

# **Environmental and Land Science**

General Certificate of Secondary Education **B494/02**

Care of Small Animals

## **Mark Scheme for June 2010**

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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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Question		Expected Answers	Marks	Additional Guidance
10		in box / cage – so do not escape / be hazard to driver and cause accident; boxes secured – so animals not thrown about; box with air holes – so they can breathe; box not crushable – so animal is not squashed; limit number of animals in box – to prevent overheating / fighting; no water in box – can spill and wet animal; cage covered – to prevent stress;	2	<b>Reject</b> contained / not free in car without qualification  <b>Allow</b> stop for feed and watering qualified reference to car overheating
11	a	parasites	1	<b>Allow</b> worms
	b	sample droppings / look in coat; blood test	1	<b>Allow</b> scans (not x-ray)
12	a	temperature sensor linked to thermostat / switch	1	
	b	mammals can control internal conditions, reptiles cannot	1	<b>Allow</b> retiles are ectotherms / cold blooded
13		75% Harry 25% Harriet;  loss of variation / hybrid vigour / may result in occurrence of harmful features / genetic disorders (recessives);	2	<b>Reject</b> result in disease

Question		Expected Answers	Marks	Additional Guidance
14		any 2 from: cover front with transparent plastic - to avoid draughts; cover part of front with wood - to give darker / sleeping area; make air holes <u>high up</u> in sides or back – to ventilate without draughts;	2	explanation must be given to get mark
15		21000 (4 times greater)	1	<b>Reject</b> increase described as a trend
16		20%	1	
17	a	i	2	answer must refer to histograms not line graphs
		ii	1	
	b		1	
18		breed / select animals with required features, line breed to fix features; mate best with the best over several generations; out cross with males with key feature; do not inbreed	3	<b>Reject</b> brother - sister mating

Question	Expected Answers	Marks	Additional Guidance
19	any 2 from: any welfare point – handle carefully / not after a meal; weigh in cloth parachute – not a container that allows movement; weighing container with / without animal; calibration of weighing machine reference;	2	
20	risk to children - bites / disease, overcome by, notices or tuition about handling / washing hands;  risk to animal – stress / damage, overcome by, limited contact time;  supervision at all times	3	
<b>Total</b>		<b>36</b>	

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