

GCSE

Environmental and Land Science

General Certificate of Secondary Education

Unit B494/02/04: Care of Small Animals (Higher Tier)

Mark Scheme for June 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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1. Annotations

Used in the detailed Mark Scheme:

| Annotation Meaning | | | | | |
|------------------------------|---|--|--|--|--|
| 1 | 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

| 2 | indicate uncertainty or ambiguity |
|--------------|---|
| []]) | benefit of doubt |
| (सन्तर) | contradiction |
| × | incorrect response |
| 1-0-1 | error carried forward |
| 0 | 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 |
| MRCIC | no benefit of doubt |

| R | reject |
|----------|---|
| ✓ | correct response |
| 2 | draw attention to particular part of candidate's response |
| ^ | information omitted |

2. Subject-specific Marking Instructions

- a. If a candidate alters his/her response, examiners should accept the alteration.
- b. 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.

Eg

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

| Put ticks (\checkmark) in the two correct boxes. | Put ticks (\checkmark) in the two correct boxes. | Put ticks (\checkmark) in the two correct boxes. |
|--|--|--|
| | | ₹ ₹ |
| ⋧ | | |
| * | * | |
| This would be worth 1 mark. | This would be worth 0 marks. | This would be worth 1 mark. |

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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, eg 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, eg 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.

Eg 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 <u>should be blank</u> (or have indication of choice crossed out).

| Edinburgh | | | ✓ | | | ✓ | ✓ | ✓ | ✓ | |
|-------------|---|---|---|---|---|---|---|---|---|----|
| Manchester | ✓ | × | ✓ | ✓ | ✓ | | | | ✓ | |
| Paris | | | | ✓ | ✓ | | ✓ | ✓ | ✓ | |
| Southampton | ✓ | × | | ✓ | | ✓ | ✓ | | ✓ | |
| Score: | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | NR |

| Q | Question (| | Question (| | uestion CB | | uestion CBT Answer | | Mark | Guidance |
|---|------------|---|--|---|---|--|--------------------|--|------|----------|
| 1 | | 1 | concentrateroughagesucculenthigh nutrienthigh fibrehigh moisture | 2 | 3 correct = 2 marks 1 correct = 1 mark | | | | | |
| 2 | (a) | 2 | D spraying | 1 | | | | | | |
| | (b) | 3 | absorption of insecticide through skin – wear rubber gloves; inhalation of insecticide through nose and mouth – wear a mask | 2 | accept ingestion of insecticide – do not eat when working / wash hands before eating reject being pecked / scratched | | | | | |
| 3 | | 4 | A anaemia | 1 | | | | | | |
| 4 | | 5 | C To keep the rabbits still and secure | 1 | | | | | | |
| 5 | (a) | 6 | water absorptionlarge intestine;digestion of fatssmall intestine | 2 | | | | | | |
| | (b) | 7 | fermentation; methane | 2 | | | | | | |
| 6 | | 8 | D have different pH values | 1 | | | | | | |
| 7 | | 9 | wire front – ventilation / air available / can see ; handle – ease of carrying; size / space – animal not cramped / can move around or not lost in big container | 2 | for each mark – need to give a feature and explanation | | | | | |

| Questio | on CBT | Answer | | Guidance |
|---------|--------|--|---|---|
| 8 | 10 | wear strong thick gloves / handle gently / quietly / correctly; getting infected by (salmonella) from excreta / flea bites | 2 | accept infection by virus eg orf reject infection by germs / disease |
| 9 | 11 | wire floor can cause problems / swellings / cuts on feet and hocks; over-crowding helps spread disease | 2 | reject overcrowding causes disease accept reference to behavioural problems if qualified accept reference to dental problems due to lack of gnawing |
| 10 | 12 | would get too fat which would pose problems when giving birth; need a balanced diet / OWTTE to provide correct amounts for developing young | 2 | reject eat too much unless qualified |
| 11 | 13 | any two from: budgerigars need to be fed by parent / hen chicks can feed themselves; budgerigars need more heat for longer than chicks; budgerigars stay in nest / hen chicks need confining | 2 | |
| 12 | 14 | 125; <u>50</u> x 10 4 | 2 | 2 marks for correct answer; 1 mark for correct working and incorrect answer / or correct answer without working |
| 13 | 15 | c | 1 | |
| 14 | 16 | prosecutions with injury – shows a gradual increase; prosecutions without injury – less marked increase with decrease at end; prosecutions with injury always more than those without injury | 2 | accept total prosecutions increase |

| Qı | uestion | tion CBT Answer | | Mark | Guidance |
|----|---------|-----------------|---|------|---------------------------------------|
| 15 | | 17 | recognisable features / type varied by – any two from: normal breeding within breed; cross breeding; inbreeding; selection for one particular feature eg aggression | 2 | accept reference to gene expression |
| 16 | | 18 | C | 1 | |
| 17 | (a) | 19 | any 2 for 1 mark: pedigree / mating / offspring / any health record eg vaccination or disease / production eg egg laid / growth | 1 | accept feed given / behaviour |
| | (b) | 20 | any two from: easy to update / easy to change entries / stores a lot of information / allows for quick reference / allows for multiple access / can produce data or lists / provides back up | 2 | reject safer |
| 18 | | 21 | any three from: move animals into cage / box carefully / safely; remove old bedding & replace with new bedding; cleaning detail –disinfectant, use of brushes / wire wool; rinse off, leave to dry; clean food / water containers; wear gloves or wash hands when finished; reference to timing and scale of cleaning | 3 | adapt marking points for fish / horse |
| | | | Total | 36 | |

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