

**2006 HSC Notes from
the Marking Centre
Primary Industries**

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2006 NOTES FROM THE MARKING CENTRE PRIMARY INDUSTRIES

Introduction

This document has been produced for teachers and candidates of the Stage 6 Primary Industries course. It provides comments based on responses to the 2006 Higher School Certificate examination. This report highlights the relative strengths and weaknesses of the candidates' responses in each question.

This document should be read along with the relevant syllabus, the 2006 Higher School Certificate examination, the marking guidelines and schemes developed from these and other support documents that have been developed by the Board of Studies to assist in the teaching and learning of Primary Industries.

General comments

In 2006, 540 candidates presented for the Higher School Certificate examination in this subject.

In general, the candidates displayed substantial knowledge and understanding of the content of the syllabus. The structure of the paper and the questions asked provided opportunities for candidates to demonstrate knowledge and understanding of course content.

The responses in section II indicate that many candidates have a sound understanding of the content of this course.

The responses in section III indicate that candidates are experiencing difficulty interpreting the questions and particularly show a poor understanding of the key terms as set out in the 'Glossary of Key Terms'. Candidates who have a sound understanding of these terms are able to gain access to the higher marks available through their ability to thoroughly interpret and answer the question. Too many candidates make very general statements without any support, for example, 'a change in the weather will cause farmers some problems'.

The quality of answers indicated that candidates had a high level of knowledge and understanding of some areas of the course, particularly OHS, use of PPE, communication strategies and the use of chemicals. Candidates are experiencing difficulty in successfully interpreting diagrams and completing calculations.

Section I

Question	Correct Response
1	C
2	B
3	D
4	D
5	A
6	B
7	B
8	A

Question	Correct Response
9	A
10	B
11	C
12	A
13	C
14	C
15	D

Section II

All questions in this section are compulsory.

Question 16 (7 marks)

- (a) Most candidates were able to correctly identify the correct weather system (low pressure system) as shown at point X. Incorrect responses generally identified the system as a high pressure system.
- (b) The majority of candidates were able to name the weather conditions at point B but were unable to describe the intensity of the rain or wind. Better responses described two extreme weather conditions, rather than just naming them.
- (c) The majority of candidates were able to propose more than one emergency procedure and justify their proposal briefly. The better responses proposed and justified several emergency procedures. Poorer responses described general procedures that could be implemented for these types of weather conditions rather than for an emergency situation.

Question 17 (6 marks)

- (a) The majority of the candidates answered this question very well. Marks were awarded to responses that listed four items of appropriate PPE (Personal Protective Equipment). Candidates that did not receive full marks listed fewer than four items of PPE. Better responses used more precise industry terminology, for example, 'safety goggles' rather than simply 'eye protection'.
- (b) Better responses were able to identify the need for multiple strands of plain and barbed wire and correctly calculated the number of whole rolls of wire and therefore the correct costing of the fencing equipment. Poorer responses did not recognise the need for multiple strands of wire (as shown in the diagram), and therefore incorrectly calculated the cost of the materials.

Question 18 (7 marks)

- (a) Almost all candidates were able to successfully state an appropriate Australian emergency telephone number.
- (b) Better responses clearly identified two appropriate actions after having identified that there was no danger to themselves and no response from the injured person. Poorer responses listed inappropriate actions to take or described a range of actions following the 'DRABC' protocol, without realising that the first two steps had already been carried out.
- (c) Better responses followed on from part (b) giving another four appropriate actions that could be performed. Poorer responses either repeated the steps outlined in part (b), or proposed inappropriate actions. Many candidates found it difficult to propose appropriate actions beyond 'DRABC'.

Question 19 (7 marks)

This question was well answered by the majority of candidates.

- (a) Better responses clearly understood the meaning of the term ‘impacts’ in this question. Clear, precise outlines achieved higher marks with simple lists. Many poorer responses stated why weeds were successful rather than presenting their impacts as required by the question.
- (b) Better responses indicated that students understood the descriptors in the question and answered the question accordingly. Poorer responses listed some control measures rather than providing a description of a range of methods as asked for.

Question 20 (8 marks)

Generally, a well answered question with most candidates able to score some marks.

- (a) The majority of candidates were able to recognise at least two signs of a developing conflict. Poorer responses identified only one sign or used examples to describe the conflict.
- (b) Better responses identified conflict resolution strategies and put forward ideas for the analysis and appropriate actions to resolve the conflict. The majority of candidates focused on the communication processes rather than the resolution process. Poorer responses were inclined to describe steps aimed at avoiding conflict.
- (c) Most candidates achieved some marks for this part of the question. Better responses were able to give characteristics and features of three steps to prevent the conflict arising. Poorer responses were unable to provide characteristics and features for three steps or simply listed a limited number of steps that may prevent conflict. These concepts of preventing conflict and conflict resolution were not well understood.

Section III

Candidates were required to answer two questions (out of three) from this section.

Question 21 (15 marks)

This question was attempted by 377 candidates (70 %)

The majority of candidates were able to provide (state) a number of features that make weeds successful, for example, high seed dispersal rates, rapid growth rates, ability to tolerate drought, allelopathic capabilities, long seed dormancy. Better responses went further and explained in greater detail how these features assisted weeds in being successful.

Most responses described the impact that weeds have economically OR environmentally, but not both. An example is shown below.

Economic: Losses of production, death to livestock

Environmental: Loss of natural habitat and subsequent flora and fauna

Better responses described and made judgements about the impact that weeds have economically and environmentally. An example of a better response is shown below.

Economic: Weeds may contain toxins that are poisonous to livestock, leading to sickness or death and a subsequent loss of income and hence profit for the farmer.

Environmental: Weeds out compete native flora and take over land areas. Native animals that require these native plants to survive, have no feed and can die out and disappear from certain regions or become extinct.

Responses scoring higher marks explained in detail why weeds are successful, gave a range of both economic and environmental explanations regarding the impact of weeds and included a range of information needed to assess the impact of weeds such as type of weed, growth cycle, chemical resistance issues, products to use etc as was suggested in the question.

Question 22 (15 marks)

This question was attempted by 333 candidates (62 %)

The majority of candidates were able to identify hazards or controls associated with risk assessment. Few responses incorporated the level of risk associated with each hazard. (eg Chemicals can be absorbed through the skin, causing you to become ill or get chemical poisoning). Most responses identified the requirement for record keeping, for example chemical inventories, rates, dates of application, applicator, and the importance of the MSDS and labels on chemicals.

Better responses demonstrated a clear and logical order for the risk assessment stages of Identify the Hazard, Assess the Level of Risk and Develop Control Measures, and referred to chemical usage to support and underpin their answers. Better responses included a range of employer/employee responsibilities and legal requirements (eg OHS Act 2000, Pesticides Act 1999) that assisted in justifying the risk assessment process.

Poorer responses failed to provide a detailed description or reference to the risk assessment process and simply discussed the use of chemicals and/or the hazards or controls associated with these.

Question 23 (15 marks)

This question was attempted by 372 candidates (69 %)

The majority of the candidates were able to answer the question with sound knowledge about weather events and their impacts as well as provide some strategies to manage them.

The majority of the responses listed at least two weather events and some described their features, for example, drought – prolonged period of heat and lack of rain. The better responses included specific characteristics associated with weather events.

Most candidates discussed in detail the environmental impacts of the selected weather events with the better responses also mentioning at least two sources of information such as forecasts or the physical data that should be collected.

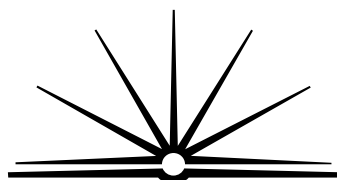
Some responses discussed information about assessing environmental impacts that would occur such as how much soil was washed away or the number of habitats being destroyed rather than what meteorological information is needed to be collected to assess the potential impact.

Better responses evaluated several management strategies designed to reduce the impact of weather events, with justifications or judgements in detail, while the poorer responses did not provide any evaluation or judgements about their management strategies. This failure to evaluate prevented the responses from being awarded the higher mark ranges.

Primary Industries

2006 HSC Examination Mapping Grid

Question	Marks	Unit of competency / Element of competency
Section I		
1	1	RTC2704A Provide basic first aid
2	1	RTC2704A Provide basic first aid
3	1	RTE2503A Observe and report on weather
4	1	RTC2701A Follow OHS procedures
5	1	RTC2701A Follow OHS procedures
6	1	RTC2209A Install, maintain and repair fencing
7	1	RTC2706A Apply chemicals under supervision
8	1	RTC2706A Apply chemicals under supervision
9	1	RTE2503A Observe and report on weather
10	1	RTC2801A Participate in workplace communications
11	1	RTC2801A Participate in workplace communications
12	1	RTC2702A Observe environmental work practices RTC2401A Treat weeds
13	1	RTC2401A Treat weeds
14	1	RTC2705A Work effectively in the industry
15	1	RTC2401A Treat weeds
Section II		
16 (a)	1	RTE2503A Observe and report on weather
16 (b)	2	RTE2503A Observe and report on weather
16 (c)	4	RTC2702A Observe environmental work practices
17 (a)	2	RTC2701A Follow OHS procedures
17 (b)	4	RTC2209A Install, maintain and repair fencing RTC2801A Participate in workplace communications
18 (a)	1	RTC2704A Provide basic first aid
18 (b)	2	RTC2704A Provide basic first aid
18 (c)	4	RTC2704A Provide basic first aid
19 (a)	3	RTC2401A Treat weeds
19 (b)	4	RTC2401A Treat weeds
20 (a)	2	RTC2705A Work effectively in the industry
20 (b)	3	RTC2705A Work effectively in the industry
20 (c)	3	RTC2705A Work effectively in the industry
Section III		
21	15	RTC2401A Treat weeds RTC2801A Participate in workplace communications RTC2702A Observe environmental work practices
22	15	RTC2701A Follow OHS practices RTC2706A Apply chemicals under supervision
23	15	RTE2503A Observe and report on weather RTC2702A Observe environmental work practices



B O A R D O F S T U D I E S
NEW SOUTH WALES

2006 HSC Primary Industries Marking Guidelines

Section II

Question 16 (a)

Competencies assessed: RTE2503A

MARKING GUIDELINES

Criteria	Marks
<ul style="list-style-type: none">• Low pressure system OR <ul style="list-style-type: none">• Cyclone	1

Question 16 (b)

Competencies assessed: RTE2503A

MARKING GUIDELINES

Criteria	Marks
<ul style="list-style-type: none">• Describes TWO weather conditions which must be heavy rainfall and strong winds	2
<ul style="list-style-type: none">• Describes ONE weather condition which must be either heavy rainfall or strong winds or identifies TWO weather conditions	1

Question 16 (c)

Competencies assessed: RTC2702A

MARKING GUIDELINES

Criteria	Marks
<ul style="list-style-type: none"> Proposes and justifies, using industry terms, at least FOUR emergency procedures 	4
<ul style="list-style-type: none"> Proposes, using industry terms, FOUR emergency procedures OR <ul style="list-style-type: none"> Proposes and justifies, using industry terms, at least TWO emergency procedures 	3
<ul style="list-style-type: none"> Proposes, using industry terms, at least TWO emergency procedures OR <ul style="list-style-type: none"> Proposes in detail, using industry terms, at least ONE emergency procedure 	2
<ul style="list-style-type: none"> Names at least TWO emergency procedures 	1

Question 17 (a)

Competencies assessed: RTC2701A

MARKING GUIDELINES

Criteria	Marks
<ul style="list-style-type: none"> Lists FOUR items of relevant PPE (personal protective equipment) 	2
<ul style="list-style-type: none"> Lists TWO or THREE items of relevant PPE 	1

Question 17 (b)

Competencies assessed: RTC2209A, RTC2801A

MARKING GUIDELINES

Criteria	Marks
<ul style="list-style-type: none"> Total price of materials correct 	4
<ul style="list-style-type: none"> Calculation of materials correct based on part rolls OR <ul style="list-style-type: none"> One calculation on full rolls incorrect 	3
<ul style="list-style-type: none"> Two correct calculations 	2
<ul style="list-style-type: none"> One correct calculation OR <ul style="list-style-type: none"> Correct process but incorrect answers 	1

Question 18 (a)*Competencies assessed: RTC2704A***MARKING GUIDELINES**

Criteria	Marks
• Gives a correct (Australian) emergency telephone number	1

Question 18 (b)*Competencies assessed: RTC2704A***MARKING GUIDELINES**

Criteria	Marks
• Lists the TWO correct actions	2
• Lists ONE of the correct actions	1

Question 18 (c)*Competencies assessed: RTC2704A***MARKING GUIDELINES**

Criteria	Marks
• Proposes FOUR appropriate actions	4
• Proposes THREE appropriate actions or gives a well-written description which includes at least TWO appropriate actions	3
• Proposes TWO appropriate actions or gives a well-written description which includes ONE appropriate action	2
• Proposes ONE appropriate action	1

Question 19 (a)*Competencies assessed: RTC2401A***MARKING GUIDELINES**

Criteria	Marks
• Sketches in general terms THREE impacts of the weed	3
• Sketches in general terms TWO impacts of the weed OR • Lists THREE or more impacts of the weed	2
• Lists TWO impacts of the weed OR • Sketches ONE impact in general terms	1

Question 19 (b)*Competencies assessed: RTC2401A***MARKING GUIDELINES**

Criteria	Marks
• Provides characteristics and features of a limited range of control methods for a weed	4
• Provides characteristics and features of a limited range of control methods for a weed in general terms	3
• Lists TWO or more control methods OR • Provides characteristics and features of ONE control method	2
• Lists ONE control method	1

Question 20 (a)*Competencies assessed: RTC2705A***MARKING GUIDELINES**

Criteria	Marks
• Identifies TWO signs of the developing conflict	2
• Identifies ONE sign of the developing conflict	1

Question 20 (b)
Competencies assessed: RTC2705A
MARKING GUIDELINES

Criteria	Marks
<ul style="list-style-type: none"> • Describes the components of a conflict resolution strategy including gathering the facts from the participants, seeking agreement on a resolution and following up to check the success of the process 	3
<ul style="list-style-type: none"> • Describes TWO components of conflict resolution OR <ul style="list-style-type: none"> • Lists THREE components of conflict resolution 	2
<ul style="list-style-type: none"> • Describes ONE component of conflict resolution OR <ul style="list-style-type: none"> • Lists TWO components of conflict resolution 	1

Question 20 (c)
Competencies assessed: RTC2705A
MARKING GUIDELINES

Criteria	Marks
<ul style="list-style-type: none"> • Provides characteristics and features of THREE steps taken to prevent the situation arising, which may include: <ul style="list-style-type: none"> – effective communication process, – effective consultation procedures, and – appropriate workplace procedures, eg rates/hours worked 	3
<ul style="list-style-type: none"> • Provides characteristics and features of TWO of the above steps OR <ul style="list-style-type: none"> • Gives a generalized description of steps named above 	2
<ul style="list-style-type: none"> • Provides characteristics and features of ONE of the above steps 	1

Section III

Question 21

Competencies assessed: RTC2401A, RTC2702A, RTC2801A

MARKING GUIDELINES

Criteria	Marks
<ul style="list-style-type: none"> • Provides in detail a significant number of features of plants which make them successful weeds • Makes a detailed judgement about the impact of weeds on economic and environmental issues • Provides a range of information that would be required to assess the environmental impact of weeds • Organises information in a well-reasoned and cohesive response • Communicates ideas using precise industry terms 	13–15
<ul style="list-style-type: none"> • Provides a significant number of features of plants which make them successful weeds • Makes a judgement about the impact of weeds on economic and environmental issues. • Provides some of the information that would be required to assess the environmental impact of weeds • Organises information in a well-structured response • Communicates ideas using relevant industry terms 	10–12
<ul style="list-style-type: none"> • Provides some features of plants which make them successful weeds • Makes a judgement about the impact of weeds • Demonstrates the use of some information that would be required to assess the environmental impact of weeds • Organises information to some extent in the response • Uses simple relevant industry terminology 	7–9
<ul style="list-style-type: none"> • States a number of features of plants which make them successful weeds. • States some information about the impact of weeds • States some information that would be required to assess the environmental impact of weeds • Uses simple industry terms 	4–6
<ul style="list-style-type: none"> • States one feature of plants which make them successful weeds • States one piece of information about weeds. • States one piece of information about the impact of weeds on the environment 	1–3

Question 22

Competencies assessed: RTC2701A, RTC2706A

MARKING GUIDELINES

Criteria	Marks
<ul style="list-style-type: none"> • Provides a detailed description of the characteristics and features of the risk management process • Supports a detailed argument for the risk management process described • Recognises and names the records required • Organises information in a well-reasoned and cohesive response • Communicates ideas using precise industry terms 	13–15
<ul style="list-style-type: none"> • Provides a description of the characteristics and features of the risk management process • Supports an argument for the risk management process described • Recognises and names the records required • Organises information in a well-structured response • Communicates ideas using relevant industry terms 	10–12
<ul style="list-style-type: none"> • Provides a description of some of the characteristics and features of the risk management process • Supports an argument for the risk management process in general terms • States or makes use of records • Organises information to some extent in the response • Communicates ideas using simple industry terminology 	7–9
<ul style="list-style-type: none"> • States or makes use of records • States some risks related to the use of chemicals • States some OHS risk management measures • Uses simple industry terms 	4–6
<ul style="list-style-type: none"> • Makes reference to a record • States one OHS risk management measure 	1–3

Question 23
Competencies assessed: RTE2503A, RTC2702A
MARKING GUIDELINES

Criteria	Marks
<ul style="list-style-type: none"> • Provides detailed characteristics and features of a number of weather events that impact on the environment • Recognises and names a range of relevant information needed to assess the environmental impacts of weather events • Makes a judgement about the effectiveness of management strategies designed to reduce the impact of weather events • Organises information in a well-reasoned and cohesive response • Communicates ideas using precise industry terms 	13–15
<ul style="list-style-type: none"> • Provides characteristics and features of a number of weather events that impact on the environment • Recognises and names a range of relevant information needed to assess the environmental impacts of weather events • Makes a judgement about the effectiveness of a number of management strategies designed to reduce the impact of weather events • Organises information in a well-structured response • Communicates ideas using relevant industry terms 	10–12
<ul style="list-style-type: none"> • Provides characteristics and features of a number of weather events that impact on the environment • Recognises and names a range of relevant information needed to assess the environmental impacts of weather events • Makes a judgement about management strategies in general terms • Organises information to some extent in the response • Communicates ideas using simple industry terminology 	7–9
<ul style="list-style-type: none"> • States a number of features of weather events that impact on the environment • States some relevant weather information • States some management strategies that can be designed to reduce the impact of weather events • Uses simple industry terms 	4–6
<ul style="list-style-type: none"> • States one feature of weather events that impacts on the environment • States one piece of weather information • States one management strategy that can help to reduce the impact of weather events 	1–3