

Australian College of Veterinary Scientists
Membership Examination

June 2010

Equine Dentistry

Paper 1

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

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

Answer **four (4)** from the six questions **only**.

All questions are of equal value.

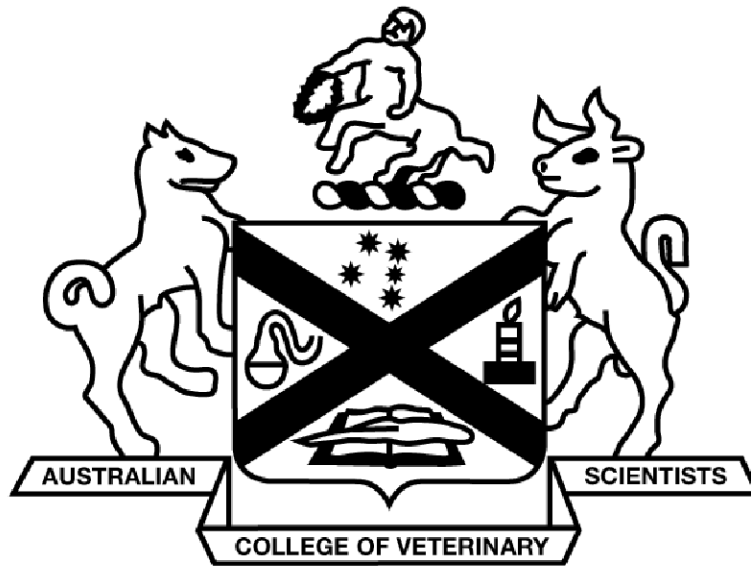
Subsections of questions are of equal value unless stated otherwise.

Paper 1: Equine Dentistry

Answer four (4) from the six questions only.

1. Name and define the calcified tissues likely to be present in Triadan tooth 210 in an 18-year-old thoroughbred gelding. Identify the main ultrastructural differences between the different tissue types. You may wish to use diagrams to help identify relationships between these structures.
2. Describe the embryological dental development of a foal from conception to birth.
3. Describe briefly the aetiopathogenesis of the following conditions:
 - a) periodontitis
 - b) apical infection
 - c) hooks and ramps
 - d) wavemouth
 - e) shearmouth.
4. Describe the pharmacological mode of action of **four (4)** sedatives and **two (2)** antibiotics commonly used in equine dental practice.
5. List the equipment that should be carried by a veterinarian who regularly performs equine dentistry. For **each** item give a **brief** explanation of its use and any potential safety issues regarding its use.
6. Answer **each** of the following:
 - a) Describe how the diet of a horse may affect its dentition. (15 marks)
 - b) List how you may alter dietary composition to assist in treatment of certain pathological dental conditions. (5 marks)
 - c) List **five (5)** mechanisms by which changes in diet have influenced the evolution of horses. (5 marks)

End of paper



Australian College of Veterinary Scientists
Membership Examination

June 2010

Equine Dentistry

Paper 2

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

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

Answer **four (4)** from the six questions **only**.

All questions are of equal value.

Subsections of questions are of equal value unless stated otherwise.

Paper 2: Equine Dentistry

Answer four (4) from the six questions only.

1. A nine-year-old thoroughbred gelding used as a polo pony had dental work performed by a lay equine dental technician two weeks ago. Since that time, the owner has said the horse is reluctant to eat although he seems interested in the food, drools a lot and occasionally takes in some hay but then lets it fall out. On external examination before sedation, it is noticed that the incisor arcades are gapped by 3 mm when the mouth is closed.

Discuss your approach to this case including differential diagnoses and advice to the client.

2. A 28-year-old retired Australian riding pony mare is losing weight despite the owner increasing the amount of good quality hay and chaff offered. She has been wormed regularly with effective anthelmintics. The horse is now in poor body condition.

Outline your differential diagnoses, diagnostic and treatment plans.

3. A 14-year-old thoroughbred gelding used for pony club work is presented with a slant bite down to the left. Oral examination under sedation revealed a large thin rostral hook on the 206 which was impacting into the mucosa of the left mandible. This was easily reduced to normal occlusion with no pulp exposure using power equipment with repeated irrigation. On attempting correction of the slant bite, you notice a red bleeding spot centrally on the occlusal surface of 403.

Discuss what you will tell the owner and describe your treatment.

4. You are presented with a three-year-old warmblood filly with a 4 cm diameter hard swelling ventrally on the left mandible approximately level with the rostral edge of the facial crest.
 - a) List your differential diagnoses. (10 marks)
 - b) Discuss your diagnostic approach. (15 marks)

Continued over page

5. A client has just purchased a yearling miniature horse gelding. This is his first horse. On examination you notice the horse has mandibular prognathism ('sow mouth').

Discuss your advice to the owner on what to expect in the oral cavity of this horse up to the age of five years.

6. On performing a routine dental examination on an 11-year-old Arabian mare, it was noted that 410 had an oblique fracture of the crown running at approximately 45 degrees from lingual to buccal (with the buccal margin 1 cm below gum level). The horse is asymptomatic and the owner assures you there are no riding or eating problems with the horse.

Discuss your approach to this case.

End of paper