

## 2015 HSC Primary Industries Marking Guidelines

### Section I

#### Multiple-choice Answer Key

Question	Answer
1	B
2	D
3	C
4	D
5	B
6	B
7	A
8	B
9	D
10	D
11	A
12	C
13	A
14	A
15	D

## Section II

### Question 16

Criteria	Marks
<ul style="list-style-type: none"> <li>Demonstrates thorough understanding of the linkages between the identified environmental risks, impacts and solutions</li> </ul>	8–9
<ul style="list-style-type: none"> <li>Demonstrates an ability to relate environmental issues to risks, potential impacts and possible solutions</li> </ul>	4–7
<ul style="list-style-type: none"> <li>Lists some potential environmental issues or risks OR outlines an impact and/or possible solution</li> </ul>	2–3
<ul style="list-style-type: none"> <li>Provides a piece of relevant environmental information</li> </ul>	1

#### *Answers could include:*

<i>Associated environmental risk</i>	<i>Potential environmental impacts on the primary industries workplace</i>	<i>Proposed solutions to reduce risk</i>
Increased discharge/run-off into waterways	Soil erosion Increased pollution of waterways Imbalance in aquatic environment	Use contour banks to control increased run-off Control run-off from site by use of barriers Plant vegetation between site and waterway to reduce run-off
Increase in salinity	Loss of arable land Loss of production Imbalance in ecosystems Death of plants at salt scald sites	Plant trees or deep rooted perennials Fence site – plant site with salt tolerant vegetation
Loss of habitat	Loss of biodiversity Increase in pests from reduction in predators Invasive species naturalise on cleared land Imbalance in ecosystems	Plant trees and native vegetation to attract predators and provide new habitats Provide artificial habitats to encourage wildlife to restore balance

**Question 17 (a)**

Criteria	Marks
• Outlines in detail the impact of named weather event on crops, livestock or property	3
• Outlines the impact of named weather event on either crops, livestock or property	2
• Provides a list or basic information about weather	1

**Sample answer:**

Named weather event: Extreme cold

The impact of extreme cold on crops, livestock and property can be major. Crops could be destroyed by severe frost. Stock are not as efficient at converting food to energy as they will use some of their nutrient intake to maintain body temperature. Newborn animals may die as a result of the cold. Water pipes and irrigation pumps may be damaged due to the extreme cold.

**Answers could include:**

- Strong winds
- Flooding
- High temperatures
- High humidity
- Drought

**Question 17 (b)**

Criteria	Marks
• Provides a detailed description of preventative actions to minimise loss, damage or harm linked to the named weather event	4
• Provides a sound description of preventative actions to minimise loss, damage or harm linked to the named weather event	3
• Provides a list of preventative actions to minimise loss, damage or harm linked to named weather event	2
• Provides a piece of information related to a weather event	1

**Sample answer:**

There are a number of preventative actions that can be taken. They can be both immediate and long term.

Immediate actions that can be taken are moving stock to paddocks with windbreaks or shelter. High ground may be better than low but away from the cold winds is required. You may need to check your water source to ensure no damage has occurred from the cold.

Longer term you should ensure that your breeding stock do not give birth during known times of extreme cold. This will reduce the potential for loss of young. There may be a need to plant trees to provide shelter in the future or build sheds to house livestock during very cold periods. If planting crops ensure that they are planted away from low areas or draughts. Also plant your crops in rows that allow for adequate wind drainage to take away cold air.

**Question 18 (a)**

Criteria	Marks
• Proposes a set of approaches to conflict management	3
• Proposes limited approaches to conflict management	2
• Provides information related to workplace conflict	1

**Sample answer:**

Provide different approaches such as problem solving, mediation and negotiation. Workplace policy regarding the management of conflict should be developed and provided to all staff. Appropriate workplace induction programs could include team building and cultural awareness training.

**Question 18 (b)**

Criteria	Marks
• Outlines a range of strategies that could be implemented to promote the acceptance of cultural diversity in the workplace	3
• Outlines one strategy that could be implemented to promote the acceptance of cultural diversity in the workplace OR lists strategies that could be implemented to promote the acceptance of cultural diversity in the workplace	2
• Provides information related to cultural diversity in the workplace	1

**Sample answer:**

Some strategies to promote cultural diversity in the workplace include the encouragement of workers to share food from different cultures. Another strategy is to have posters around the workplace displaying greetings in a range of languages.

**Answers could include:**

- Encourage the sharing of stories from represented workplace cultures
- Celebrating cultural festivals as represented by workplace cultures

**Question 19**

Criteria	Marks
• Thoroughly justifies the use of a range of valid procedures	6
• Provides some justification for the use of a range of valid procedures	4–5
• Provides description of some procedures	2–3
• Provides information related to procedures	1

**Sample answer:**

<i>Procedure to minimise risk</i>	<i>Justification</i>
Check that the floor of the shed is impervious to chemicals and that a bund surrounds the shed	This will ensure that any spill is contained within the shed and does not spread to surrounding land, crops or waterways. A bund is also necessary to contain any spill.
MSDS located in a convenient place	They contain information on how to manage a specific spill and information on the toxicity of the chemical.
Appropriate PPE should be available for all workers to wear	Reduces the risk if it is worn correctly, properly maintained and used at all times.

**Other procedures could include:**

Maintaining a chemical inventory

Evacuation plan clearly displayed

Contact details of emergency services visible in or near the storage shed

**Question 20 (a)**

Criteria	Marks
• Provides TWO sources of information	1

**Sample answer:**

Two sources of information are the internet and newspapers.

**Answers could include:**

- Personal contact with employer
- Social media
- Employment agency

**Question 20 (b)**

Criteria	Marks
• Describes in detail personal attribute/s relevant to a primary industries worker	2
• Lists attribute/s	1

**Sample answer:**

One of the personal attributes that should be required of a primary industries worker is trustworthiness as they may be left to complete a job unsupervised and need to be trusted not to do the wrong thing. Another attribute is a strong work ethic, to demonstrate commitment to the employer and the work tasks.

**Answers could include:**

- An ability to work as part of a team.
- An ability to turn up on time suitably attired.

**Question 20 (c)**

<b>Criteria</b>	<b>Marks</b>
• Compares in detail the effectiveness of different types of communication in the primary industries workplace	4
• Provides a sound comparison of different types of communication in the primary industries workplace	3
• Demonstrates a limited understanding of types of communication in the primary industries workplace	2
• Provides a piece of relevant information	1

***Sample answer:***

It is important to determine the most effective means of communicating in a workplace.

Written forms may be more effective if there is a large amount of information to be given and where records need to be kept or used for work instructions. Email may be more effective in a large workplace as more details can be given and there is a better chance of more people receiving the message. Details can also be saved by the recipient.

Sometimes a verbal communication may be more effective than non-verbal communication. A personal verbal message may be the most effective means of communicating a message as the message is given directly to the intended recipient.

Non-verbal communication may be very effective, such as safety signs, when graphic messages need to be communicated or when a common language is an issue.

## Section III

### Question 21

Criteria	Marks
<ul style="list-style-type: none"> <li>Explains, in detail, how WHS is essential to all daily activities of a PI workplace, provides a number of well reasoned/relevant examples for employers and employees to support explanation</li> </ul>	13–15
<ul style="list-style-type: none"> <li>Explains how WHS is essential to all daily activities of a PI workplace, provides examples relevant to employers and employees to support explanation</li> </ul>	10–12
<ul style="list-style-type: none"> <li>Limited explanation of how WHS is essential to PI workplace, gives examples relevant to employers and employees to support explanation</li> </ul>	7–9
<ul style="list-style-type: none"> <li>Outlines WHS as it relates to a PI workplace, includes examples relevant to employers/employees</li> </ul>	4–6
<ul style="list-style-type: none"> <li>Provides some relevant points/examples on WHS as they relate to a PI workplace</li> </ul>	2–3
<ul style="list-style-type: none"> <li>Provides at least one relevant point/example</li> </ul>	1

#### *Answers could include:*

- PI workplaces are hazardous
- Need to consider: risk of injury, cost of injury (human, social, organisational and economic), roles and responsibilities of employers/employees, monitoring and reporting in relation to workplace safety, communication of and between employees and employer
- Compliance with legislation – WHS, EEO, Anti-discrimination
- Responsibilities – employer and employee – committee formation, safe work practices, workplace free from bullying and harassment (direct/indirect), development of Safe Operating Procedures (safe work statements)
- Rights – employer and employee – ensure a safe place of work for all who are on the worksite
- Consequences of non-compliance with WHS – potential injury, fines
- Examples to support how WHS underpins PI workplace such as SOPS, workplace signs, MSDS, chemical storage units, manual handling, selection/storage and use of PPE, clean and safe disposal of waste, risk control.



## Section IV

### Question 22 (a)

Criteria	Marks
<ul style="list-style-type: none"> <li>Names ONE livestock disease, parasite or disorder and describes in detail TWO or more appropriate methods of prevention or treatment</li> </ul>	3
<ul style="list-style-type: none"> <li>Names ONE livestock disease, parasite or disorder and describes in detail ONE appropriate method of prevention or treatment</li> </ul>	2
<ul style="list-style-type: none"> <li>Provides a piece of relevant information</li> </ul>	1

#### *Sample answer:*

Name of livestock disease, parasite or disorder: Fly strike.

<i>Treatment/Method of prevention</i>	<i>Description</i>
Crutching	Removes wool from fly breeding areas – rear end of sheep – on a regular basis
Chemical	Quick short-term solution/treatment Chemical applied to affected area

Other possible diseases, parasites and disorders could include:

- Tapeworm
- Bloat
- Tetanus
- Newcastle disease.

**Question 22 (b)**

Criteria	Marks
<ul style="list-style-type: none"> <li>Describes in detail advantages of one method of prevention or treatment for the named livestock disease, parasite or disorder</li> </ul>	3
<ul style="list-style-type: none"> <li>Describes an advantage of one method of prevention or treatment for the named livestock disease, parasite or disorder OR lists advantages of one method of prevention or treatment for the named livestock disease, parasite or disorder</li> </ul>	2
<ul style="list-style-type: none"> <li>Provides a piece of relevant information</li> </ul>	1

**Sample answer:**

Name of livestock disease, parasite or disorder: Fly strike.

<i>Treatment/Method of prevention</i>	<i>Advantage</i>
Crutching	Removes wool from fly breeding areas Cost-effective treatment Limited impact on animals Quick impact on animal and removes source of problem
Selective breeding	Longer term prevention strategy Reduces need for ongoing cost of crutching and use of chemicals Reduces long-term stress on animals
Chemical	Quick short-term solution/treatment Works quickly

**Question 22 (c)**

<b>Criteria</b>	<b>Marks</b>
• Provides a comprehensive justification of safe work practices related to treating livestock diseases, parasites or disorders	7–9
• Demonstrates detailed knowledge of safe work practices as they relate to treating livestock diseases, parasites or disorders	4–6
• Demonstrates basic knowledge of safe work practices as they relate to treating livestock diseases, parasites or disorders	2–3
• Provides limited information relevant to question	1

***Answers could include:***

Safe work practices include:

- Safe handling of animals which minimises risk of harm to self, others and livestock
- Correct techniques used to move, draft, control and restrain animals
- Selection of appropriate PPE and its correct use
- Correct manual handling techniques
- Comply with WHS workplace policies and procedures
- Correct handling of chemicals
- Safe operating procedures in relation to self and livestock
- Risk management, assessment and control.

Each statement needs to be justified and related to safe work practices when treating livestock diseases, parasites and disorders.

**Question 23 (a)**

<b>Criteria</b>	<b>Marks</b>
• Names one plant pest, disease or disorder and describes in detail two or more appropriate methods of prevention or treatment	3
• Names one plant pest, disease or disorder and describes one appropriate method of prevention or treatment	2
• Provides a piece of relevant information	1

***Sample answer:***

Name of plant disease, pest or disorder: Caterpillars

<i>Treatment/Method of prevention</i>	<i>Description</i>
Chemical	Quick short-term solution/treatment Chemical mixed and applied or premixed chemical applied
Biological	Use of predator is specific to pest

**Question 23 (b)**

<b>Criteria</b>	<b>Marks</b>
• Describes in detail advantages of one method of prevention or treatment for the named plant pest, disease or disorder	3
• Describes an advantage of one method of prevention or treatment for the named plant pest, disease or disorder OR lists advantages of one method of prevention or treatment for the named plant pest, disease or disorder	2
• Provides a piece of relevant information	1

**Sample answer:**

Name of plant disease, pest or disorder: Caterpillars

<i>Treatment/Method of prevention</i>	<i>Advantages</i>
Chemical	Quick short-term solution/treatment Works quickly
Biological	Use of predator is specific to pest
Increase biodiversity	Long-term prevention method Allows for natural predators to have habitat and increase their population

**Question 23 (c)**

<b>Criteria</b>	<b>Marks</b>
• Provides a comprehensive justification of safe work practices related to treating plant diseases, pests or disorders	7–9
• Demonstrates detailed knowledge of safe work practices as they relate to treating plant diseases, pests or disorders	4–6
• Demonstrates basic knowledge of safe work practices as they relate to treating plant diseases, pests or disorders	2–3
• Provides limited information relevant to question	1

***Answers could include:***

Safe work practices include:

- Safe handling which minimises risk of harm to self, others
- Correct techniques used in use of equipment
- Selection of appropriate PPE and its correct use
- Correct manual handling techniques
- Comply with WHS workplace policies and procedures
- Correct handling of chemicals
- Safe operating procedures in relation to self
- Risk management, assessment and control.

Each statement needs to be justified and related to safe work practices when treating plant pests, diseases and disorders.

# 2015 HSC Primary Industries Mapping Grid

## Section I

Question	Marks	HSC content – focus area	Employability skills (Please put an X where appropriate)							
			Communication	Teamwork	Problem-solving	Initiative and enterprise	Planning and organising	Self-management	Learning	Technology
1	1	Safety — Safe work practices and procedures – page 37	X	X	X	X	X	X	X	X
2	1	Weather — Weather and climate – definition – page 47						X		X
3	1	Weather — Managing – impact/effect on – planning – page 48			X	X	X	X		
4	1	Chemicals — WHS – first aid – page 32 Working with chemicals — MSDS – page 32	X	X	X	X	X			
5	1	Working in the industry — page 52	X	X	X	X	X			
6	1	Safety — Risk management – hazard identification – page 38			X	X	X		X	
7	1	Weather — Monitoring conditions – air pressure – page 48						X	X	X
8	1	Chemicals — Equipment – correct chemical output – page 31: understanding calibration – page 32			X	X	X	X	X	
9	1	Sustainability — Environmentally sustainable work practices – use of resources – page 43			X	X	X	X	X	
10	1	Working in the industry — Quality assurance – page 53	X	X	X	X	X	X	X	X
11	1	Working in the industry — Working in the industry – differences – page 51						X	X	
12	1	Chemicals — Measuring – calculating – page 32			X		X	X	X	X
13	1	Working in the industry — Employment – types – page 52						X		
14	1	Sustainability — Environmental compliance – page 42; Environmentally sustainable work practices – page 43	X	X	X	X	X	X	X	X
15	1	Safety — Risk management – risk control – substitution – page 38	X	X	X	X	X	X	X	

## Section II

Question	Marks	HSC content – focus area	Employability skills (Please put an X where appropriate)							
			Communication	Teamwork	Problem-solving	Initiative and enterprise	Planning and organising	Self-management	Learning	Technology
16	9	Sustainability — current environmental issues – page 41 Sustainability — inappropriate human intervention – page 42 Strategies to work in an environmentally sustainable manner – page 43	X	X	X	X	X	X	X	
17 (a)	3	Weather — managing conditions – awareness of potential implications of weather and climate changes – page 48			X	X	X			X
17 (b)	4	Weather — managing conditions – preventative action to minimise loss, damage or harm – page 48			X	X	X			X
18 (a)	3	Working in the industry — misunderstandings and conflict – conflict in the workplace, conflict management – page 53/54	X	X			X	X	X	
18 (b)	3	Working in the industry — cultural diversity – workplace diversity – benefits of workplace diversity – page 53/54/55	X	X			X	X	X	
19	6	Chemicals — chemical compliance – page 32 — WHS – risk management – page 31 — working with chemicals – storage of chemicals – page 33 — chemical compliance – page 32 — WHS – risk management – page 31	X	X	X	X				X
20 (a)	1	Working in the industry — sources of information – page 51	X		X	X	X	X	X	
20 (b)	2	Working in the industry — primary industries worker – personal attributes – page 52	X		X	X	X	X	X	
20 (c)	4	Working in the industry — working with others – communication in the workplace, workplace examples of communication – page 53/54	X		X	X	X	X	X	



**Section III**

Question	Marks	HSC content – focus area	Employability skills (Please put an X where appropriate)							
			Communication	Teamwork	Problem-solving	Initiative and enterprise	Planning and organising	Self-management	Learning	Technology
21	15	Working in the industry – employment – working knowledge and understanding of employee and employer rights and responsibilities – page 52 Anti-discrimination – workplace/enterprise policy and procedures relating to anti-discrimination – page 54 Safety — WHS compliance – acknowledge that WHS is everyone’s responsibility in the workplace – page 37	X		X	X	X	X	X	

**Section IV**

Question	Marks	HSC content – focus area	Employability skills (Please put an X where appropriate)							
			Communication	Teamwork	Problem-solving	Initiative and enterprise	Planning and organising	Self-management	Learning	Technology
22 (a)	3	Livestock health and welfare — health — ill health in livestock – page 60							X	
22 (b)	3	Livestock health and welfare — treatment — common treatment procedures – page 60 Livestock health and welfare — working with livestock — importance of safe work practices when working with livestock – page 58							X	
22 (c)	9	Livestock health and welfare — requirements when working with livestock – page 58 Livestock health and welfare — application of animal welfare guidelines – page 58	X	X	X				X	

Question	Marks	HSC content – focus area	Employability skills (Please put an X where appropriate)							
			Communication	Teamwork	Problem-solving	Initiative and enterprise	Planning and organising	Self-management	Learning	Technology
23 (a)	3	Plant pests, diseases and disorders — recognition of plant pests, disease and disorders – page 64 — management – methods of treatment and control – page 64 — management – importance of safe work practices – page 64							X	
23 (b)	3	Plant pests, diseases and disorders — requirements applying to the treatment and control of pests, disease and disorders – page 65							X	
23 (c)	9	Plant pests, diseases and disorders — requirements applying to the treatment and control of pests, disease and disorders – page 65	X	X	X				X	

X