

0172-33 Level 3 Advanced Technical Extended Diploma in Animal Management (Wildlife)

0172-041/541 Level 3 Animal Management – Theory exam (2)

March 2022 Mark Scheme

Q no.	Acceptable answer(s)	Guidance	Max mks	Ref
Q1	<p>1 mark each for any of the following, to a maximum of 1 mark</p> <ul style="list-style-type: none"> Environment Act 1995 (1) Wildlife and Countryside Act 1981 (1) <p>Any other relevant legislation.</p>	Candidates are not required to state legislation year to be awarded mark.	1	308 2.1 AO1
Q2	<p>1 mark each for any of the following, to a maximum of 3 marks:</p> <ul style="list-style-type: none"> Natality (1) Mortality (1) Migration (1) Breeding strategies (r and K) (1) Growth (1) Dispersion (1) Genetic variability (1) Continuity in time (1) Predator prey interactions (1). Emerging disease (1). Human factor (1). <p>Any other relevant point</p>		3	308 3.1 AO1
Q3	<ul style="list-style-type: none"> Divergent (1) two groups of the same species evolve different traits (1) to accommodate for differing environmental and social pressures (1). Convergent (1) organisms not closely related evolve similar features (1) as a result of having to adapt to similar environments/ecological niches (1). 		6	308 3.2 AO2

	<ul style="list-style-type: none"> Parallel (1) two separate species in the same environment (1) develop similar adaptations/characteristics for survival (1). <p>Any other relevant point</p>			
Q4	<ul style="list-style-type: none"> IUCN/ International Union for Conservation of Nature (1) undertaking environmental scientific research/operates field projects worldwide (1) works to implement conservation legislation (1). WWF/ World Wide Fund for Nature/World Wildlife Fund (1) provides money for conservation initiatives around the world (1) focusing on species, habitat, climate change and trade (1). IWCS/ International Wildlife Conservation Society WCS/Wildlife Conservation Society (1) assist governments to protect wild places (1) partner with indigenous people to reduce demand for wildlife/wildlife products (1). <p>Any other relevant point</p>		3	308 2.2 AO2
Q5 a)	<ul style="list-style-type: none"> Red Fox (1) 	Do not accept Fox on its own	1	309 4.1 AO1
Q5 b)	<ul style="list-style-type: none"> Mute Swan (1) 	Do not accept Swan on its own.	1	309 4.1 AO1
Q6	<p>1 mark each for any of the following, to a maximum of 2 marks:</p> <ul style="list-style-type: none"> Limping/normal limb movement (1) Normal eye movement/appearance (1) Visible wounds/bleeding (1) Loss or damage to fur/feathers (1) Respiration/heavy breathing (1) <p>Any other relevant point</p>	Do not accept signs that are not physical	2	309 2.1 AO1
Q7	<ul style="list-style-type: none"> In summer there is more foliage (1) making viewing more difficult (1). In colder temperatures (1) certain animals may reduce activity/migrate/hibernate (1). In heavy rain many species will seek shelter to avoid getting wet and cold (1) making accurate results difficult (1). In some species breeding seasons may make animals more visible/audible (1) as they try to attract mates (1). Certain species may become more wary or aggressive in mating/breeding seasons (1) which makes them harder to approach/view (1). 	Maximum of four marks for statements.	8	309 1.1 AO2

	<ul style="list-style-type: none"> Human interference during breeding season may cause abandonment of offspring (1) which would make it unethical to survey then (1). <p>Any other relevant point</p>			
Q8	<ul style="list-style-type: none"> To avoid imprinting on care giver (1) to prevent inappropriate social behaviours/reproductive behaviours (1). To avoid habituation towards humans (1) to prevent inappropriate response towards humans upon release (1). For infection control (1) to protect staff against infection/zoonotic disease (1) protect patients from spreading their pathogens to other non-infected animals (1). 	One mark for reason, one mark for explanation.	4	309 2.2 AO2
Q9	<p>1 mark each for any of the following, to a maximum of 3 marks:</p> <ul style="list-style-type: none"> Equipment (1) Experimental (1) Human (1) Statistical (1) 		3	328 4.3 AO1
Q10 a)	<p>Subpopulation expansion to other unoccupied habitat (1) ensures metapopulation survival (1).</p> <p>Any other relevant point</p>		2	328 2.1 AO2
Q10 b)	<p>Large gaps between subpopulations (1) hinders population/genetic flow (1).</p> <p>Any other relevant point</p>		2	328 2.1 AO2
Q11	<ul style="list-style-type: none"> Most negative impacts will result from disturbance of species (1) shy/persecuted animals may migrate away from the reserve (1) or shift towards a more nocturnal activity pattern (1) Litter left by humans may pose a threat (1). Some species may be attracted to the reserve (1) to take advantage of human leftovers (1) or by humans providing food or nesting shelters (1). Humans can economically benefit the reserve (1) to increase conservation of the species/habitat (1). <p>Any other relevant point</p>	<p>Maximum of three marks per statement.</p> <p>Must relate to a nature reserve</p>	6	328 2.2 AO2
Q12	<p>1 mark each for any of the following, to a maximum of 1 mark:</p> <ul style="list-style-type: none"> Equality Act 2010. (1) 	<p>Must include year.</p> <p>Do not accept acronyms.</p>	1	364 2.3 AO1

<p>Q13</p>	<p>1 mark each for any of the following, to a maximum of 2 marks:</p> <ul style="list-style-type: none"> • The word 'Invoice' must be visible (1) • A unique identification number (1) • Business name/address/contact information (1) • Business/customer name/address (1) • A clear description of what is being charged (1) • The date provided for the goods or services (the supply date) (1) • The date of the invoice (1) • The amount(s) you're charging (1) • VAT amount if applicable (1) • Total amount owed (1) <p>Any other relevant point</p>		<p>2</p>	<p>364 4.1 AO1</p>
<p>Q14</p>	<ul style="list-style-type: none"> • Interest rates (1) can alter the impact of borrowing money for the business (1) as higher interest rates make borrowing more risky/expensive (1). • Recession (1) could result in employees losing their jobs (1) due to reduced production (1). • Inflation (1) impacts on the cost of living/the cost of doing business/borrowing money (1) with lower inflation, employment increases/ higher inflation, unemployment increases (1). • Taxes (1) a rise in tax has the same effect as an increase in costs (1) which can lead to raised prices within the business (1). • Demand / Supply (1) If there is an increase in supply for services while demand remains the same (1) prices tend to fall (1). <p>Any other relevant point</p>		<p>3</p>	<p>364 3.1 AO2</p>
<p>Q15</p>	<p>For no awardable content, award 0 marks.</p> <p>Band 1: 1-4 marks 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>Band 2: 5-8 marks 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>Indicative content</p> <ul style="list-style-type: none"> • Legislation • Population dynamics • Predator prey interactions • Ecological survey of habitats • Wildlife population survey • Human threats to wildlife populations • Species habitat requirements 	<p>12</p>	<p>308 1.2, 2.1, 3.1, 309 1.1, 2.2, 3.1, 4.2, 4.3, 328 2.1, 2.2, 3.3, 364 1.1, 1.2 AO4</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>Band 3: 9-12 marks 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"> • Population management control • Importance to the economy • Associated businesses 		
--	--	---	--	--