



Australian and New Zealand College of Veterinary Scientists

Membership Examination

June 2016

Medicine of Australasian Wildlife Species 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

© 2016 Australian and New Zealand College of Veterinary Scientists ABN 00 50 000894 208

This publication is copyright. Other than for the purposes of and subject to the conditions prescribed under the Copyright Act, no part of it may in any form or by any means (electronic, mechanical, microcopying, photocopying, recording or otherwise) be reproduced, stored in a retrieval system or transmitted without prior written permission. Enquiries should be addressed to the Australian and New Zealand College of Veterinary Scientists

Paper 1: Medicine of Australasian Wildlife Species

Answer all four (4) questions

1. Identify key differences in the dentition, gastrointestinal tract anatomy and nutritional ecology of kangaroos, the koala (*Phascolarctos cinereus*), and the brushtail possum (*Trichosurus vulpecula*). Discuss the relevance of these differences in the development of captive diets. (30 marks)

2. Answer **four (4)** parts only of this question:
 - a) Discuss the clinical signs and diagnosis of psittacid herpesvirus-1. (7.5 marks)

 - b) Discuss the clinical signs of pain in birds, and compare the efficacy of available analgesic options for a pigeon with a fractured humerus. (7.5 marks)

 - c) Discuss the aetiology, zoonotic potential and prevention of avian mycobacteriosis. (7.5 marks)

 - d) Discuss the clinical significance, treatment and prevention of snake mites (*Ophionyssus natricis*) in captivity. (7.5 marks)

 - e) Discuss the housing and dietary requirements of tuatara (*Sphenodon* spp.) (7.5 marks)

 - f) Discuss the diagnostic options for chytridiomycosis in tadpoles and adult frogs. (7.5 marks)

Continued over page

3. Choose **one (1)** species from **each** of the taxonomic categories below. For **each** species, compare and contrast the available methods for safe capture and restraint in a free ranging situation:

a) marine mammal (10 marks)

b) bird (10 marks)

c) macropod. (10 marks)

4. Answer **four (4)** parts only of this question:

a) Discuss the impact of oil exposure on the health of free-ranging marine mammals. (7.5 marks)

b) Discuss the diagnostic approach to diarrhoea in orphaned marsupial joeys being hand-reared. (7.5 marks)

c) Discuss the pathogenesis and diagnosis of cryptococcosis in koalas (*Phascolarctos cinereus*). (7.5 marks)

d) Discuss the role of brushtail possums (*Trichosurus vulpecula*) in the epidemiology of tuberculosis in New Zealand (7.5 marks)

e) Discuss the risk factors for, and prevention of, oral necrobacillosis in captive macropods. (7.5 marks)

f) Discuss the epidemiology of Tasmanian devil facial tumour disease and its implications for the conservation of the species. (7.5 marks)

End of paper



Australian and New Zealand College of Veterinary Scientists

Membership Examination

June 2016

Medicine of Australasian Wildlife Species

Paper 2

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

Paper 2: Medicine of Australasian Wildlife Species

Answer all four (4) questions

1. Discuss the considerations for the release of a captive bred native species of your choice, from pre-release evaluation to post-release monitoring. In your answer, include biosecurity, logistical and welfare concerns. *(30 marks)*
2. Design a wildlife response plan for a large bushfire. Your answer should include discussion of the veterinarian's relationship with relevant agencies, triage, treatment and considerations for release. *(30 marks)*
3. You have been contracted to provide veterinary services to a native fauna park. Discuss the components of a comprehensive preventative medicine program for this collection. *(30 marks)*
4. Discuss the welfare, biosecurity and conservation considerations of public feeding of wild birds, illustrating your answer with specific examples. *(30 marks)*

End of paper