



Australian and New Zealand College of Veterinary Scientists

Membership Examination

June 2014

Veterinary Behaviour Paper 1

Perusal time: **Fifteen (15)** minutes

Time allowed: **Two (2)** hours after perusal

Answer **ALL FOUR (4)** questions

Answer **FOUR** questions each worth 30 markstotal 120 marks

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Paper 1: Veterinary Behaviour

Answer all four (4) questions

1. Answer **all** parts of this question:

- a) List the anatomical areas of the brain involved in anxiety and briefly describe their role in the normal brain. *(6 marks)*
- b) Describe the physiological and anatomical abnormalities that might be found in the brain of an animal suffering from an anxiety disorder. *(18 marks)*
- c) List general factors that contribute to the development of anxiety in an individual animal. *(6 marks)*

2. Briefly discuss **all** of the following:

- a) social structure in chickens *(6 marks)*
- b) grazing behaviour in horses *(6 marks)*
- c) behavioural indications of oestrous in cows that are not kept with bulls *(6 marks)*
- d) behavioural strategies for avoiding parasitism in domesticated animals *(6 marks)*
- e) use of the term 'dominance' to describe behaviour in dogs. *(6 marks)*

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3. Answer **all** parts of this question:

a) Define both 'positive reinforcement' and 'negative reinforcement'. (4 marks)

b) Answer **both** of the following:

i. Discuss the advantages and disadvantages of using positive reinforcement in a training program. (8 marks)

ii. Discuss the advantages and disadvantages of using negative reinforcement in a training program. (8 marks)

c) Briefly describe how you would train a horse to be led over an unfamiliar plastic mat using:

i. positive reinforcement (5 marks)

ii. negative reinforcement. (5 marks)

4. Answer **all** parts of this question:

a) Answer **both** of the following:

i. Describe typical play behaviour in cats and discuss how this changes with age. (8 marks)

ii. Discuss the function of play in cats. (7 marks)

b) Answer **both** of the following:

i. Discuss what is meant by a 'positive welfare state' in animals and discuss why its measurement is important. (5 marks)

ii. Describe methods by which a positive welfare state can be measured in animals. (10 marks)

End of paper



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Paper 2

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Paper 2: Veterinary Behaviour

Answer all four (4) questions

1. A client seeks your advice after several aggressive incidents between their two dogs; a two-year-old female desexed boxer and a four-year-old male desexed Jack Russell terrier.

The owner can recall several minor aggressive interactions between the two dogs over the past two years but in the past month there have been three significant fights which have resulted in at least one of the dogs requiring veterinary attention.

- the first incident occurred after the dogs were given bones
- the second incident occurred when the dogs were playing with the owner
- the third incident occurred when the owner was in the garden with both dogs but was not interacting with them

The dogs have access to both inside and outside the house during the day via a dog door.

The family consists of two adults and two young children under the age of four. There is at least one owner home most days.

Answer **all** parts of this question:

- a) List differential diagnoses for the aggression between the two dogs. *(6 marks)*

- b) Describe the environmental management strategies that would be recommended in this case. *(10 marks)*

- c) Describe the behaviour modification exercises that would be recommended. *(10 marks)*

- d) Briefly discuss the prognosis for this case. *(4 marks)*

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2. Answer **all** parts of this question:

a) Benzodiazepines are commonly prescribed for behavioural problems in pets:

- i. List the effects of benzodiazepines that may be useful in the treatment of behaviour cases. *(4 marks)*
- ii. List possible adverse effects of benzodiazepines. *(4 marks)*
- iii. Give **three (3)** examples of benzodiazepines. *(3 marks)*
- iv. Discuss the differences between the benzodiazepines you have listed in part a) iii, giving an example of a situation in which **each** would be used. *(7 marks)*

b) Tricyclic antidepressants (TCAs) are also commonly prescribed for behavioural problems in pets:

- i. List possible adverse effects of TCAs. *(5 marks)*
- ii. List **two (2)** examples of TCAs. *(2 marks)*
- iii. Discuss the differences between the TCAs you have listed in part b) ii, **and** give an example of a situation in which **each** would be used. *(5 marks)*

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3. Answer **all** parts of this question:

a) Answer **both** of the following:

- i. Name **two (2)** domestic species that engage in coprophagy (of either their own faeces **or** that of adult members of their own species) where this behaviour is considered normal. (2 marks)
- ii. For the **two (2)** species named in part a) i, describe when this behaviour occurs **and** the potential benefits to the individual engaging in the behaviour. (8 marks)

b) Answer **all** of the following:

- i. In dogs, coprophagy of canine faeces (excluding maternal ingestion of the faeces of puppies) is considered abnormal. List differential diagnoses for the behaviour in this species. (4 marks)
- ii. Briefly describe the steps taken to investigate a case of coprophagy in a dog. (8 marks)
- iii. List potential treatment options for canine coprophagy. (8 marks)

4. Answer **all** parts of this question:

- a) List behavioural problems that may be seen in intensively housed weaner pigs. (6 marks)
- b) List behavioural problems that may be seen in extensively housed 'free range' weaner pigs. (4 marks)
- c) Describe management strategies that could be used to reduce the incidence of behavioural problems in weaner piglets at an intensive piggery. (20 marks)

End of paper