THE ROYAL COLLEGE OF VETERINARY SURGEONS

STATUTORY EXAMINATION FOR MEMBERSHIP

2000 WRITTEN EXAMINATION QUESTION PAPERS

MEDICINE (3 hours)

SECTION A (answer (a) or (b) from each of the 3 pairs of questions)

1(a) An eight year old entire bitch is presented with a history of having recently developed haematuria. List the possible causes and describe the procedures which you would carry out to reach a definitive diagnosis.

OR

1(b) A twelve week old kitten is presented with a history of having had diarrhoea since being obtained some four weeks previously. What are the possible causes? Describe the steps you would take in an attempt to reach a diagnosis and suggest appropriate therapy for the conditions mentioned.

2(a) A client contacts you a month after he has turned his dairy cattle out to permanent pasture with a problem of reduced milk yield. Approximately 15% of his lactating cows have shown a marked drop in milk production to less than 20% of their expected yield. Individual cows then stage a slow recovery but most do not reach their original yield and he has had to dry off several early. What factors might be involved? Describe how you would approach your investigation of this problem.

OR

2(b) A farming client of your practice rears his own heifer replacements together with an equal number of beef calves bought from a local market at 1-2 weeks of age. During late winter several of his younger pre-weaned calves suffer from an outbreak of severe diarrhoea and a resulting growth check. The calves are reared in mixed groups and bucket fed powdered milk replacer. Both Rotavirus and Cryptosporidium parvum are isolated from several of the faecal samples. Describe firstly how you would treat the affected calves and secondly your advice to the farmer on how to prevent further cases.

3(a) Other than primary cardiac diseases, discuss the aetiology, investigation and treatment of conditions which may cause a persistent cough in adult dogs.

OR

3(b) The owner of an extensive riding stable complex calls you in to see a case of a four year old mare with complete anorexia, depression, a purulent nasal discharge, a severe pharyngitis/laryngitis and enlarged lymph nodes in the throat region. You suspect Streptococcus equi infection (Strangles). Describe firstly your approach to diagnosis and treatment of this case. Secondly, outline your advice to the owner of the riding stables concerning S. equi infection.

SECTION B (answer all questions)

1. Write short notes on canine exocrine pancreatic insufficiency.

2. In dogs, what signs are commonly associated with ingestion of the following poisons and how would you treat each of these intoxications?
3. Write short notes on the clinical signs, diagnosis and treatment of feline hyperthyroidism.

4. List the laboratory tests which you would carry out or request in the investigation of suspected hyperadrenocorticism in dogs. Comment briefly on the significance of the results of these tests.

5. What are the possible causes of hypersalivation in cats?

6. List the diseases of cattle for which a vaccine is available in the UK. Describe the vaccination regime for ONE of them.

7. Describe the clinical signs of Psoroptic Mange in sheep (Sheep Scab). How do you control this problem in the UK?

8. List the major pathogens that are implicated in outbreaks of respiratory disease in housed fattening pigs in the UK. Briefly describe the measures available to the farmer to control this problem.

9. What are the clinical signs found in a case of colic in a horse that would lead you to treat by medical means rather than a prompt referral for possible surgery?

10. What are the clinical conditions in cattle due to Ostertagia ostertagi? How can you control this problem under UK conditions?

SURGERY (3 hours)

SECTION A (answer (a) or (b) from each of the 3 pairs of questions)

1(a) Describe the clinical signs which might be exhibited by a dog with a unilateral perineal hernia. Discuss possible treatment options and any potential complications which may occur.

1(b) A five month old Scottish Deerhound is presented with progressive bilateral carpal valgus (lateral angulation of the forelimbs). Describe how you would make a clinical and radiological evaluation of this dog and discuss possible methods of correction.

2(a) An owner telephones to report that a horse has trodden on a 2 inch nail. How may the consequences of such an injury vary? Describe in detail how you would assess and treat the horse if the site of entry of the nail was found to be through the frog.

2(b) How can surgery contribute to the management of colic in horses?
3(a) An eight year old Doberman Pinscher has developed hindlimb ataxia and a short-stepping gait of its forelimbs. Describe the procedures which you would perform to establish a diagnosis and mention the treatments which might be performed for any likely causes.

OR

3(b) Compare and contrast the methods used to extract a third upper cheek tooth from a horse with an upper carnassial in the dog. Mention the indications for such extractions as well as potential complications.

SECTION B (answer all questions)

1. Describe the technique you would use to insert a chest drain into a dog and how would you manage it once it is in place?

2. You are responsible for the care of a 30kg dog following painful salvage surgery of the hip joint. What analgesic options are available to control pain during the first 24 hours after surgery?

3. Describe the appearance of a descemetocoele in a dog and outline your approach to the management of this condition.

4. Briefly comment upon the principles involved in the use of external skeletal fixation of fractures and mention indications for this technique in small animal orthopaedics.

5. A six month old bitch is presented to you with a history of urinary incontinence. Briefly outline how you would investigate this case in order to establish the cause of the incontinence.

6. Briefly describe the endoscopic features which would help you in the diagnosis of the following upper respiratory tract disorders of horses:
   i.) Epiglottal entrapment
   ii.) Arytenoid chondropathy

7. Write short notes on the construction and purpose of the following items of radiographic equipment:
   i.) Intensifying screen
   ii.) Focused grid

8. Outline the technique you would use to provide local analgesia for the following surgical procedures:
   i.) Amputation of a digit from a dairy cow
   ii.) Correction of left displacement of the abomasum in a cow
   iii.) Disbudding a young goat

9. Briefly annotate the features which you might find on direct visual inspection and with the aid of an ophthalmoscope in a case of equine anterior uveitis.

10. You are called to examine a racehorse which has pulled up lame during a training gallop and shows warm swelling at the caudal aspect of the metacarpus. How would
you evaluate such a swelling and briefly comment on treatments which might be used for the most likely causes of such a swelling.

REPRODUCTION (3 hours)

SECTION A (answer (a) or (b) from each of the 3 pairs of questions)

1(a) A four-year-old bitch has been mated at two separate oestruses but according to the owners did not become pregnant. Discuss how you would manage the case when the bitch next comes into season as the owners are very keen to obtain a litter.

OR

1(b) Describe the presenting signs of pyometra in the bitch. Discuss the factors that may be involved in the aetiology of the condition. What methods can be used to help you confirm your diagnosis?

2(a) Discuss the oestrous cycle of the mare. When would you choose to cover (mate) the mare and how would you determine the best time? What drug regimes are available to manage or alter the mare’s cycle if the owner requests such manipulation?

OR

2(b) The owner of a flock of 200 ewes reports that six animals have aborted two weeks before lambing was expected to start. List the important causes of abortion in sheep in the UK. Describe in detail how you would investigate the problem and advise the farmer about the management of the flock both now and in future years.

3(a) You are called to a five-year-old Hereford cow who has suffered a uterine prolapse 30 minutes after the owner assisted her with the delivery of a living calf. What are the possible causes of uterine prolapse in cattle and what other predisposing factors are believed to be involved? Describe how you would examine and treat the case.

OR

3(b) A seven-year-old valuable Holstein-Friesian cow has developed an excessively large abdomen at eight months into her pregnancy. You suspect that she may be suffering from Hydrops allantois. Describe concisely how you would confirm your diagnosis and how you would manage and treat the case.

SECTION B (answer all questions)

1. Briefly discuss the clinical signs and treatment of ONE tumour of the bitch’s reproductive system.

2. A Great Dane bitch is presented with signs of aggression that occur about two months after every oestrus. You suspect pseudopregnancy. Discuss the mode of action of TWO drugs that are licensed for treating this condition in the UK.

3. Define paraphimosis. How would you manage this condition in a dog that has recently mated a bitch?

4. Briefly discuss the signs and diagnosis of granulosa theca cell tumour in the mare.

5. How would you carry out pregnancy diagnosis in the queen cat?
6. A farmer reports that a number of his cows are suffering from endometritis four weeks after calving. List the factors that may contribute to the aetiology of this condition in a dairy herd. Describe concisely how you would treat this condition in an individual cow.

7. A five-year-old Suffolk ram failed to impregnate many ewes last year. List the possible causes of infertility in the ram. Describe concisely how you would obtain a semen sample from the animal noting the values of the normal parameters for semen quality in sheep.

8. A sow giving birth to her second litter has only delivered two piglets after being in labour for four hours. Describe concisely how you would investigate and treat the case.

9. Compare and contrast prolonged gestation in the cow and the mare. How would you manage a case of the condition in each species?

10. A group of ten Ayrshire heifers have failed to show signs of oestrus by eighteen-months of age. List the possible causes of anoestrus in these animals. State concisely how you would investigate and deal with the problem.

ANIMAL HEALTH (3 hours)

SECTION A (answer (a) or (b) from each of the 3 pairs of questions)

1(a) Discuss the importance of the transition from the dry period into early lactation for the health and productivity of the high yielding dairy cow. Outline a management and nutrition programme for a Holstein herd calving at grass in August and September.

OR

1(b) A client intends to house a flock of grey faced ewes during late pregnancy and for a few days after lambing. Give a concise, informative account of the advice you would give with regard to the management of the flock over this period in order to maximise lambing performance.

2(a) Write an essay on how veterinary practitioners and Official Veterinary Surgeons can collaborate to improve the health status of farm animals.

OR

2(b) You are invited by a Young Farmers Club to give a talk on the health and welfare of young calves reared as dairy replacements. Outline what you would tell them.

3(a) Describe the methods used to supplement grazing livestock with minerals and vitamins. Why do some of these methods appear to fail?

OR

3(b) The accurate identification of farm animals is important for assisting disease control, and increasingly for quality assurance purposes. Write an essay on the ways by which this may be achieved in cattle, sheep and pigs indicating the advantages and disadvantages of each method you describe.

SECTION B (answer all questions)

1. List the most important causes of death in piglets from birth to three weeks of age.
2. Write a concise note on stereotypic behaviour in the horse.

3. What factors are important in managing and feeding an obese six-year-old Labrador bitch?

4. What are the major advantages and disadvantages of housing cows in straw yards?

5. List the main preventative measures in controlling an outbreak of environmental mastitis in dairy cows.

6. Define the terms ‘disinfection’ and ‘sterilisation’. Summarise the properties of a disinfectant suitable for routine use on equipment in a meat processing plant.

7. List the parasitic conditions which might be detected in the lungs and livers of cattle slaughtered in the UK and indicate what action meat inspectors should take in each case.

8. Summarise the value and limitations of the ante-mortem inspection of birds and mammals destined for slaughter for human consumption.

9. Describe briefly how you would investigate the reason for the bulk milk from a dairy farm in your practice failing a test for inhibitory substances carried out at the dairy.

10. Explain the term “zoonosis”. List five causes of infectious abortion in ruminants which may also cause illness in humans.