either the types of muscle contractions (isotonic, isometric and isokinetic) or strength training. It was only the more able candidates who were able to relate the two concepts.

A range of candidates provided responses which:

- included a reasonable discussion of types of muscle contraction but had confused the relevant syllabus terms eg. confusing the definitions of isotonic with isokinetic.
- dealt with isokinetic muscle contractions poorly and included discussion based on the use of elaborate strength training machines.

In Question 24 part (a), many candidates responded in terms of physical effects of a range of ergogenic aids upon athletes. Typically this included statements about the effects of anabolic steroids, diuretics and blood doping.

More able candidates produced responses that identified a range of potential physical, psychological and social effects of ergogenic aids upon the athlete. These responses often included discussion of short and long-term effects.

Question 24 part (b) proved to be a complex question for candidates. Most candidates were able to describe a variety of types of practice and correctly identify which strategies were most appropriate for learners at the cognitive and autonomous stages of skill acquisition. However, few candidates were able to integrate aspects of task complexity and task organisation into their responses. Candidates who incorporated relevant examples into their responses generally gained better marks for this part of the question.

Section III – Option Questions

The following table provides a breakdown of the number of candidates who attempted each option question

Option	No. of candidates
Q.25 Community health issues	120
Q.26 Sociology of games and sports	810
Q.27 Two social health issues – Drugs and HIV/AIDS	1600
Q.28A Biomechanics of human movement	150
Q.28B Applied anatomy	590
Q.29 The art and science of coaching	6300

The following comments highlight some of the significant features about each of the option questions.

Question 25 – Community health issues

Candidates who had studied this option were able to demonstrate a clear understanding of community health issues and had little difficulty applying this understanding to special population groups.

In part (a), responses were able to be differentiated by the candidate's ability to:

- identify and explain appropriate fieldwork techniques
- correctly apply an understanding of fieldwork techniques to a special population group
- use relevant syllabus terminology in context.

In part (b), responses were able to be differentiated by the candidate's ability to:

- identify a number of special population groups
- discuss reasons for inequalities in health status within these groups with clear links to associated risk factors
- use relevant syllabus terminology in context.

Question 26 – Sociology of games and sports

In part (a) the better responses were able to present a good explanation of the contribution of mass media or sponsorship to the rise of professional sport. These responses included an explanation of both advantages and disadvantages and were supported by relevant examples. Lower order responses provided examples of the contributions of mass media or sponsorship to sport but were unable to develop links to the rise of professional sport.

The better responses to part (b) provided excellent discussion of equality of access and opportunity through sport and the physical activity patterns of different groups. Relevant examples supported the discussion. Average responses generally addressed only one of the issues required in the question.

Question 27 – Two social health issues – Drugs and HIV/AIDS

This question provided candidates with adequate opportunity to demonstrate their understanding of several broad areas of the syllabus. The majority of candidates attempted all parts of the question with most gaining some marks.

In part (a), the better responses explored the links between support structures provided by the government and how these reduced harm from illegal drugs.

Part (b) proved to be problematic as some candidates interpreted the stimulus statement, ‘Drug problems are people problems’, to imply that the question was asking about the community implications of drug use as opposed to individual implications of drug use.

In part (c), candidates found it difficult to ‘link modes and principles of transmission’ and ‘challenging social mores and practices’. The majority of candidates concentrated their discussion on the modes and principles of transmission and how these have challenged practices with little discussion around the challenge to social mores.

Question 28(a) – The biomechanics of human movement

This question provided a broad and appropriate coverage of this option that allowed candidates to demonstrate their knowledge and process skills. The stimulus material that was provided was appropriate.

In part (a)(i), most candidates were able to apply some biomechanical principles to the hammer throw. Better responses were very specific and used several key principles in their explanation of the distance achieved.

The better responses to part (a)(ii) were able to use accurate biomechanical principles and terms to explain the difference in throwing distance between the hammer throw and shot put. Average responses provided an explanation in physiological and general terms only.

In part (b), better responses accurately applied a number of key principles of fluid mechanics to freestyle swimming efficiency in salt water. Average responses were able to recognise some principles of fluid mechanics but lacked the application of these to freestyle efficiency in salt water.

Question 28(b) – Applied anatomy, exercise physiology, principles of training, fitness testing protocols

The responses of most candidates to part (a) identified major muscles and their origin and insertion, and discussed types of contractions related to the up and down phase of the vertical jump test. Average responses tended to confuse muscle origin and insertion and listed appropriate muscle contractions without application to the vertical jump test.

Many responses to part (b) were presented in a table. Better responses were able to use appropriate syllabus terminology and combined their comparisons with a detailed application of strength training techniques. Average responses used general terminology and provided limited comparisons between the two resistance training schedules.

Part (c) provided a variety of responses related to both the structure and function of muscle anatomy. Better responses discussed both aspects generally including reference to ‘sliding filament theory’.

Question 29 – The art and science of coaching

This question was quite straightforward. Each of the parts was framed around syllabus headings relating to:

- Factors affecting motivation
- Individual needs of the performer
- Structure of the training

In part (a), a large number of responses focused on ‘what is motivation?’ and ‘how is it developed?’ rather than on the factors that affect player motivation within team sports. The more able candidates were able to produce quality discussion that displayed their understanding of the factors that affect an individual’s motivation within a team sport eg expectations, previous success or failure and environment.

Better responses to part (b)(i) outlined all individual needs of the performer using terminology from the syllabus. These responses also included reasons for consideration by a coach. Poorer responses were able to outline one or two needs, specifically age and skill level

In part (b)(ii) the majority of candidates were able to outline the structure of a training session but were unable to discuss how this structure could cater to individual needs. The better responses provided a thorough discussion of the structure of a training session and develop strong links to a variety of individual needs that could be catered for within this structure.