0172-531/031 June 2018 March Scheme – Technical in Animal Management

Q	Acceptable answer(s)	Guidance	Max marks	Ref
1	 1 mark for any of the following, maximum of 3 marks. Ensure appropriate rest periods for feed and water Ensure correct space allowances for species Ensure the use of competent and/or trained handlers. Ensure correct treatment of (potentially) sick animals. Any other appropriate answer 	the animal has to have food and water during transporting (outside of the rest periods). Check animal is fit prior to travel All answers should focus on welfare during transportation.	3	303- 1.2 AO1
2	Model answer, maximum of 2 marks Assess the area (1), encourage the animal to stay calm (1) limit movement of the animal (1), support the fractured limb before moving the animal (1) Seek veterinary attention (1) Any other appropriate answer	Accept • Splint the limb	2	303- 4.1 AO1
3a	 Maximum of 1 mark for any of the following: Topical veterinary treatment (1) with antibiotics (1) Ivermectin (1) 	Accept	2	303- 2.2 AO2
3b	 Maximum of 4 marks. Zoonotic disease (1) that is passed from animal to human (1). The handler would need to wear PPE such as gloves/plastic apron (1). The animal should be barrier nursed/strict biosecurity measures should be in place during treatment (1). The dog could be aggressive because of pain, use caution when handling (1). Any other appropriate answer. 		4	303- 2.2 AO2

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4	 1 mark for each control method, maximum of 3 marks, Control methods: strict laws and regulations have been implemented to control the movement of (dogs, cats and ferrets) between (specific) countries using passports (1) specialised quarantine facilities (1) border controls to check documentation (1) vaccination programme carried out by the Vet (for dogs, cats and ferrets) (1) Euthanasia (1) Any other appropriate response 	Accept 'needs to be reported to DEFRA/APAH as rabies is notifiable disease'. Do not accept puppies and kittens vaccinated as standard as part of routine preventative care in the UK.	3	303- 2.2 AO2
5	 1 mark for any of the following, maximum of 3 marks. Natural food source Richer nutrients. Higher water content. Higher palatability/animal's preferred choice Less dusty than hay. Easier to digest. Cost. Any other appropriate response	Do not accept not related to nutrition	3	304- 2.1 AO2
6a	 1 mark for each of the following, maximum of 1 marks per body part. Tongue – used to grip and direct grass into the mouth during grazing (1) manipulate food in the mouth/ forming a bolus of food (1). Any other appropriate response 	Only accept function. Accept technical terms for function.	1	304- 1.3 AO1
6b	1 mark for each of the following, maximum of 1 marks per body part. Oesophagus – allows food to travel from the mouth to the rumen (reticulum) (1) and regurgitation for further chewing (chewing the cud) (1) via peristalsis (1) Any other appropriate response	Only accept function. Accept technical terms for function.	1	304- 1.3 AO1

1 mark for each of the following, maximum of 1 marks per body part.	Only accept function.	1	304-
Rumen – provides an environment for the digestion of fibre/cellulose/plant material (1) for bacterial fermentation.(1) Any other appropriate response	Accept technical terms for function.		1.3 AO1
1 mark for each of the following, maximum of 1 marks per body part. Omasum – removes excess water from the food (1) reduces the size of the food particles for further digestion (1) Any other appropriate response	Only accept function. Accept technical terms for function.	1	304- 1.3 AO1
1 mark for each of the following, maximum of 1 marks per body part. Abomasum – produces acids and enzymes for digestion (1) bacteria are digested here and used as a source of protein (1) Final breakdown (1) Any other appropriate response	Only accept function. Accept technical terms for function.	1	304- 1.3 AO1
 1 mark for each of the following, maximum of 2 marks. Lactose – disaccharide (1) made from monosaccharide glucose (1) and galactose (1). Any other appropriate response 	Award 1 mark if correct elements are given, 2 marks if the formula is numerically correct.	2	304- 1.1 AO2
 Model answer: 1 mark for each of the following, maximum of 6 marks. Poor nutrient value can lead to weight loss/ill health and lack of energy (1) Too much protein can put additional strain on the liver and kidney/ and cause hyperactivity (1) Excess carbohydrates/fat can cause obesity (1) Dusty or mouldy feed can cause respiratory disorders (1) Contaminated foods can cause toxicity leading to illness or death (1) Poor mineral ratios can result in mineral deficiency (1) Any other appropriate response	 More expensive More readily available Only accept responses that impact on the health of the animal. Accept answers relating to a specific life stage. 	6	304- 3.1 AO2
	fibre/cellulose/plant material (1) for bacterial fermentation.(1) Any other appropriate response 1 mark for each of the following, maximum of 1 marks per body part. Omasum – removes excess water from the food (1) reduces the size of the food particles for further digestion (1) Any other appropriate response 1 mark for each of the following, maximum of 1 marks per body part. Abomasum – produces acids and enzymes for digestion (1) bacteria are digested here and used as a source of protein (1) Final breakdown (1) Any other appropriate response 1 mark for each of the following, maximum of 2 marks. • Lactose – disaccharide (1) made from monosaccharide glucose (1) and galactose (1). Any other appropriate response Model answer: 1 mark for each of the following, maximum of 6 marks. • Poor nutrient value can lead to weight loss/ill health and lack of energy (1) • Too much protein can put additional strain on the liver and kidney/ and cause hyperactivity (1) • Excess carbohydrates/fat can cause obesity (1) • Dusty or mouldy feed can cause respiratory disorders (1) • Contaminated foods can cause toxicity leading to illness or death (1) • Poor mineral ratios can result in mineral deficiency (1)	Rumen – provides an environment for the digestion of fibre/cellulose/plant material (1) for bacterial fermentation.(1) Any other appropriate response 1 mark for each of the following, maximum of 1 marks per body part. Omasum – removes excess water from the food (1) reduces the size of the food particles for further digestion (1) Any other appropriate response 1 mark for each of the following, maximum of 1 marks per body part. Abomasum – produces acids and enzymes for digestion (1) bacteria are digested here and used as a source of protein (1) Final breakdown (1) Any other appropriate response 1 mark for each of the following, maximum of 2 marks. • Lactose – disaccharide (1) made from monosaccharide glucose (1) and galactose (1). Any other appropriate response Model answer: 1 mark for each of the following, maximum of 6 marks. • Poor nutrient value can lead to weight loss/ill health and lack of energy (1) • Too much protein can put additional strain on the liver and kidney/ and cause hyperactivity (1) • Excess carbohydrates/fat can cause obesity (1) • Dusty or mouldy feed can cause respiratory disorders (1) • Contaminated foods can cause toxicity leading to illness or death (1) • Poor mineral ratios can result in mineral deficiency (1)	Rumen – provides an environment for the digestion of fibre/cellulose/plant material (1) for bacterial fermentation.(1) function. function. Any other appropriate response 1 mark for each of the following, maximum of 1 marks per body part. Only accept function. 1 Omasum – removes excess water from the food (1) reduces the size of the food particles for further digestion (1) Only accept function. 1 Any other appropriate response Only accept function. 1 Abomasum – produces acids and enzymes for digestion (1) bacteria are digested here and used as a source of protein (1) Final breakdown (1) Accept technical terms for function. Accept technical terms for function. Any other appropriate response 1 mark for each of the following, maximum of 2 marks. Lactose – disaccharide (1) made from monosaccharide glucose (1) and galactose (1). Award 1 mark if correct elements are given, 2 marks if the formula is numerically correct. Model answer: 1 mark for each of the following, maximum of 6 marks. Poor nutrient value can lead to weight loss/ill health and lack of energy (1) Too much protein can put additional strain on the liver and kidney/ and cause hyperactivity (1) Dusty or mouldy feed can cause respiratory disorders (1) Contaminated foods can cause toxicity leading to illness or death (1) Contaminated foods can cause toxicity leading to illness or death (1) Poor mineral ratios can result in mineral deficiency (1)

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9	 1 mark for any of the following, maximum of 3 marks Pacing repetitively Tongue-playing/bar-biting Head bobbing/weaving/swaying Vocalisation Over grooming Aggression Any other appropriate response	Do not award any marks if no named animal is given.	3	305- 1.1 AO1
10	 1 mark for any of the following, maximum of 4 marks Wild - Flies between a range of feeding sites whereas caged/aviary food is provided (1) Wild - forages throughout the day whereas caged/aviary food is provided at specific times during the day (1) Wild - Feed on greater variety of fruits, blossoms, leaves, seeds, and nuts, whereas caged/aviary can be picky eaters, become addicted to seeds, fearful or phobic of new foods Wild select own mates, whereas caged/aviary – keeper selects mate (1) Any other appropriate response. 	Accept comparison of wild to caged, or comparison of behaviour e.g wild birds forage wide areas whereas a keeper would give food.	4	305- 1.3 AO2
11a	1 mark for definition: Social teaching involves the transfer of information from a more experienced individual to a naive one (1) Any other appropriate response	Accept one animal learning from another.	1	305- 3.2 AO1
11b	1 mark for example of social teaching: mother to offspring demonstrating how to hunt for food (1) Any other appropriate response	Accept any appropriate example. Do not accept incorrect examples of a specific species.	1	305- 3.2 AO1
12a	 1 mark for each explanation of method, 1 mark for example, maximum of 2 marks. touch – physical contact between two or more animals (1) eg for the purpose of mutual grooming (1) eg Mounting for dominance (1) Any other appropriate response 	Examples have to be related to communication. Only accept specific examples of communication i.e. without justification of communication.	2	305- 4.1 AO2
12b	1 mark for each method, 1 mark for example, maximum of 2 marks. chemical – chemical signals produced by the body (1) pheromones/hormones released to attract a mate (1) Any other appropriate response	Examples have to be related to communication. Only accept specific examples of communication i.e. without justification of communication.	2	305- 4.1 AO2

12c	1 mark for each method, 1 mark for example, maximum of 2 marks.	Examples have to be related to communication.	2	305- 4.1
	hearing – vocalisations between animals (1) alarm calls to indicate danger/mating calls (1) Any other appropriate response	Only accept specific examples of communication i.e. without justification of communication.		AO2
13	1 mark for each of the following, maximum of 3 marks	Accept responses related to gauntlets or any other type of	3	303- 4.1
	Prevent cross contamination (1) protect handlers from infection (1) protection from substances in medicines/cleaning agents that can impregnate skin(1) Any other appropriate response.	glove.		AO2

Confidential 14 **Banding: Indicative content:** 12 303: Band A (1 - 4marks) 1.1, Routine health checks The candidate's response was brief with limited 1.2, Signs of health in animals consideration to the animal's welfare. Key points in Common 2.1, relation to generic care were described, but clear gaps diseases/disorders 3.1. in knowledge present. Limited understanding of the Routine treatments 5.1 topics demonstrated. Technical terminology used Isolation procedure and infrequently and inaccurately. Legislation that relates to 5.2. animal health 304: To access the higher marks within the band, the Accommodation 1.1, candidate will have attempted to justify their requirements 2.1 recommendations, but few or no links were made Feeding regimes between the welfare of the animal and how the centre and nutritional requirements meets those needs. 4.1 Monitor and record 305: behaviour Band B (5 - 8 marks) - The candidate's response was 1.1, Animal welfare detailed and they took the animal's welfare into 1.2, Record keeping consideration. Key points in relation to both generic 2.1 and more specialist care were described, with some and gaps in knowledge present. The candidate 4.2. demonstrated a detailed understanding of the topics. **AO4** Technical terminology used frequently and mostly accurately. To access the higher marks within the band, the candidate will have provided justifications for their recommendations. Clear links were made between the welfare of the animal and how the centre meets those needs, but these may not always be valid. Band C (9 - 12 marks) - The candidate produced an indepth response which included detailed considerations of the animal's welfare. Key points in relation to both generic and more specialist care were described, with minor gaps in knowledge present. The candidate demonstrated a thorough understanding of the topics and comprehensive descriptions were presented in a logical sequence. Technical terminology used frequently and accurately. To access the higher marks within the band, the candidate will have provided valid justifications for their recommendations, with coherent links made between the welfare of the animal and how the centre meets those needs.