



AUSTRALIAN AND NEW ZEALAND COLLEGE OF VETERINARY SCIENTISTS

MEMBERSHIP GUIDELINES

Medicine of Beef Cattle

INTRODUCTION

These Membership Guidelines should be read in conjunction with the *Membership Candidate Handbook*.

ELIGIBILITY

Refer to the *Membership Candidate Handbook*.

OBJECTIVES

General objectives are detailed in the Guidelines for membership candidates. Candidates must have a **sound knowledge** of the basic science of medicine. In addition candidates must have a **sound**¹ **knowledge** of the production management and diseases of beef cattle.

LEARNING OUTCOMES

This course outline is a guide only and additional matters may be raised in the examination. It is suggested that candidates seek further advice from their mentor prior to the examination.

1. The candidate will have a **sound knowledge** of anatomy and physiology of cattle.
2. The candidate should display a **sound knowledge** of epidemiology, pathogenesis, clinical signs, pathology, differential diagnosis, treatment and control of diseases of beef cattle in Australia and New Zealand.
3. The candidate will have a **sound knowledge** of management programs for the following within the beef cattle industry:
 - a. preventative medicine, pregnancy, calving and calves
 - b. heifers from weaning to first calving
 - c. improving reproductive efficiency
 - d. feedlot diseases.

¹ Knowledge Levels:

Sound knowledge – candidate must know all of the principles of the topic including some of the finer detail, and be able to identify areas where opinions may diverge. A middle level of knowledge.

Basic knowledge – candidate must know the main points of the topic and the core literature.

4. The candidate should have a **basic knowledge** of:
 - a. those exotic diseases which are likely to cause a threat to the Australasian cattle industry
 - b. the State/Federal regulations governing the control of endemic and exotic diseases
 - c. the clinical nutrition of beef cattle
 - d. the economics of management decisions as they relate to disease control.

EXAMINATION

For information on both the standard and the format of the Written and Oral examinations, candidates are referred to the *Membership Candidates Handbook*. The Membership examination has **two separate components**:

1. **Written Examination (Component 1)**
Written Paper 1 (two hours): Principles of the Subject
Written Paper 2 (two hours): Applied Aspects of the Subject
2. **Oral Examination (Component 2)**
Oral (one hour)

The written examination will comprise of two separate two-hour written papers taken on the same day. There will be an additional 15 minutes perusal time for each paper, during which no writing in an answer booklet is permitted. In each paper you are provided with four (4) questions to answer, worth 30 marks each, giving a total of 120 marks per paper. There is no choice of questions. Marks allocated to each question and to each subsection of questions will be clearly indicated on the written paper.

Written Paper 1:

This paper is designed to test the candidate's knowledge of the principles of Medicine of Beef Cattle as described in the Learning Outcomes using essay-style, short answer and note-point formats. Answers may cite specific examples where general principles apply, but should primarily address the theoretical basis underlying each example.

Written Paper 2:

This paper is designed to (a) test the candidate's ability to apply the principles of Medicine of Beef Cattle to particular cases/problems or tasks and (b) test the candidate's familiarity with the current practices and current issues that arise from activities within the discipline of Medicine of Beef Cattle in Australia and New Zealand using essay-style, short answer and note-point formats.

Oral Examination:

The duration of this examination is approximately one (1) hour. Slides and/or video of livestock and farms and other clinically relevant material are likely to be used during this examination. Five (5) cases are presented with supporting questions asked verbally in a face-to-face setting. The oral examination has a total of 100 marks with each case allocated 20 marks. This examination will assess the candidate's problem solving skills with respect to individual animal disease and herd health and production problems. The candidate will be required to demonstrate achievement of the above-mentioned Learning Outcomes.

RECOMMENDED READING MATERIAL

The candidate is expected to read widely within the discipline, paying particular attention to areas not part of their normal work experiences. This list of books and journals is intended to guide the candidate to some core references and other source material. Candidates also should be guided by their mentors. *The list is not comprehensive and is not intended as an indicator of the content of the examination.*

Text Books²

Post Graduate Committee in Veterinary Science, University of Sydney, *Lot feeding and Beef Production* (1992) Proceedings No 137.

Constable, Hinchcliff, Done, Gruenberg, (2007). *Veterinary Medicine; A textbook of the diseases of cattle, horses, sheep, pigs and goat*. 11th Edition, Saunders Ltd, London.

Smith B.P. (2014) *Large Animal Internal Medicine*, 5th Edition, Mosby Elsevier, St Louis.

Parkinson T.J., Vermunt J.J. and Malmo J. (2010). *Diseases of Cattle in Australasia – A Comprehensive Textbook*, VetLearn, New Zealand.

McKenzie R. (2012). *Australia's Poisonous Plants, Fungi and Cyanobacteria*. CSIRO Publishing, Collingwood Victoria.

Greenhough, P.R., Weaver, A.D. (1997). *Lameness in Cattle*, 3rd Edition, W.B. Saunders, Philadelphia.

Radostits O.M. (2001). *Herd Health, Food Animal Production Medicine*, 3rd Edition, W.B. Saunders.

Chenoweth, P.J. and Sanderson, M.W. (2005). *Cow-calf Production Medicine*, 1st Edition, Wiley Blackwell, London.

Thompson, G.B. & O'Mary, C.C. (1983). *The Feedlot*, 3rd Edition, Williams and Wilkins, England.

Post Graduate Committee in Veterinary Science, University of Sydney. *Lot feeding and Beef production*. (1992), Proceedings No. 137.

Geering, Forman and Nunn, (1995). *Exotic Diseases of Animals – a field guide for Australian veterinarians*, Australian Government Publishing Service, Canberra, Australia.

Makeham and Malcolm, (1998). *The Farming Game Now*, Cambridge University Press, Cambridge, United Kingdom.

Dijkhuizen and Morris, (1997). *Animal Health Economics*, Post Graduate Foundation in Veterinary Science, University of Sydney, Australia.

Herring, A.D. (2013). *Beef Cattle Production Systems*, 1st Edition, CABI.

Nutrient Requirements of Beef Cattle, 7th revised Edition (2000). National Academy Press, Washington, DC.

² **Definitions of Textbooks**

Recommended textbook – candidates should own or have ready access to a copy of the book and have a sound knowledge of the contents.

Additional references – candidates should have access to the book and have a basic knowledge of the contents.

Anderson D.E. and Rings D.M., (2009). *Current Veterinary Therapy: Food Animal Practice 5*, W.B. Saunders, Philadelphia.

Journals³

Candidates should be consistent readers of the journals listed below in section 1 and be familiar with those in section 2 as a course of reference material.

Candidates are encouraged to be part of industry email discussion lists (such as the ACV-List, AABP).

Section 1.

Veterinary Record
British Veterinary Journal
Journal American Veterinary Medical Association
New Zealand Veterinary Journal
Australian Veterinary Journal
Bovine Practitioner (and Proceedings of the A.A.B.P.)
Australian Society of Animal Production Publications
New Zealand Society of Animal Production Publications
Veterinary Clinics of North America – Food Animal Section
Canadian Veterinary Journal
In Practice (Journal of Postgraduate Clinical Study)
Proceedings of the World Buiatrics Congress
Journal of the Australian Cattle Veterinarians

Section 2

American Journal Veterinary Research
Cornell Veterinarian
Research in Veterinary Science
Journal of Comparative Pathology
Journal of Animal Science
Journal South African Veterinary Association
Onderstepoort Journal of Veterinary Research
Veterinary Bulletin
Veterinary Preventive Medicine

³ **Definitions of Journals**

Recommended Journal – candidates should have ready access to either print or electronic versions of the journal and have a sound knowledge of the published articles in the subject area.

Additional Journal – candidates should be able to access either printed or electronic versions of the journal and have a basic knowledge of the published articles in the subject area.

FURTHER INFORMATION

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