

2010 HSC Agriculture Paper 2 Marking Guidelines

Question 1 (a)

Criteria	Marks
• Provides characteristics and features of a technique that can be used to analyse the financial situation of a farm	3
• Outlines a technique that can be used to analyse the financial situation of a farm	2
• Identifies a technique that can be used to analyse the financial situation of a farm	1

Question 1 (b)

Criteria	Marks
• Makes a judgement about a marketing option or selling system that is available for a particular agricultural product	4
• Describes in detail a marketing option or selling system that is available for a particular agricultural product	3
• Outlines a marketing option or selling system that is available for a particular agricultural product studied	2
• Identifies a marketing option or selling system that is available for a particular agricultural product	1



Question 1 (c)

Criteria	Marks
• Provides a number of points for and/or against impacts that large agricultural corporations or companies may have on biological and physical components of the industry	7–8
• Provides some points for and/or against impacts that large agricultural corporations or companies may have on biological and/or physical components of the industry	5–6
• Outlines impacts that large agricultural corporations or companies may have on biological and physical components of the industry	
OR	3–4
• Explains in detail an impact that large agricultural corporations or companies may have on biological or physical components of the industry	
• Identifies an impact that large agricultural corporations or companies may have on biological and physical components of the industry	
OR	1–2
• Outlines an impact that large agricultural corporations or companies may have on a biological or physical component of the industry	

Question 2 (a)

Criteria	Marks
• Sketches in general terms the role of objective measurement in a named animal breeding program	3
• Sketches in general terms the role of objective measurement	
OR	2
Sketches in general terms an objective measurement	
Identifies a role of objective measurement	
OR	
Identifies an objective measurement	1
OR	
Names an animal breeding program	



Question 2 (b)

Criteria	Marks
• Shows the relationship between the pest/disease and the development of resistance to a chemical or chemicals used in an animal production system	4
• Provides characteristics and features of the development of resistance to a chemical or chemicals used in an animal production system	3
 Identifies a pest/disease resistant to an identified chemical or chemicals used in animal production systems OR Outlines the development of resistance in animal production systems 	2
 Identifies a pest/disease that may have developed chemical resistance OR Identifies a chemical that has become ineffective due to resistance levels in target organisms 	1

Question 2 (c)

Criteria	Marks
• Shows the relationship between the hormones involved in animal reproductive cycles and how farmers manipulate them	7-8
 Shows the relationship between the hormones involved in reproductive cycles OR 	5-6
• Identifies the hormones involved in reproductive cycles and describes how farmers manipulate them	
• Outlines the reproductive cycles found in farm animals	
OR	
• Outlines the role of hormones found in animal reproductive cycles	3-4
OR	5-4
• Identifies a hormone and shows how farmers use this hormone to manipulate reproductive cycles	
• Identifies an animal hormone(s)	
OR	1-2
• Identifies ways farmers can manipulate reproductive cycles in farm animals	1-2



Question 3 (a)

Criteria	Marks
• Provides characteristics and features of a production cycle for a named horticultural system	3
• Outlines some characteristics and features of a production cycle for a horticultural system	2
 Identifies a characteristic or feature of a production cycle for a horticultural system OR 	1
Names a horticultural system	

Question 3 (b)

Criteria	Marks
• Provides the relationship between changing international markets and the influences on post-harvest handling in horticulture	4
• Outlines the influences that changing international markets may have on post-harvest handling in horticulture	3
• Outlines some effects that changing international markets may have on post-harvest handling in horticulture	2
• Identifies an effect that changing international markets may have on post- harvest handling in horticulture	1

Question 3 (c)

Criteria	Marks
• Shows the relationships between managing components of the horticultural system and its economic viability and environmental sustainability	7–8
• Provides a relationship between components of a horticultural system and the economic viability and environmental sustainability of the system	5–6
• Outlines the management of components of a horticultural system	
OR	3_4
• Outlines factors that affect the economic viability or environmental sustainability of a horticultural system	5 1
• Outlines a role that the manager may play in manipulating parts of a horticultural system	
OR	
• Identifies that the farm manager can affect economic viability and environmental sustainability of a horticultural system	1–2
OR	
Identifies components of a system that can be managed	



Question 4 (a)

Criteria	Marks
• Outlines how a new production system or technology has impacted on farm management	3
Outlines a new production system or technology	2
Identifies a new production system or technology	1

Question 4 (b)

Criteria	Marks
• Provides an account of why there is a need for research prior to implementation of an alternative enterprise	3–4
• Outlines a need for research prior to implementation of an alternative enterprise	2
• Identifies a need for research prior to implementation of an alternative enterprise	1

Question 4 (c)

Criteria	Marks
• Provides judgment(s) on the use of techniques that may be used to market an innovation in Australian Agriculture	7–8
• Describes a technique that may be used to market an innovation in Australian agriculture, providing a judgement for the use of this technique	5–6
Describes an additional technique	
• Provides a judgement on the use of an outlined technique that may be used to market an innovation in Australian agriculture	
OR	3–4
• Outlines techniques that may be used to market an innovation in Australian agriculture	
• Outlines a technique that may be used to market an innovation in Australian agriculture	
OR	1–2
• Identifies technique(s) that may be used to market an innovation in Australian agriculture	



Question 5 (a)

Criteria	Marks
• Sketches in general terms the anatomy AND function of a type of cell found in plant leaves	3
• Sketches in general terms the anatomy OR function of a type of cell found in plant leaves	2
Identifies a type of cell found in plant leaves	1

Question 5 (b)

Criteria	Marks
Provides the relationship between plant hormones and fruit production	3–4
Outlines a plant hormone involved in fruit production	
OR	2
• Identifies hormones involved in the production of fruit	
Identifies a hormone involved in the production of fruit	1

Question 5 (c)

Criteria				
• Shows the relationships between management of inputs in photosynthesis and the effect on plant growth, while providing an outline of the process of photosynthesis	7–8			
Outlines photosynthesis and shows how inputs can be managed				
OR	5–6			
Relates the process of photosynthesis to plant growth				
Outlines the process of photosynthesis				
OR	3–4			
• Outlines how an input can be managed to affect plant growth				
• Identifies an input(s) into photosynthesis				
OR				
States the equation for photosynthesis	1–2			
OR				
Defines plant growth				



Question 6 (a)

Criteria	Marks
• Shows the relationship between a farm practice and an increase or decrease on the level of soil acidification	3
• Sketches in general terms a farm practice that affects the level of soil acidification	2
• Identifies an example of a farm practice related to the level of soil acidification	1

Question 6 (b)

Criteria	Marks
 Shows how governments intervene in land management in agricultural systems Shows how governments intervene in water management in agricultural systems 	4
• Shows how governments intervene in either land or water management in agricultural systems	3
• Identifies how governments intervene in either land or water management in agricultural systems	5
• Identifies how governments intervene in land management in agricultural systems	2
• Identifies how governments intervene in water management in agricultural systems	2
• Identifies how governments intervene in land management in agricultural systems	
OR	1
• Identifies how governments intervene in water management in agricultural systems	



Question 6 (c)

Criteria	Marks
• Illustrates similarities and/or differences in both the cause of dryland and irrigation salinity, and the management strategies associated with each	7–8
Describes the causes of dryland and irrigation salinity	5–6
• Describes a management strategy for both dryland and irrigation salinity	3–0
Describes the causes of dryland and irrigation salinity	
• Identifies a management strategy for both dryland and irrigation salinity	
OR	3–4
Identifies the causes of dryland and irrigation salinity	
• Describes a management strategy for both dryland and irrigation salinity	
Identifies the causes of both dryland and irrigation salinity	
OR	
• Identifies a management strategy for both dryland and irrigation salinity	1–2
OR	1-2
• Identifies a cause and a management strategy for either dryland or irrigation salinity	

Agriculture Paper 2 2010 HSC Examination Mapping Grid

Question	Marks	Content	Syllabus outcomes		
Question 1 -	Question 1 — Agribusiness				
1 (a)	3	Processes in Agricultural Systems	H3.4		
1 (b)	4	Innovations, Ethics, Current issues	H5.1		
1 (c)	8	Processes in Agricultural Systems	H3.4		
Question 2 -	— Animal	Management			
2 (a)	3	Processes in Agricultural Systems	H3.4		
2 (b)	4	Innovations, Ethics, Current issues	H5.1		
2 (c)	8	Processes in Agricultural Systems	H3.4		
Question 3 -	Question 3 — Horticulture				
3 (a)	3	Processes in Agricultural Systems	H3.4		
3 (b)	4	Innovations, Ethics, Current issues	H5.1		
3 (c)	8	Processes in Agricultural Systems	H3.4		
Question 4 — Innovation and Diversification					
4 (a)	3	Processes in Agricultural Systems	H3.4		
4 (b)	4	Innovations, Ethics, Current issues	H5.1		
4 (c)	8	Processes in Agricultural Systems	H3.4		
Question 5 -	— Plant N	lanagement			
5 (a)	3	Processes in Agricultural Systems	H3.4		
5 (b)	4	Innovations, Ethics, Current issues	H5.1		
5 (c)	8	Processes in Agricultural Systems	H3.4		
Question 6 -	Question 6 — Sustainable Land and Resource Management				
6 (a)	3	Processes in Agricultural Systems	H3.4		
6 (b)	4	Innovations, Ethics, Current issues	H5.1		
6 (c)	8	Processes in Agricultural Systems	H3.4		