



The Australian and New Zealand
College of Veterinary Scientists

Membership Examination

June 2012

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

All four questions are of equal value

Answer **FOUR** questions each worth 25 markstotal 100 marks

Paper 1: Small Animal Dentistry and Oral Surgery

Answer ALL four (4) questions.

1. Describe the embryology, formation and maturation of the tooth, including the pulp's responses to noxious stimuli. (25 marks)

2. Select **four (4)** drugs from each of a minimum of **three (3)** categories that are used in the management of pain for dental patients. Discuss the mode of action, duration of effect, indications and contraindications of each of the four drugs. (25 marks)

3. Discuss the aetiology and pathogenesis of periodontal disease in dogs. (25 marks)

4. Discuss each of the following:
 - a) the stages of wound healing of a laceration involving the oral mucosa (12½ marks)

 - b) the principles and techniques involved in jaw fracture management. (12½ marks)

End of paper



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Answer **ALL FOUR (4)** questions

All four questions are of equal value

Answer **FOUR** questions each worth 25 marks total 100 marks

Paper 2: Small Animal Dentistry and Oral Surgery

Answer ALL four (4) questions.

1. Describe your treatment plans and the surgical steps involved in the extraction of both of the following teeth; details of ancillary medical therapy are **not** required:
 - a) A periodontally sound maxillary 4th premolar tooth with a necrotic pulp in a three-year-old healthy golden retriever dog. (10 marks)
 - b) Bilateral mandibular canine teeth with tooth resorptions extending through the enamel 0.5mm into the dentine at the cemento-enamel junction in a 14-year-old healthy domestic shorthair cat. Radiographs have demonstrated that the left canine tooth has a uniform periodontal ligament space, whereas the right canine tooth has loss of the periodontal ligament space with no visible apical lucency. (15 marks)

2. A client presents to your practice with a six-year-old healthy beagle dog with a complicated crown fracture of the maxillary 4th premolar tooth. The owner is not certain when the tooth fractured, but believes it may have occurred whilst chewing on a large bone about ten days ago.
 - a) List the treatment options that you would discuss with the client. (5 marks)

After discussing the treatment options with the client, the client decides to follow your recommendation of root canal therapy (complete pulpectomy).

- b) List the technical steps (including your sequence and timing) involved in delivering a successful root canal therapy. Include in each step, details of your technique including instruments and materials used. (20 marks)

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3. A six-year-old German shepherd dog presents to your practice with an ulcerated gingival mass involving the right mandibular incisor teeth (401,402,403). The owner says that she first noticed the mass one week ago.
- a) Discuss your management of this case, including:
 - i. differential diagnoses (5 marks)
 - ii. diagnostic tests that you would need to perform (10 marks)
 - b) Histopathology on the submitted biopsy samples confirms that the gingival mass is a squamous cell carcinoma. Discuss any medical and/or surgical treatment required. (10 marks)
4. A 10-year-old Maltese terrier presents to your practice with severe halitosis and ptyalism of two weeks duration. On extra-oral examination you find a mobile 3cm diameter right mandibular lymph node. Rectal temperature is 38.7 C. On intra-oral examination you find a 2 cm diameter soft non-painful highly mobile right-sided sublingual mass.

Blood profile reveals a neutrophilia with a left shift and fine needle aspiration (FNA) of the sublingual mass demonstrates a thick ropy fluid and on stained specimen of a FNA of the right mandibular lymph node reveals **mainly** lymphocytes on microscopy.

The client requests that all be done to treat her pet.

- a) State the most likely diagnosis and give reasons for reaching this diagnosis. (10 marks)
- b) Based on this diagnosis discuss your immediate, medium-term and long-term management of this case. (15 marks)

End of paper