



Australian and New Zealand College of Veterinary Scientists

Membership Examination

June 2016

Small Animal Dentistry and Oral Surgery 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: Small Animal Dentistry and Oral Surgery

Answer all four (4) questions

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

- a) Discuss the concepts of pre-emptive nerve block analgesia in dental procedures **and** the advantages of local anaesthesia over other forms of analgesia in oral surgery. (8 marks)
- b) Describe the mode of action, time to onset and duration of action of both lignocaine **and** bupivacaine. (5 marks)
- c) Based on 1b), provide a specific example of when it would be appropriate to use **each** of lignocaine and bupivacaine. Include in your answer a justification for **each** choice. (7 marks)
- d) Compare and contrast how you would place a caudal maxillary nerve block versus an infra-orbital nerve block in a dog. Include in your answer:
(10 marks)
 - anatomical considerations
 - the technique utilised
 - structures anaesthetised.

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2. Enamel hypoplasia and supernumerary teeth are common developmental clinical problems.

Answer **all** parts of this question:

- a) Using your knowledge of embryology, development and maturation of teeth describe the development of: *(12 marks)*
- enamel hypoplasia
 - supernumerary teeth.
- b) Discuss the treatment options for enamel hypoplasia **and** supernumerary teeth. *(10 marks)*
- c) List **eight (8)** other possible developmental and congenital abnormalities of dentition. *(8 marks)*
3. Discuss appropriate oral fracture repair techniques *(15 marks)* **and** the possible complications of inappropriate repair management *(15 marks)*.
4. Describe the structure and function of **each** of the tissues that make up the periodontium. Include in your answer a discussion on how the structure **and** function of these tissues changes with the onset and progression of periodontal disease. *(30 marks)*

End of paper



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Small Animal Dentistry and Oral Surgery Paper 2

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Answer **ALL FOUR (4)** questions

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

Paper 2: Small Animal Dentistry and Oral Surgery

Answer all four (4) questions

1. A five-year-old male neutered boxer dog is presented to you. His owners have noticed he has developed halitosis and is not chewing his food. On oral examination you note that the gingiva is enlarged, and has almost engulfed some of the teeth. The problem appears to involve all four quadrants and has a reasonably symmetrical distribution.

Answer **all** parts of this question:

- a) What is your primary differential diagnosis? (2 marks)
- b) What is understood about the aetiology and pathogenesis of this condition?
(13 marks)
- c) Discuss your short **and** long term management of this case. Include details of any procedures performed. (15 marks)

2. You are performing a dental procedure on a 12-year-old female, spayed Siamese cat. You have taken full mouth dental radiographs of this patient and determined that there is tooth resorption affecting the maxillary right canine tooth (104) and the mandibular left third premolar tooth (307).

Answer **all** parts of this question:

- a) Describe the radiographic techniques you would have employed to obtain the images of these two teeth. (2 marks)
- b) Your radiographs reveal that tooth 104 is undergoing type 1 tooth resorption:
 - i. Describe the typical radiographic appearance of a tooth with type 1 tooth resorption. (5 marks)
 - ii. Give a detailed description of your treatment plan for this tooth.
(9 marks)

Question 2 continued over page

- c) Your radiographs reveal that tooth 307 is undergoing type 2 tooth resorption:
- i. Describe the typical radiographic appearance of a tooth with type 2 tooth resorption. (5 marks)
 - ii. Give a detailed description of your treatment plan for this tooth. (9 marks)

3. An 11-month-old Staffordshire bull terrier presents to you. His owners report that he broke his lower right canine tooth (404) trying to escape during a storm two days ago. On conscious clinical examination you determine that tooth 404 has a complicated crown fracture, the exposed pulp is pink in colour. Further clinical examination is unremarkable and the owners report that he is happy and eating normally.

Answer **all** parts of this question:

- a) Provide details of the treatment options you discuss with the owners and your reasons for and against **each** of these options. (5 marks)
 - b) The owners wish to save the dog's tooth. Explain in detail the procedure(s) you would perform including the instruments and materials used. (20 marks)
 - c) Describe any special considerations or complications you may encounter when treating this dog's fractured tooth. (5 marks)
4. A nine-year-old female spayed Kelpie is presented with a right rostral mandibular mass that the owners noticed about a month ago.

Answer **all** parts of this question:

- a) Describe the diagnostic plan that you would propose to provide for this patient. (5 marks)
- b) The biopsy diagnosis is acanthomatous ameloblastoma. Provide reasons for any procedure(s) you advise **and** how you would perform the advised procedure(s). (20 marks)
- c) Comment on the short **and** long term follow-up of this case. (5 marks)

End of paper