## 0172-33 Level 3 Advanced Technical Extended Diploma in Animal Management (Zoos) 0172-539 Level 3 Animal Management – Theory exam (2)

## October 2022 Mark Scheme

Q no.	Acceptable answer(s)	Guidance	Max mks	Ref
Q1	<ul> <li>1 mark for each for any of the following, to a maximum of 3 marks:</li> <li>Scatter feeding (1)</li> <li>Hand feeding (1)</li> <li>Automatic feeding (1)</li> <li>Drip feeding (1)</li> </ul> Any other relevant point		3	<b>313 3.2</b> AO1
Q2	<ul><li>Agnatha (1)</li><li>Osteichthyes (1)</li></ul>	Do not accept alternative names for Class of fish  Accept incorrect spelling only where the provided answer indicates the correct Class	1	<b>313 2.1</b> AO1
Q3	A state of dormancy/hibernation/long sleep during the summer/hot periods (1)	Do not accept dormancy/hibernation/long sleep on its own with no reference to the season	1	<b>313 2.4</b> AO1
Q4	<ul> <li>No parental protection/random egg dispersal (1) so eggs are susceptible to predators (1) which results in a lower survival rate (1)</li> <li>Reduced mate choice in captivity (1) so weaker individuals reproduce (1) which can result in a lower survival rate (1)</li> <li>Any other relevant point</li> </ul>	Award a maximum of one mark for statements only without the linked explanation	3	<b>313 2.3</b> AO2
Q5	<ul> <li>To ensure any births are identified (1) so that tank is not overstocked (1)</li> <li>To ensure any deaths are identified (1) so that water quality can be checked/disease can be treated (1)</li> </ul>	Award a maximum three marks for statements without the linked explanations  Do not accept repetition	6	<b>313 4.2</b> AO2

	<ul> <li>To ensure species/individuals are compatible         <ul> <li>(1) in order to reduce aggression/competition</li> <li>(1)</li> </ul> </li> <li>To ensure feeding regime/food quantity/type is appropriate (1) so that food is accessible to all species/individuals (1)</li> <li>Any other relevant answer in line with the guidance</li> </ul>			
Q6	1 mark each for any of the following, to a maximum of 3 marks:  • Age (1) • Disability (1) • Gender reassignment (1) • Marriage/civil partnership (1) • Pregnancy/maternity (1) • Race (1) • Religion/belief (1) • Sex/gender (1) • Sexual orientation (1)  Any other relevant point		3	364 2.3 AO1
Q7	Allows business to identify competitors' products and services/weaknesses/gaps in the market (1) enabling the business to provide their own products/services at a competitive price (1) to maintain customer flow/business performance (1)  Any other relevant answer in line with the guidance	Award a maximum of one mark for statements without the linked explanation  Accept linked answers reflecting the following:  Identifying competitor's advantage Allowing business to provide competition Maintaining sales	3	<b>364 1.2</b> AO2
Q8	1 mark each for any of the following, to a maximum of 4 marks:  Breeding/environmental triggers (1) Pairing birds (1) Introduction methods (1) Timings (1) Expected outcomes (1) Nests/materials (1)  Any other relevant point in line with the guidance	Accept examples of considerations  Accept environmental trigger examples (eg temperature, lighting, seasonality)  Do not award more than one mark for examples of triggers and overarching term for triggers (eg environmental trigger and lighting)	4	314 4.2 AO1

Q9	<ul> <li>Can contain large amounts of plants/foliage         <ul> <li>(1) in order to mimic the natural environment/habitat (1)</li> </ul> </li> <li>Provides exposure to natural light (1) which ensures birds are not deficient in Vitamin D         <ul> <li>(1)</li> </ul> </li> <li>Provides access to natural foods/insects (1) so that birds can show natural foraging behaviour (1)</li> <li>Encourages breeding(1) by exposing the birds to their natural circadian rhythm (1)</li> <li>Any other relevant answer in line with the guidance</li> </ul>	Award a maximum three marks for statements only without the linked explanations  Do not accept repetition	6	314 1.1 AO2
Q10	To reduce the size of food particles (1) via mechanical breakdown (1) using grit/stones/gastroliths (1)  Any other relevant answer		3	<b>314 4.1</b> AO2
Q11	<ul> <li>To prevent spread to the rest of the collection/flock (1) by monitoring for disease/ provide routine preventative care (prophylactic treatments/wormers/vaccinations) (1)</li> <li>To prevent the potential spread of disease (1) by observing for signs of disease (1)</li> <li>Any other relevant answer in line with the guidance</li> </ul>	Award a maximum of one mark for statements only without the linked explanation	2	<b>314 2.3</b> AO2
Q12	1 mark each for any of the following, to a maximum of 2 marks:  • Hook (1) • Tube (1) • Gauntlets (1) • Grabstick (1) • Cotton bag/pillowcase (1)  Any other relevant point		2	<b>316 4.4</b> AO1
Q13	<ul> <li>Provides social interaction (1) increasing the animals mental/physical stimulation (1)</li> <li>Avoidance of abnormal behaviours/stress/injury (1) if solitary species are kept on their own/social species kept in groups (1)</li> </ul>	Award a maximum of three marks for statements only without the linked explanations  Do not award marks for repetition	6	<b>316 2.1</b> AO2

				1
	<ul> <li>Allows natural hierarchy to be established (1) if the correct ratio of males to females used (1)</li> <li>Successful breeding/increased likelihood of mating/copulation (1) if correct ratio of males to females chosen (1)</li> <li>Any other relevant answer in line with the guidance</li> </ul>			
Q14	Records the number of healthy animals/births/deaths	Award a maximum of two	5	316
	(1) in order to identify/track possible diseases/health issues (1) as well as monitor the effectiveness of treatments/medication (1) so that changes can be made to husbandry routines when needed (1) to ensure that high standards of welfare are maintained (1)	marks for statements only without the linked explanation		<b>3.2</b> AO2
	Any other relevant answer in line with the guidance			
Q15	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.  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.  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.  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.	Indicative content  Aquarium equipment requirements  Health and safety/risk assessment  Legislation Species kept Sourcing of animals Visitor experience Ethics of allowing public interaction Welfare Quarantine Enclosure design	12	313 1.1 1.2 1.3 1.4 1.5 2.1 5.2 316 1.2 1.3 2.1 3.1 4.1 4.3
	valid links to the topic, including some justifications.  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.  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.			