



Australian and New Zealand College of Veterinary Scientists

Membership Examination

June 2019

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 marks total 120 marks

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Paper 1: Veterinary Behaviour

Answer all four (4) questions

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

- a) Discuss the function of aggressive behaviour. (8 marks)
- b) Compare and contrast the aggressive behaviour of **one (1)** carnivore and **one (1)** herbivore. (6 marks)
- c) Use examples to illustrate how aggressive behaviour can be recognised as abnormal. (8 marks)
- d) Use examples to discuss ways in which medical conditions might affect the expression of aggressive behaviour in animals. (8 marks)

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

- a) Define memory and identify the different types of memory, providing an example of each type. (6 marks)
- b) Define anxiety and describe the function of anxiety for an animal. (5 marks)
- c) Discuss the relationships between learning, emotional state and memory. (7 marks)
- d) Briefly describe the amygdala and discuss the role of this structure in anxiety and memory formation. (7 marks)
- e) Describe the positive and negative effects of psychotropic medications on learning. Provide an example of **one (1)** drug that has a positive effect on learning, and **one (1)** drug that has a negative effect on learning, and explain how these effects can be used in managing behaviour in veterinary patients. (5 marks)

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

- a) Describe the factors that should be assessed when considering the welfare of a caged parrot. (8 marks)
- b) Briefly describe the timeline of kitten development. (10 marks)
- c) Compare and contrast the grooming behaviour of horses and cats. (6 marks)
- d) Discuss, giving examples, the importance of maternal experience on feeding behaviour of young animals. (6 marks)

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

- a) Define the following and give an example of each: (8 marks)
 - i. sensitisation
 - ii. habituation
 - iii. negative reinforcement
 - iv. salience
- b) Considering the principles of learning theory, briefly describe **two (2)** methods that could be used to increase the probability of a behaviour being repeated. (4 marks)
- c) Answer **both** parts of this sub-question:
 - i. List the parts of the limbic system. (3 marks)
 - ii. Describe the function of the limbic system, as a whole. (5 marks)
- d) Discuss the advantages and disadvantages for animals of living in a social group. (10 marks)

End of paper



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Veterinary Behaviour Paper 2

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Answer **ALL FOUR (4)** questions

Answer **FOUR** questions, each worth 30 marks total 120 marks

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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 cats, a two-year-old, male, neutered domestic shorthair and a 12-year-old, female, neutered Ragdoll cat. There have been at least three aggressive episodes in the previous few months. The cats live confined indoors with access to an outdoor cat run.

Answer **all** parts of this question:

- a) List the most relevant questions to ask the owner in order to make a diagnosis. *(6 marks)*
- b) List the differential diagnoses that should be considered. *(6 marks)*
- c) Discuss methods to differentiate between these potential diagnoses. *(6 marks)*
- d) Describe appropriate environmental management strategies for indoor cats to maximise their welfare. *(6 marks)*
- e) Describe appropriate behavioural modification management strategies for a cat diagnosed with aggression, due to anxiety. *(6 marks)*

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

- a) A client has purchased a miniature pig as an indoor household pet. They ask you how to train the pig to walk on a harness and lead. Outline a training programme for the client to implement and identify the learning principles involved. *(14 marks)*

- b) The client also owns a large dog. The dog gets extremely anxious and reactive when the now-not-so-miniature pig is near its bed. Outline an appropriate approach to reducing the dog's anxiety and reactivity when around the pig. Identify the behaviour modification techniques involved, and, in your answer differentiate how behaviour modification differs from training. *(12 marks)*

- c) Give a specific example of a method that should **not** be tried to reduce the reactivity between the two animals. Explain why the method is unsuitable and identify the learning principles involved. *(4 marks)*

3. Small, furry exotics are becoming increasingly popular household pets.

Answer **all** parts of this question:

- a) Applying knowledge of normal ferret behaviour, describe how their behavioural and environmental needs can be met appropriately. *(8 marks)*

- b) A client brings in their guinea pig with pododermatitis. It lives on its own in a small, two-storey, outdoor hutch. Considering normal guinea pig behaviour, identify and discuss the factors that may be affecting the welfare of this animal. In your answer, define animal welfare and include an appropriate model that is used to assess animal welfare. *(12 marks)*

- c) Considering normal rabbit behaviour, briefly outline the factors that need to be considered for a successful pest management programme in a large rural environment. *(10 marks)*

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4. A three-year-old gelding has been presented to you for biting and kicking. He is a retired racehorse and lives in a stable.

Answer **all** parts of this question:

- a) List the possible causes of biting and kicking in a horse. (6 marks)
- b) List other behaviours that you may see in a horse that is suffering from a mental health disorder. (6 marks)
- c) Considering species-typical behaviour for horses, discuss factors that could affect the mental welfare and emotional wellbeing of this horse. (8 marks)
- d) Describe in detail appropriate environmental and behavioural modification strategies for this horse in order to reduce the biting and kicking. (10 marks)

End of paper