



Australian and New Zealand College of Veterinary Scientists

Membership Examination

June 2018

Equine Dentistry

Paper 1

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

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

Answer **ALL FIVE (5)** questions

Answer **FIVE (5)** questions, each worth 20 markstotal 100 marks

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Paper 1: Equine Dentistry

Answer all five (5) questions

1. Answer **all** parts of this question:
 - a) List the anatomical features of the temporomandibular joint (TMJ). *(10 marks)*
 - b) List the possible clinical signs associated with TMJ disease. *(2.5 marks)*
 - c) List the diagnostic tests used to investigate TMJ disease in the horse **and** briefly identify any advantages **and** disadvantages of **each**. *(7.5 marks)*

2. Briefly discuss the various therapeutic options that might be considered for **each** condition below, including the rationale, if any, for the use of antibiotics in the treatment of:
 - a) advanced periodontal disease *(10 marks)*
 - b) tooth root abscess of 209 with secondary sinusitis. *(10 marks)*

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3. Oral radiology is considered to be an important part of an oral examination.

Answer **all** parts of this question:

- a) List the indications for the use of radiology in the investigation of dental disease in the horse. *(5 marks)*
- b) List the advantages **and** disadvantages of extra-oral versus intra-oral radiology in the horse. *(10 marks)*
- c) Describe the bisecting angle technique **and** explain when its use is appropriate. *(5 marks)*

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

- a) List the optimum facilities **and** equipment required for the extraction of the 304 in the horse. *(10 marks)*
- b) Outline the technique for the extraction of the 304. *(10 marks)*

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5. Briefly discuss the treatment options for the following causes of periodontal disease:
- a) Closed-valve diastemata 706–707–708 in a two-year-old Thoroughbred with five-millimetre deep lingual and palatal periodontal pockets. *(5 marks)*
 - b) Open mandibular bone fracture with avulsed 302 and 303. *(5 marks)*
 - c) Equine odontoclastic tooth resorption and hypercementosis (EOTRH) of the lower incisors. *(10 marks)*

End of paper



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Answer **ALL FIVE (5)** questions

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Paper 2: Equine Dentistry

Answer all five (5) questions

1. A four-year-old Thoroughbred filly was presented with a three-centimetre mass in the left mandible between 302 and 703. A biopsy confirms the lesion to be a squamous cell carcinoma.

Answer **both** parts of this question:

- a) Describe **and** compare the following **three (3)** treatment options and the prognosis for this case. Include the variables that would affect the choice of treatment(s). *(16 marks)*
- i surgical excision
 - ii cryotherapy
 - iii chemotherapy.
- b) List any **other** options that may also be used to treat this type of tumour. *(4 marks)*

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2. You have recently joined a new practice in tropical Queensland and notice one of the senior partners using a power tool to treat an 18-year-old Thoroughbred horse in the clinic. He comments to you that it has huge rostral ramps in the upper 06s and lower 11 hooks.

Later in the day, one of the nurses asks you to check the horse because it appears to be depressed, anorexic and exhibiting ptyalism.

Answer **all** parts of this question:

- a) Discuss the pathophysiology of thermal trauma. (5 marks)
- b) Describe the possible sequelae for this horse over time. (5 marks)
- c) Discuss the techniques to avoid thermal trauma. (2 marks)
- d) List **and** briefly explain other differential diagnoses for these clinical signs in any horse after a dental examination **and** treatment. (8 marks)

3. You are asked to examine a valuable one-month-old Thoroughbred filly foal with a 10-millimetre maxillary overjet and a one-to-two-millimetre overbite.

Answer **all** parts of this question:

- a) List the consequences of this condition if left untreated, including any possible impacts on racing performance. (5 marks)
- b) List treatment options for this horse. (10 marks)
- c) Discuss considerations for future breeding of the dam, sire and this filly. (5 marks)

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4. A 10-year-old Thoroughbred gelding is presented to you three months after a float accident. A fractured 303 is present and there is material oozing from the tooth fracture site. Outline the principles of orthograde endodontic repair of a 303 with an open dead pulp. (20 marks)

5. You are asked to perform a dental examination of a 28-year-old Arab gelding that is quidding and losing weight. He has not had a dental examination for several years. On your initial examination of the horse, in general, you find that the horse has an abnormally long hair coat, a grade 2/5 left systolic heart murmur and is nervous each time you approach.

Answer **both** parts of this question:

- a) Discuss the options and considerations for sedation and analgesia for a routine dental examination in this horse. (15 marks)

- b) After your examination, the horse relaxes and appears ataxic. Discuss management of his recovery after the procedure. (5 marks)

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