

GCSE

Environmental and Land-Based Science

General Certificate of Secondary Education

Unit **B495/01:** Livestock Husbandry

Mark Scheme for June 2011

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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.

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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 | |

MARK SCHEME: B495/01

| Qı | uestion | CBT Question Numbers | Answer | Mark | Guidance |
|----|---------|----------------------------|--|------|---|
| 1 | | 1 | A keep animals healthy | 1 | |
| 2 | | 2 | cattle – intensive sheep – extensive pigs – extensive chicks – intensive | 2 | 4 correct = 2 marks 3 correct = 1 mark |
| 3 | | 3 | knees bent back straight use leg muscles | 2 | 3 correct = 2 marks 2 correct = 1 mark |
| 4 | | 4 | В | 1 | |
| 5 | | 5 | female – egg, ovary, vagina male – penis, sperm, testis | 3 | 1 or 2 correct = 1 mark 3 or 4 correct = 2 marks 5 or 6 correct = 3 marks |
| 6 | | 6 | С | 1 | |
| 7 | | 7 | any 3 from; alert; good posture OWTTE; bright eyes; feathers clean; pen clean; wattles good colour | 3 | accept – good weight; no feathers; normal droppings reject - clean |

B495/01 Mark Scheme June 2011

| Qı | ıestic | CBT Question Numbers | Allower | Mark | Guidance accept – aggressive; smelling each other; producing to attract the bull; lifting tail |
|----|--------|----------------------------|---|------|---|
| 8 | | 8 | | 3 | |
| 9 | | 9 | any 2 from; yield; disease resistance; hardiness; conformation; lack of horns/polled; temperament | 2 | accept more muscular reject appearance; more female calves |
| 10 | а | 10 | prevent the animal biting the student, acts as a shield | 1 | accept guiding the pig owtte |
| | b | 11 | they are distracted, more interested in food | 1 | must relate to food |
| | С | 12 | any 1 from; approach from front; talk quietly; make sure they have seen you | 1 | accept don't work alone |
| 11 | а | 13 | 2.5 days | 1 | |
| | b | 13 | 5 bags | 1 | |
| | С | 13 | water /milk | 1 | reject additional non essential parts of the diet |

B495/01 Mark Scheme June 2011

| Question | | tion | CBT Question Numbers | Answer | Mark | Guidance |
|----------|---|------|----------------------------|--|------|---|
| 12 | а | | 14 | 90% | 1 | |
| | b | | 14 | contagious mastitis has declined while environmental has increased as a proportion | 1 | must mention both |
| 13 | а | | 15 | 74% | 1 | |
| | b | | 15 | £30 000 | 1 | |
| 14 | | | 16 | any 2 from; contagious – teat dipping disinfection of clusters; use of antibiotics; use disposable udder wipes; segregation / culling of infected cows | 2 | allow homeopathic treatments / dry wipes; more frequent milking |
| 15 | | | 17 | two populations , one of each breed; sufficient numbers of each; same sex; weigh at start; weigh regularly throughout; keep in same environmental conditions; feed the same; weigh at end; calculate average increase of mass for each breed | 4 | level of response marking – expect 8 valid points for full marks. 1 valid point = 0 marks 2/3 valid points = 1 mark 4/5 valid points = 2 marks 6/7 valid points = 3 marks 8 valid points = 4 marks |
| 16 | | | 18 | genotype arrangements of chromosomes/ genes/alleles phenotype physical expression of these genes OWTTE | 2 | reject what they get from their parents |
| | | | | Total | 36 | |

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