



The Australian and New Zealand  
College of Veterinary Scientists

**Membership Examination**

June 2012

**Medicine of Australasian Wildlife Species**

**Paper 1**

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

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

Answer **ALL FOUR (4)** questions

All questions are of equal value

Subsections of questions are of equal value unless stated otherwise

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

# Paper 1: Medicine of Australasian Wildlife Species

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Answer **ALL** four (4) questions

1. Describe the anatomy and physiology of the reproductive systems of monotremes and marsupials, and outline how they differ from that of eutherian mammals. (25 marks)
2. Describe a comprehensive pre-release health assessment protocol for an avian species in a captive breed for release program. Choose either a psittacine or passerine species to illustrate your answer. Your answer should include a list of potential diseases of concern, diagnostic tests you would utilise, any preventative health measures and a detailed approach to the clinical examination. (25 marks)
3. You have been contracted to provide advice on the construction of a veterinary facility for a newly developed fauna park that houses a diverse collection of native species including macropodids, koalas, daysurids, echidnas, reptiles, and birds. The owners of the fauna park wish to provide veterinary care to sick and injured free-ranging wildlife on site. Discuss your recommendations for the design and management of a facility for the provision of animal treatment, quarantine, wildlife rehabilitation, diagnostics and hospitalisation of both collection animals and wildlife in this facility. (25 marks)
4. Discuss the provision of appropriate analgesia to captive wildlife species. Your answer should include a description of the major drug classes available, limitations associated with their use in wildlife, modes of administration, and indications and contraindications in wildlife species. (25 marks)

**End of paper**



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Answer **ALL FOUR (4)** questions

All questions are of equal value

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

# Paper 2: Medicine of Australasian Wildlife Species

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Answer **ALL** four (4) questions

1. Discuss the role of the veterinarian in a cetacean stranding OR pinniped stranding. Your answer should include a discussion of the veterinarian's relationship with relevant authorities and stakeholders, clinical assessment and triage, therapeutics, and options for euthanasia. (25 marks)
  
2. Write short notes on **each** of the following:
  - a) the epidemiology and diagnosis of botulism in wild waterfowl (7 marks)
  - b) the aetiology, clinical signs and pathogenesis of coccidiosis in captive echidnas (*Tachyglossus aculeatus*) (6 marks)
  - c) the clinical signs, pathogenesis and diagnosis of ranavirus infections in amphibians (6 marks)
  - d) the options for anaesthetic induction of snakes, the relative merits of each option, and the monitoring of snakes under anaesthesia. (6 marks)
  
3. Describe **three (3)** common medical problems associated with hand-rearing orphaned marsupial joeys. Your answer should include the epidemiology, clinical signs, pathogenesis, treatment and prevention for the three conditions. (25 marks)
  
4. Write short notes on **each** of the following:
  - a) the assessment and management of injuries to the patagium of flying foxes (*Pteropus* spp.) (6 marks)
  - b) the pathogenesis, clinical signs and prevention of disease due to *Plasmodium* spp. infections in captive penguins (7 marks)
  - c) the pathogenesis, clinical signs and treatment of the *Chrysosporium* anamorph of *Nannizziopsis vriesii* (CANV) infections in bearded dragons (6 marks)
  - d) the aetiology, clinical signs and diagnosis of lymphoid neoplasia in koalas. (6 marks)

**End of paper**