

Mark Scheme (Results)

Summer 2010

Principal Learning

Environmental and Land-based Studies

ES306 Plants and Animals - Safe Working Practices and Relevant Legislation

Edexcel is one of the leading examining and awarding bodies in the UK and throughout the world. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers.

Through a network of UK and overseas offices, Edexcel's centres receive the support they need to help them deliver their education and training programmes to learners.

For further information, please call our Diploma Line on 0844 576 0028, or visit our website at www.edexcel.com.

If you have any subject specific questions about the content of this Mark Scheme that require the help of a subject specialist, you may find our **Ask The Expert** email service helpful.

Ask The Expert can be accessed online at the following link:

<http://www.edexcel.com/Aboutus/contact-us/>

Summer 2010

Publications Code DP023864

All the material in this publication is copyright

© Edexcel Ltd 2010

General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Question Number	Answer	Mark
1(a)	Award 1 mark for a correct piece of PPE linked to a realistic operation and one mark for the reason as to why it is used. For example: Face mask/goggles would be needed when spraying pesticides onto forage crops (1) to prevent chemicals damaging the operatives eyes (1) Respirators when storing crops in barns (1) to prevent dust from being inhaled into the lungs (1)	(4)

Question Number	Answer	Mark
1(b)	Up to 3 marks for each explanation. For example: Winter feed concentrates cattle movement in specific areas (1). Cattle cause 'poaching' by trampling/cutting up areas of grass(1) leaving them exposed to erosion from water run-off as roots no longer bind the soil (1) The production of silage produces silage effluent (1). This effluent has a great biochemical oxygen demand (1) and if it enters water courses can therefore produce algal blooms/starve fish etc of oxygen (1) N.B. Accept any operation that could realistically be part of a dairy farm. It does not have to be strictly based on the bullet points in the stimulus.	(6)

Question Number	Answer	Mark
1(c)	Award 1 mark for each mark describing the role/purpose of the HSE. For example: They make unexpected visits to organisations (1) to ensure that they are adhering to legislation protecting workforce/visitors (1). They can impose sanctions if legislation is not being followed (1). They may carry out assessment of risks for new businesses (1) and may advise upon implementation of new legislation/training (1)	(4)

Question Number		Indicative content
1(d)		<p><i>The candidates are not expected to deal with every possible point and may be rewarded well for a comparatively small number of points if these are developed and supported by relevant evidence. This list is not exhaustive</i></p> <p>Responsibilities to themselves visitors will mean reduction in accidents/incidents. Responses should develop this in terms of benefits through visitor safety (reputation, keeping to the law, no fines etc) or in terms of employee morale/motivation. Updating on machinery/safety procedures will enhance safety record and enable most efficient use of equipment, meaning greater efficiency of production, less wear and tear, wastage. Record keeping will enable faults/problems to be detected as patterns of incidents will be seen, responsibility can be established and thus less likelihood of repetition N.B. If other health and safety training is considered then allow as the question invites this.</p>
Level	Mark	Descriptor
	0	No rewardable material
1	1-3	Simple statements mainly linking the giving training scenarios to immediate improvements in safety. The wider operations only implicated.
2	4-6	Explanation is sound with some development to consider the overall effects on the business. There should be some attempt to link to a specific organisation, although explanation may still be a little generic at times.
3	7-8	Detailed explanation in which specific information for one or more organisations will be linked to benefits for the organisation considered.

Question Number	Answer	Mark
2(a)	<p>Award up to 2 marks for each response, 1 mark for description of measure with the second for explanation as to why it is there or for further detail.</p> <p>Lays down standards governing the design of transport for animals (1) to ensure that, for example, they have enough room and are not unduly stressed in the process (1)</p> <p>Lays down guidelines for food/watering during transit (1) for example that they should have little eat before transport but that their usual diet is available during the journey (1)</p>	(4)

Question Number		Answer
2(b)		<p><i>The candidates are not expected to deal with every possible point and may be rewarded well for a comparatively small number of points if these are developed and supported by relevant evidence. This list is not exhaustive</i></p> <p>Consideration of regulations covering animal movement and passports that ensure that the whereabouts/movement of specific animals is known. In conjunction with use of animal passports. Electronic tagging/recording of information so each animal is identifiable.</p> <p>Databases/records at abattoir so that destiny of animal products (Specified Risk Material SRM) is also traceable.</p> <p>Credit knowledge of testing regimes where relevant.</p>
Level	Mark	Descriptor
	0	No rewardable material
1	1-2	Some elements of the system for recording animal location are put forward but with little attempt to link these to DEFRA role
2	3-4	Some explanation of how at least one element of the tracking systems can be used to identify the location of the initial animals, their movement or end products.
3	5-6	Sound explanation that considers at least two parts of the tracking process

Question Number		Answer
2(c)		<p><i>The candidates are not expected to deal with every possible point and may be rewarded well for a comparatively small number of points if these are developed and supported by relevant evidence. This list is not exhaustive</i></p> <p>Impacts of the outbreak should consider the effects on consumption patterns, public perception of 'safety' for food products, government/industry expenditure on guidance. Secondary effects on product using/supplying industries should be noted.</p> <p>Impacts of quarantine restrictions should be considered, with economic effects on farms and other rural activity. 'no movement' zones could be explored. Social impacts of wider rural pursuits such as rambling may be considered.</p>
Level	Mark	Descriptor
	0	No rewardable material
1	1-3	Some of the effects are described in simple terms. Precise links to industry outcomes are vague.
2	4-6	Discussion manages to link some of the industry actions with effects on the industry itself or local/national issues. Links may at times be implicit or limited in scope.
3	7-8	Full discussion of a range of issues arising from the outbreak of a notifiable disease. There should be some consideration of both economic and social issues, although these may not be separated as such by the candidate.

Question Number		Answer
2(d)		<p><i>The candidates are not expected to deal with every possible point and may be rewarded well for a comparatively small number of points if these are developed and supported by relevant evidence. This list is not exhaustive</i></p> <p>Food Safety regulations from the Act will be linked to the farm shop storage/preparation/selling different types of products (cooked/uncooked, meat/dairy) and the requirements for staff involved with this.</p> <p>HACCP procedures should be used to show how the on-site plant would have controls in place, identifying critical points, determining their importance, implementing measures and reviewing their effectiveness.</p>
Level	Mark	Descriptor
	0	No rewardable material
1	1-4	Simple explanation of some procedures/regulations that should be followed as part of the process of production/selling. May only concentrate on one of these with reference to regulations or HACCP procedures.
2	5-7	Sound explanation, linking the existence of regulations or HACCP procedures specifically to the types of operation described/implied
3	8-10	Detailed explanation that shows how the public is protected at more than one stage of the operations. Both FSA regulations and HACCP are dealt with

Further copies of this publication are available from
Edexcel Publications, Adamsway, Mansfield, Notts, NG18 4FN

Telephone 01623 467467
Fax 01623 450481

Email publications@linneydirect.com

Order Code DP023864 Summer 2010

For more information on Edexcel qualifications, please visit www.edexcel.com/quals

Edexcel Limited. Registered in England and Wales no.4496750
Registered Office: One90 High Holborn, London, WC1V 7BH