

# 0172-30/31/32/33 Level 3 Technical Certificate/Diploma/Extended Diploma in Animal Management

## 0172-531 Level 3 Animal Management - Theory exam

### October 2022 Mark Scheme

Q no.	Acceptable answer(s)	Guidance	Max mks	Ref
<b>Q1</b>	<p><b>1 mark each for any of the following, to a maximum of 3 marks:</b></p> <ul style="list-style-type: none"> <li>• Route of administration (1)</li> <li>• Frequency of administration/timings (1)</li> <li>• Method of administration (1)</li> <li>• Potential side effects/adverse reactions (1)</li> <li>• Dose required by the animal (1)</li> <li>• What the drug is treating (1)</li> <li>• Controlled drug/drug category (1)</li> <li>• PPE/equipment requirements (1)</li> <li>• Risk drugs poses to handler (1)</li> <li>• In date/expiry date (1)</li> <li>• Withdrawal period (1)</li> </ul> <p><b>Any other relevant point in line with the guidance</b></p>	<p>Do not award marks for:</p> <ul style="list-style-type: none"> <li>• COSHH without context</li> <li>• Batch number</li> </ul>	<b>3</b>	<b>303 4.1 A01</b>
<b>Q2 a)</b>	Lack of/absence of appetite (1)	Do not accept weight loss	<b>1</b>	<b>303 2.4 A01</b>
<b>Q2 b)</b>	Inflammation of the laminae/sensitive tissues in the hoof of equine animals/within the hoof (1)	Do not accept swollen hooves/feet	<b>1</b>	
<b>Q3 a)</b>	<p>Only qualified/registered veterinary professional can perform acts of veterinary surgery/diagnose/prescribe/operate (1) to ensure that only those with the correct training/skills carry out these tasks (1) minimising the risk of harm to the animal (1).</p> <p><b>Any other relevant point in line with the guidance</b></p>	Accept SQP (suitably qualified person) in regard to prescribing only	<b>3</b>	<b>303 1.2 A02</b>

<b>Q3 b)</b>	Ensures that all animals have their welfare needs are maintained (1) by providing consequences/a deterrent to not doing so (1) in the form of fines/imprisonment (1)  <b>Any other relevant point in line with the guidance</b>	Accept prevention of health conditions in place of maintaining	<b>3</b>	
<b>Q 4a)</b>	Masks filter disease particles (1) reducing the amount/number of airborne particles being inhaled (1) and having contact with nasal or oral mucous membranes/nose or mouth (1)  <b>Any other relevant point in line with the guidance</b>	Do not award marks for protecting others/animal from the mask wearer's pathogens  Award up to one mark for statements only without the linked explanation.	<b>3</b>	<b>303 2.2 A02</b>
<b>Q4 b)</b>	Overalls provide an additional layer of clothing (1) preventing handler's clothing from becoming a fomite/housing disease (1) which reduces the risk of transmission to the body/cross-contamination (1)  <b>Any other relevant point in line with the guidance</b>	Accept overalls preventing scratches/cuts to handler skin in relation to transmission into the body.  Only accept injury in the context of zoonotic disease transmission.  Award up to one mark for statements only the linked explanation.	<b>3</b>	
<b>Q5</b>	<b>1 mark each for any of the following, to a maximum of 3 marks:</b>  <ul style="list-style-type: none"> <li>• Salivary (1)</li> <li>• Gallbladder (1)</li> <li>• Liver (1)</li> <li>• Pancreas (1)</li> </ul>		<b>3</b>	<b>304 1.3 A01</b>
<b>Q6 a)</b>	Energy released as heat in food/total amount of energy in food (1)	Do not award marks for 'available energy' or 'digested energy'	<b>1</b>	<b>304 3.1 A01</b>
<b>Q6 b)</b>	The number of calories/amount of energy used by the body to perform basic (basal) life-sustaining function (1).		<b>1</b>	
<b>Q7</b>	<ul style="list-style-type: none"> <li>• Increased protein (1) to prevent the use stored protein from the body/to allow for increase demand in tissue repair (1)</li> </ul>	Do not award marks for repetition  Do not award marks for water as this should be provided <i>ad lib</i>	<b>6</b>	<b>304 3.2 A02</b>

	<ul style="list-style-type: none"> <li>Increased fat/lipids/calories (1) to provide for increased energy requirement/prevent weight loss (1)</li> <li>Increased slow-release <u>carbohydrates</u> (1) to maintain a continuous availability of energy during work (1)</li> <li>Highly digestible/reduce fibre (1) to reduce bulk of food/make nutrients required easily consumable (1)</li> <li>Additional carbohydrates post exercise (1) to counteract glycogen storage depletion (1)</li> <li>Supplement antioxidants/low dose multivitamin (1) to counteract oxidative stress/increased production of free radicals (1)</li> </ul> <p><b>Any other relevant point in line with the guidance</b></p>	<p>Accept specific supplements if relevant eg calcium for bone building/density (due to increased concussion)</p> <p>Award up to <b>three</b> marks for statements only without the linked explanation</p>		
<b>Q8</b>	<p>Rabbits should regularly produce two types of faecal matter (1) with hard faeces being the only visible faecal matter found to be recorded (1) as rabbits perform caecotrophy/eat soft faeces daily (1) which is essential to allow nutrient absorption (1) without which health issues/deficiencies will occur (1)</p> <p><b>Any other relevant answer</b></p>	Award up to two marks for statements only	<b>5</b>	<b>304</b> <b>4.1</b> A02
<b>Q9</b>	<p><b>1 mark each for any of the following, to a maximum of 2 marks:</b></p> <ul style="list-style-type: none"> <li>Hormones (1)</li> <li>Fixed action patterns/innate behaviours (1)</li> <li>Pain (1)</li> <li>Disease (1)</li> <li>Gender (1)</li> <li>Genetic predisposition/factors (1)</li> <li>Age/life-stage (1)</li> <li>Parasite (<i>Toxoplasma gondii</i> coccidian) (1)</li> </ul> <p><b>Any other relevant point in line with the guidance</b></p>	<p>Award marks for examples e.g. adrenaline in place of hormones</p> <p>Do not award marks for repetition</p>	<b>2</b>	<b>305</b> <b>3.3</b> A01
<b>Q10</b>	<p><b>1 mark each for any of the following, to a maximum of 3 marks:</b></p> <ul style="list-style-type: none"> <li>Allogrooming (1)</li> <li>Group sleeping/close contact (1)</li> <li>Mutual fly swotting (1)</li> <li>Sharing food (1)</li> <li>Tail wagging (1)</li> <li>Touching muzzles (in horses) (1)</li> <li>Mating/mating rituals (1)</li> <li>Play fighting/playing (1)</li> <li>Greeting displays (1)</li> <li>Mutual vocalisation (1)</li> </ul>	<p>Do not award marks for 'grooming' on its own</p> <p>Award marks for descriptions/examples e.g. 'Monkeys grooming each other'</p> <p>Only award marks for positive (mutual) interactions</p>	<b>3</b>	<b>305</b> <b>4.2</b> A01

	<b>Any other relevant point in line with the guidance</b>			
<b>Q11</b>	<ul style="list-style-type: none"> <li>Self-mutilation behaviour/excessive masturbation (1) caused by frustration (1) if an animal cannot naturally mate (1)</li> <li>Excessive sleeping/inactivity/anorexia (1) caused by depression (1) due to lack of social interaction (1)</li> <li>Excessive pacing/self-mutilation/withdrawal/anorexia (1) caused by fear (1) if animal is bullied by other members of the group/housed alone when should be in the company of others (1).</li> </ul> <p><b>Any other relevant point in line with the guidance</b></p>	<p>Award a maximum of two marks for statements only without the linked explanation</p> <p>Do not award marks for repeated behaviour examples/cause/explanation</p> <p>Do not award marks for normal behaviour eg aggression, without a reference to it being excessive</p>	<b>6</b>	<b>305</b> <b>1.2</b> A02
<b>Q12</b>	<p>A domesticated animal has been selectively bred (1) to have behaviour traits suitable to living with humans/be calm/non-aggressive/non-anxious (1) making them easier to interact with/feed/fecund/adapt to human lifestyles (1) and more likely to thrive in a captive environment (1).</p> <p><b>Any other relevant answer in line with the guidance</b></p>	<p>Award a maximum of two marks for statements without the linked explanation</p> <p>Do not award additional marks for opposites</p>	<b>4</b>	<b>305</b> <b>3.1</b> A02
<b>Q13</b>	<p><b>For no awardable content, award 0 marks</b></p> <p><b>Band 1: 1-4 marks</b> A limited range of considerations with a mostly descriptive answer showing clear gaps in knowledge and limited understanding. Candidate attempts to use technical terminology infrequently but mostly inaccurately.</p> <p>To access the higher marks in the band, the candidate demonstrates a wider range of considerations with superficial explanations, which may not all be valid. An attempt to provide some examples may be evident but may not be relevant.</p> <p><b>Band 2: 5-8 marks</b> Candidate considered a range of aspects of the topic with a clear discussion showing knowledge and understanding with some gaps. Technical terminology is used frequently with some inaccuracies.</p> <p>To access the higher marks in the band, discussion is supported with relevant examples with developed and valid links to the topic, including some justifications.</p>	<p><b>Indicative Content</b></p> <ul style="list-style-type: none"> <li>Health checks and quarantine for new animals coming in</li> <li>Notifiable and zoonotic disease</li> <li>Legislation</li> <li>Hygiene/cleaning routines</li> <li>Staffing</li> <li>Preventative treatments</li> <li>Correct diet</li> <li>Consequences of incorrect diet</li> <li>Drug requirements</li> <li>Predator/prey interaction</li> <li>Five animal needs</li> <li>Life-stage</li> <li>Feeding plans</li> <li>Abnormal behaviour</li> <li>Species specific behaviour</li> </ul>	<b>12</b>	<b>303</b> <b>1.1</b> <b>1.2</b> <b>2.1</b> <b>2.2</b> <b>2.3</b> <b>2.4</b> <b>4.1</b>  <b>304</b> <b>1.3</b> <b>2.1</b> <b>3.2</b> <b>4.1</b> <b>4.2</b>  <b>305</b> <b>1.2</b> <b>1.3</b> <b>3.3</b> <b>4.1</b> <b>4.2</b>  A04

	<p><b>Band 3: 9-12 marks</b></p> <p>Candidate considered a wide range of aspects of the topic with a comprehensive discussion showing thorough knowledge and understanding. Technical terminology is used correctly and appropriately throughout with minimal inaccuracies.</p> <p>To access the higher marks in the band, the discussion is supported using a broad range of highly relevant examples with clear and detailed justifications.</p>	<ul style="list-style-type: none"> <li>• Internal and external factors influencing behaviour</li> <li>• Animal communication and welfare</li> <li>• Needs and behaviours of gregarious species</li> </ul>		
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