ELIGIBILITY REQUIREMENTS OF CANDIDATE

The candidate must meet the eligibility prerequisites for Membership outlined in the Membership Candidate Handbook.

OBJECTIVES

To demonstrate that the candidate has acquired a sufficient level of postgraduate knowledge and skill in the field of Veterinary Pathology, to be able to give sound advice in this field to veterinary colleagues.

LEARNING OUTCOMES

1. The candidate will have sound knowledge of:

   1.1. General and systemic pathobiology, including:

      1.1.1. The concepts of host-pathogen-environment interactions to produce disease.

      1.1.2. Principles of disease related to pathological processes (mechanisms of cell injury, inflammation and repair, vascular disturbances, disorders of growth, and pigmentation and deposits) and their causes (physical, chemical, infectious, genetic and immune-mediated).

      1.1.3. Pathobiology of organ systems, including the structural and functional changes at the subcellular, cellular, tissue and organ levels.

   1.2. The aetiology, pathogenesis, and pathological features of:

      1.2.1. Diseases of companion and commercial animals, including poultry and commercially-farmed aquatic species in Australia and New Zealand.
1.2.2. Major infectious animal diseases exotic to Australia and New Zealand.

1.3. Diagnostic (technical and interpretive) aspects of Veterinary Anatomical Pathology and Veterinary Clinical Pathology.

1.3.1. Routine laboratory procedures.

1.3.2. Immunodiagnosis, including immunohistochemistry.

2. The candidate will have basic knowledge of:

2.1. The aetiology, pathogenesis and pathological features of:

2.1.1. Major diseases of laboratory animals, and wildlife and zoo species in Australia and New Zealand.

2.2. Diagnostic (technical and interpretive) aspects of related disciplines, including Veterinary Microbiology, Veterinary Parasitology, Immunology and Toxicology, including:

2.2.1. Routine laboratory procedures.

2.3. Principles of related disciplines, including Comparative Anatomy, Physiology, Biochemistry, Veterinary Medicine, Molecular Biology (predominantly the principles of PCR and in situ hybridization), Veterinary Epidemiology, Veterinary Public Health, and Statistics.

3. The candidate will be able to:

3.1. Carry out a routine necropsy on a common companion or commercial animal species.

3.2. Detect, describe and interpret macroscopic and microscopic (histopathological, cytological and haematological) changes in specimens from companion and commercial animals, including poultry and commercially farmed aquatic species. Sound microscopic expertise is required for histopathological sections, and for cytological and haematological smears.

3.3. Interpret the results of haematological, biochemical, endocrinological, and immunological investigations for companion and commercial animals. Sound diagnostic expertise is required.

3.4. Provide to veterinarians and non-veterinarians information and advice on the pathological features of diseases in animals, using concise, clear verbal and written communication.

EXAMINATIONS

Refer to the Membership Candidate Handbook, Section 10.

The Membership examination has two (2) sections, the Written, and Practical/Oral.

The Written consists of two (2) parts:

1. Written Paper 1 (2 hours – 50%)

Skill levels:

Detailed expertise — the candidate must be able to perform the technique with a high degree of skill, and have extensive experience in its application. The highest level of proficiency.

Sound expertise — the candidate must be able to perform the technique with a moderate degree of skill, and have moderate experience in its application. A middle level of proficiency.

Basic expertise — the candidate must be able to perform the technique competently in uncomplicated circumstances.
Written Paper 1 assesses the candidate’s knowledge of the principles of Veterinary Pathology as described in the Learning Outcomes. The candidate should be able give examples of the application of the principles of pathobiology to specific diseases of animals. The candidate should be aware of recent advances in pathobiology (as covered in recent review articles). There is some choice in this paper.

2. Written Paper 2 (2 hours – 50%)

Written Paper 2 assesses the candidate’s ability to apply the principles of Veterinary Pathology, with an emphasis on knowledge of the aetiology, pathogenesis, pathological features, and diagnosis of animal diseases, as described in the Learning Outcomes. Questions involving analysis of clinical laboratory data (normal reference values are provided) may be included. There is considerable choice in this paper.

The Practical/Oral consists of three (3) parts:

1. Microscopy (2 hours - 50%)

Microscopy assesses the candidate’s ability to detect, describe and interpret morphological changes in histopathological sections, AND cytological and haematological smears. Laboratory data for interpretation may accompany haematological and cytological smears. The candidate is informed of the animal species, and in the case of smears, their origin.

2. Gross Pathology AND Clinical Pathology (Projected Images) (1 hour - 25%)

Gross Pathology assesses the candidate’s ability to detect, describe and interpret macroscopic changes illustrated in projected images of lesions in animals.

Clinical Pathology assesses the candidate’s ability to detect, describe and interpret microscopic changes illustrated in projected images of cytological smears (solid tissue, body fluid), urine components, and haematological smears (peripheral blood, bone marrow) of animal species.

The candidate may be required to write morphological and/or aetiological diagnoses and possibly brief comments.

The candidate is informed of the animal species and tissue.

Each candidate is required to answer all Gross Pathology AND Clinical Pathology questions in this part of the Practical/Oral.

3. Oral (1 hour - 25%)

Oral provides the candidate with a further opportunity to demonstrate knowledge of Veterinary Pathology as described in the Learning Outcomes.
RECOMMENDED READING LIST

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 *** indicate the likely most important 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.

Textbooks

General Veterinary Pathology


Anatomical Pathology

*Aughey E, Frye FL. *Comparative Veterinary Histology with Clinical Correlates* Manson Publishing (2001).


**Clinical Pathology**


**General References and Associated Disciplines**
Noga EJ. Fish Disease. Diagnosis and Treatment Mosby-Year Book (1996).

**Journals (particularly issues from the immediate past five years).**
*Aust Vet J.*
*Aust Vet Practitioner.*
*Comp. Continuing. Education for the Practising Veterinarian.*
*Equine Vet J.*
*J Am Anim Hosp Assoc.*
*J Comp Pathol.*
**J Vet Diagn Investig.*
*NZ Vet J.*
*Res Vet Sci*
**Vet Clin Pathol.*
**Vet Pathol.*
*Vet Clinics N Am (Small Animal Practice, Equine Practice and Food Animal Practice).*
*Vet Rec.*

**Journals for Review Articles**
*Immunology Today.*
*New England Journal of Medicine.*
Websites
Animal Health Australia (to access AUSVETPLAN through publications link):

The candidate should also be familiar with current and emerging animal diseases, both domestic and exotic. A useful resource in this regard is: http://www.promedmail.org

FURTHER INFORMATION
For further information contact the College Office
Telephone: International +61 (07) 3423 2016
Fax: International +61 (07) 3423 2977
Email: admin@acvsc.org.au
Web: www.acvs.org.au
Postal Address: Building 3, Garden City Office Park, 2404 Logan Road
EIGHT MILE PLAINS QLD 4113 Australia