

Australian College of Veterinary Scientists
Membership Examination

June 2011

Medicine of Sheep
Paper 1

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

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

Answer **ALL FOUR (4)** questions

All four main questions are of equal value

Answer **FOUR** questions each worth 25 markstotal 100 marks

Paper 1: Medicine of Sheep

Answer **ALL FOUR (4)** questions.

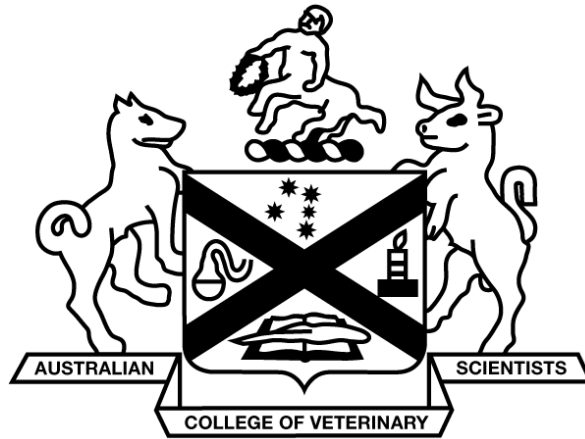
1. Describe the clinical signs and post-mortem findings that would be present in **each** of the following conditions of sheep:
 - a) *Actinobacillus seminis* infection in rams (6¼ marks)
 - b) scrapie (6¼ marks)
 - c) ovine Johne's disease (6¼ marks)
 - d) maedi-visna. (6¼ marks)

2. Discuss the risk factors for the occurrence in a flock of **each** of the following diseases:
 - a) lice (6¼ marks)
 - b) foot abscess (6¼ marks)
 - c) ovine brucellosis (6¼ marks)
 - d) redgut. (6¼ marks)

3. For **each** of the following diseases or syndromes, outline the key economic impacts they have on a sheep flock, including the expected losses per head in dollar terms:
 - a) caseous lymphadenitis (CLA) (6¼ marks)
 - b) pregnancy toxaemia (6¼ marks)
 - c) haemonchosis (6¼ marks)
 - d) liver fluke infection. (6¼ marks)

4. Describe the mechanisms for the development of anthelmintic resistance in sheep internal parasites, with particular reference to *Trichostrongylus* spp and *Teladorsagia circumcincta*. In your answer, make clear the connection between the parasite control strategies employed on sheep farms and the development of resistance in the parasitic nematode populations on those farms. (25 marks)

End of paper



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Paper 2

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Answer **ALL FOUR (4)** questions

All four main questions are of equal value

Answer **FOUR** questions each worth 25 markstotal 100 marks

Paper 2: Medicine of Sheep

Answer **ALL FOUR (4)** questions.

1. A client contacts you concerned about poor performance across his flock. His sheep are generally not performing well, with lower than average lambing performance and lower wool weights and lower growth rates than expected; they are generally not as healthy as he expects. Discuss how you will approach this problem (*12 marks*), the likely causes (*8 marks*) and the advice you would give (*5 marks*).
2. You are asked to address a local group of sheep producers on a topic relevant to their sheep farming. For your selected topic, discuss why you have chosen it (*5 marks*) and provide in detail the information you would provide in the presentation (*20 marks*).
3. Nutrition is an important component of animal health. List the energy and protein requirements for the various classes of stock normally found in sheep flocks (*10 marks*). Discuss the levels of feeding, both with pasture and through supplementary feeding, which are necessary in order to meet these requirements (*10 marks*). Discuss any advice about specific nutritional requirements that you would give a client for each of the various classes of stock in the flock (*5 marks*).
4. List **four (4)** major diseases that may require control or eradication from sheep flocks in your region or country (*4 marks*). Choose **one (1)** of these diseases and outline the steps you would take to control or eradicate the disease if it was present in a flock you are familiar with (*15 marks*). Include details of the flock you have chosen, the likely cost of the disease if not controlled in the flock, and the cost:benefit ratio of control and/or eradication (*6 marks*).

End of paper