

Environmental and Land-Based Science

General Certificate of Secondary Education

Unit **B495/01**: Livestock Husbandry

Mark Scheme for January 2012

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

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Annotations

Used in the detailed Mark Scheme:

Annotation	Meaning
/	alternative and acceptable answers for the same marking point
(1)	separates marking points
not/reject	answers which are not worthy of credit
ignore	statements which are irrelevant - applies to neutral answers
allow/accept	answers that can be accepted
(words)	words which are not essential to gain credit
words	underlined words must be present in answer to score a mark
ecf	error carried forward
AW/owtte	alternative wording
ORA	or reverse argument

Available in scoris to annotate scripts

	indicate uncertainty or ambiguity
	benefit of doubt
	contradiction
	incorrect response
	error carried forward
	draw attention to particular part of candidate's response
	draw attention to particular part of candidate's response
	draw attention to particular part of candidate's response
	no benefit of doubt
	reject

	correct response
	draw attention to particular part of candidate's response
	information omitted

Subject-specific Marking Instructions

- If a candidate alters his/her response, examiners should accept the alteration.
- Crossed out answers should be considered only if no other response has been made. When marking crossed out responses, accept correct answers which are clear and unambiguous.

E.g.

For a one mark question, where ticks in boxes 3 and 4 are required for the mark:

Put ticks (✓) in the two correct boxes.

✗
✗

This would be worth
1 mark.

Put ticks (✓) in the two correct boxes.

✓
✗

This would be worth
0 marks.

Put ticks (✓) in the two correct boxes.

✗
✗
✓
✓

This would be worth
1 mark.

c. The list principle:
 If a list of responses greater than the number requested is given, work through the list from the beginning. Award one mark for each correct response, ignore any neutral response, and deduct one mark for any incorrect response, e.g. one which has an error of science. If the number of incorrect responses is equal to or greater than the number of correct responses, no marks are awarded. A neutral response is correct but irrelevant to the question.

d. Marking method for tick boxes:
 Always check the additional guidance.
 If there is a set of boxes, some of which should be ticked and others left empty, then judge the entire set of boxes.
 If there is at least one tick, ignore crosses. If there are no ticks, accept clear, unambiguous indications, e.g. shading or crosses.
 Credit should be given for each box correctly ticked. If more boxes are ticked than there are correct answers, then deduct one mark for each additional tick. Candidates cannot score less than zero marks.

E.g. If a question requires candidates to identify a city in England, then in the boxes

Edinburgh	
Manchester	
Paris	
Southampton	

the second and fourth boxes should have ticks (or other clear indication of choice) and the first and third should be blank (or have indication of choice crossed out).

Edinburgh			✓			✓	✓	✓	✓	
Manchester	✓	x	✓	✓	✓				✓	
Paris				✓	✓		✓	✓	✓	
Southampton	✓	x		✓		✓	✓		✓	
Score:	2	2	1	1	1	1	0	0	0	NR

MARK SCHEME:

Question		CBT Question Numbers	Answer	Mark	Guidance
1		1	C	1	
2		2	milk yield; disease resistance; hardiness; conformation (or any example): large udder	3	accept any feature particular to the Holstein or any dairy animal
3		3	uterus	1	
4		4	B	1	
5		5	C - genotype	1	
6		6	C – meadow hay	1	
7		7	round worm - internal parasite ring worm – fungus lice - external parasite mastitis - bacteria	2	3 or 4 correct - 2 2 correct - 1 1 correct - 0
8		8	D – tuberculosis (TB)	1	
9		9	A - can only be passed on if both parents have that gene	1	
10		10	age; bloodline; boars used on her; numbers of litters; performance of offspring; health records; any 3 points with explanation	3	weight only if linked to breeding
11		11	head down; ears down; looks miserable/stance; ribs visible; stomach drawn in; eyes small/sunken; thin; dull coat; behavioural changes	3	
12		12	standing for the male; swollen vulva; discharge from vulva; reddened vulva; changes in behaviour (described)	3	any 3 allow bulling mounting or standing for.
13	(a)	13	freezing (in liquid nitrogen)	1	
	(b)	13	more females impregnated per ejaculation OWTTE	1	

Question		CBT Question Numbers	Answer	Mark	Guidance
14		14	sides of polythene – pigs could easily damage it; gate easily lifted off by pigs; equipment inside could harm pigs; wooden sides pigs would chew; drafts; too hot in summer	2	any 2
15	(a)	15	tractors /machinery/ vehicles	1	
	(b)	15	24	1	
16	(a)	16	50 %	1	
	(b)	16	the more colostrum absorbed the less lambs die or converse	1	
17	(a)	17	800 (cm ³)	1	
	(b)	17	1100 (cm ³)	1	
18		18	same breed, same environment, large numbers of repeats, same sex or mix of sexes, weigh at start, weigh regularly throughout the investigation; compare weight gained at the end	3	5/6 valid points = 3 marks 3/4 valid points =2 marks 1/2 valid points = 1 mark allow mark for any correct explanation
19		19	approach from the front; make sure it has seen you; talk quietly to reassure the animal; slowly/calmly; wear steel toe capped boots; good escape route; have someone else there	2	allow reference to use of a pig board
			Total	36	

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