

**Qualification: 0172-543 Level 3 Advanced Technical Extended
Diploma in Animal Management (Animal Management) – Theory Exam (2)**

2019 (Paper 1)

1	Define the term speciation. (2 marks)		
	Acceptable answer(s)	Guidance	Max mks
	The formation of new/distinct species (1) caused by evolution (1). Accept any other appropriate answer.		2
2	State two reasons for fluctuations in wildlife populations. (2 marks)		
	Acceptable answer(s)	Guidance	Max mks
	Seasonality (1), migration (1), emerging disease (1), climate change (1), habitat destruction (1), influence of man (1) Accept any other appropriate answer.		2
3	Explain the following, giving a named example for each. (3 marks)		
	<ul style="list-style-type: none"> • Convergent evolution • Divergent evolution (3 marks)		
	Acceptable answer(s)	Guidance	Max mks
2 marks for each explanation, 1 mark for each example. Convergent – two different species do not share a common ancestor (1) but have developed similar characteristics (1) examples: shark & dolphin body shape, development of flight in birds, bats, butterflies/moths (1) Divergent – two different species share a common ancestor (1) but have developed different characteristics (1) examples: Darwin’s finches, homologous pentadactyl limb in vertebrates (1)			6

	Accept any other appropriate answer.		
4	Explain the advantages of r breeding strategies.		(4 marks)
	Acceptable answer(s)	Guidance	Max mks
	<p>r reproduce at an early age (1) decreases generation interval (1)</p> <p>r have multiple offspring (1) to increase chance of survival to adulthood/reproductive age (1), strengthens the species due to natural selection (1)</p> <p>r offspring are precocial (1) therefore need less parental care (1)</p> <p>r have a small body size (1) to aid in producing more offspring (1)</p> <p>r mature quickly (1) to allow offspring to reproduce earlier (1)</p> <p>Accept any other appropriate answer.</p>		4
5	Identify two diseases commonly vaccinated against in the UK in each of the following species.		(2 marks)
	a) Rabbit		(2 marks)
	b) Cat		(2 marks)
	Acceptable answer(s)	Guidance	Max mks
	<p>Any of the following:</p> <p>a) Myxomatosis Viral Haemorrhagic Disease</p> <p>b) Feline panleucopaenia (feline infectious enteritis) Feline upper respiratory disease (cat flu) Feline leukaemia virus</p> <p>Accept any other appropriate answer.</p>		4

6	Explain why anatomical directional terms are used in veterinary practice. (3 marks)		
	Acceptable answer(s)	Guidance	Max mks
	<ul style="list-style-type: none"> • To identify correct injection sites (1) • To identify wound sites (1) • To ensure the correct positioning of animals during xray/operation/procedure/ to aid recovery (1), for interpreting xrays (1) • To ensure the correct use of restraints (1) • To keep accurate records (1) <p>Accept any other appropriate answer.</p>		3
7	Explain two treatments of canine parvovirus.		
	Acceptable answer(s)	Guidance	Max mks
	<p>Intravenous fluids/fluid therapy (1) – to control/regulate replacements of fluids/electrolytes lost (usually through vomiting and/or diarrhoea) (1)</p> <p>Antiemetic drugs (1) – to control/minimise vomiting which will lead to dehydration (1)</p> <p>Potassium supplementation (1) – to prevent hypokalemia/low potassium levels (which can affect muscle and/or heart function) / to maintain normal electrolyte balance/levels (1)</p> <p>(Broad spectrum) antibiotic (1) – to support immune function (but will not treat parvo causing virus) (1)</p> <p>Hyper-immune serum (1) – to support immune function/reduce viral load (but is difficult to obtain serum for treatment) (1)</p>	<p>Do not accept vaccine as this is preventative rather than treatment.</p> <p>Do not accept ‘broad spectrum antibiotic to treat the parvo causing virus’</p>	4
8	State four of the Animal Welfare Needs as stated in The Animal Welfare Act 2006. (4 marks)		
	Acceptable answer(s)	Guidance	Max mks
	<p>Need for a suitable environment (1)</p> <p>Need for a suitable diet (1)</p> <p>Need to exhibit normal behaviour patterns (1)</p> <p>Need to be housed with, or apart from, other animals (1)</p> <p>Need to be protected from pain, suffering, injury and disease (1)</p> <p>Accept any other appropriate answer.</p>	<p>Accept any alternative ordering of wording, must contain the stated language e.g diet not food.</p>	4
9	Explain two features of an isolation area within a kennel environment.		

			(4 marks)
	Acceptable answer(s)	Guidance	Max mks
	<ul style="list-style-type: none"> • Physical barrier (1) – to stop contact between animals to reduce spread of disease (1) • Foot bath (1) – to disinfect staff footwear before exiting isolation/ re-entering kennel (1) • Separate exercise area (1) – to reduce spread of disease by in-direct contact (1) • Construction material (1) – allows for easy disinfection/cleaning (1) • Relevant warning/isolation signage (1) to ensure isolation protocols are adhered to/signify isolation procedures are followed (1) <p>Accept any other appropriate answer.</p>		4
10	Explain three ways a cattery could reduce stress in boarding cats. (6 marks)		
	Acceptable answer(s)	Guidance	Max mks
	<p>1 mark for method, 1 mark for explanation, up to 6 marks.</p> <p>Use of (synthetic) Pheromones (1) – reduce stress by stimulating the feeling of security (1)</p> <p>Limiting noise (1) – provide a quiet environment to reduce noise sensitivity (1)</p> <p>House away from other species (1) – to avoid overstimulation/ to avoid the fear response (1)</p> <p>Limit contact with other cats (1) – reduce physical/visual/sensory contact as they are a solitary species (1)</p> <p>Body language (1) - recognise specific body language and respond in appropriate manner (1)</p> <p>Meet the needs of the individual (1) – tailor the pet pen to make it more accommodating (e.g blanket from home, housing with a familiar cat) (1)</p> <p>Accept any other appropriate answer.</p>		6

11	State three ways a supplier can influence a business. (3 marks)		
	Acceptable answer(s)	Guidance	Max mks
	Suppliers may raise/lower prices of stock (1) Suppliers may not always be reliable (1) Suppliers may change credit terms/ not allow discounts for large orders/loyal customers (1) Suppliers may stop supplying certain products (1) Accept any other appropriate answer.		3
12	Describe how a business can ensure that they do not discriminate against protected characteristics, giving three examples. (6 marks)		
	Acceptable answer(s)	Guidance	Max mks
	1 mark for each example, up to 3 marks. Up to 3 marks for description. Age (1) ensuring staff of all ages are employed/responsibilities are allocated according to staff skills /experience not age (1) Disability (1) providing reasonable adjustments within the workplace to allow the job to be completed/ Ensuring access/amenities/resources for those with a disability(1) Pregnancy/maternity (1) - Providing maternity/paternity/adoption leave for all staff/employees (1) Religion (1) allow space in the workplace for a prayer room (providing it does not interrupt other workers/the business) (1) Race (1) accept equivalent qualifications during recruitment (to provide equal opportunity for those of a different race) (1) Becoming/being a transsexual person (1) provide gender neutral/mixed gender toilet facilities (1)		6

13	<p>Discuss the factors that need to be considered when planning a husbandry schedule for a working gun dog being kept in a kennel environment for boarding.</p> <p style="text-align: right;">(12 marks)</p>		
	Acceptable answer(s)	Guidance	Max mks
<p>Band 1 (1-4 marks)</p> <p>The learner has given a brief answer which includes limited reference to husbandry for a gun dog with clear gaps in knowledge. Only one aspect of husbandry may have been discussed.</p> <p>For the higher marks in the band, learners have made some links between husbandry and the needs of the working gundog. Technical terminology may be used infrequently and not always accurately.</p> <p>Band 2: (5-8 marks)</p> <p>The learner has given a detailed answer which includes some references husbandry with some gaps in knowledge. Learner has discussed more than one element of husbandry.</p> <p>For the higher marks in the band, learners have made relevant links and some justification between husbandry and the needs of the working gundog. Technical terminology may be used frequently with some minor inaccuracies.</p> <p>Band 3: (9-12 marks)</p> <p>The learner has given a comprehensive answer which includes detailed references to husbandry with few gaps in knowledge. Learner has thoroughly discussed more than one element of husbandry.</p> <p>For the higher marks in the band, learners have made relevant links between the husbandry and the needs of the gundog and have fully justified their suggestions. Technical terminology is used frequently and is mostly accurate.</p>	<p>Indicative content</p> <p>Feeding Cleaning Accommodation Exercise Enrichment Health checks/medical checks Record keeping Welfare Vaccinations</p>	<p>12</p>	

