FACULTY	**Health Sciences and Veterinary Medicine**		
DEPARTMENT	**School of Veterinary Medicine**		
SUBJECT	**Production Animal Clinical Studies IV**		
SUBJECT CODE	**V3872PA**		
DATE	**November 2024**		
DURATION	**3 hours**	**MARKS**	**150**

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This question paper consists of 7 pages, including this front page.

Instructions

Read the questions carefully
Answer ALL questions
Write clearly and concisely

Second Opportunity Examination

SECTION A

Diseases of Sheep and Goats [75 marks]

1	A two-crop ewe from a group of 155 pastured sheep due to start lambing in 3 weeks has aborted two fresh fetuses. Three other abortions have occurred over the previous 5 days. The ewe is bright and alert but there is a red–brown vulval discharge over the wool of the tail and perineum as shown in Fig 1. The rectal temperature is 40.0°C (104.0°F). The udder is reasonably well developed and there is some accumulated colostrum.  Fig 1 a. What four samples would you collect for laboratory diagnosis? [4] b. List five common causes of abortion. [5] c. What control measures could be adopted? [4]	13
2	Nineteen (19) sheep (10 adults and 9 lambs) were purchased one month ago in an organized farm at Mariental. Vaccination status was not clearly known. Three lambs (2 female and 1 male) of 2 months old died suddenly without any signs. These lambs were well fed and were reared in a feedlot. Postmortem examination revealed congestion in the lung, hemorrhages in the large intestine and generalized hemorrhage in the brain. (see Figs 2a and 2b below)  	8

	Fig 2a Fig 2b a. Based on acute nature of death, clinical signs and post mortem lesions, what is your tentative diagnosis? [1] b. What samples can you take to confirm your diagnosis; include a discussion of the laboratory workout? [7]	
3	A farmer from Kunene Region reports sudden death in three sheep over two weeks during early summer. You set out to investigate and find one of the dead sheep, as shown in the picture below in Figure 3a. Further investigation reveals that the farmer has wounds on the hands, as shown in the picture below in Figure 3b. [25]  Figure 3a  Figure3b	25
	a. What is your tentative diagnosis? [1] b. List differential diagnoses. [9] c. What samples would you collect to confirm your tentative diagnosis? [3] d. Which agent identification tests would you perform to confirm your tentative diagnosis? [4] e. If you were the state veterinarian of the area what control measures would you implement? [10]	
4	You set out to investigate an outbreak of lameness in a flock of sheep, where 12 out of 80 sheep are affected. On clinical examination you noted the absence of oral lesions but observed the following findings as shown in the photos below in Figures 4a and 4b. [20]	20

	 Figure 4a  Fig 4b	
	a. What is your tentative diagnosis? [1] b. What is the aetiology of your tentative diagnosis? [2] c. Describe the pathogenesis of your tentative diagnosis? [7] d. List eight differential diagnoses? [8] e. How would you confirm the disease? [2]	
5	Namibia recently imported 5 bucks for breeding purposes and were sent to quarantine. One of the recently imported 3-year old buck presented with the following signs while in quarantine: profuse diarrhoea and bottle jaw. It was euthanized and post-mortem lesions observed included mesenteric lymphadenopathy and granulomatous infiltrates of the ileum, jejunum, terminal small intestine, caecum and colon as shown in Figure 5a-5b below:  Figure 5a  Fig 5b	9
	a. What is your tentative diagnosis, and give your reasons for suspecting it? [2] b. What is the aetiology of your tentative diagnosis? [1] c. What tests would you request to confirm your tentative diagnosis? [4] d. List two antibody detection tests you would request to screen the rest of the bucks? [2]	

SECTION B

[75 marks]

1. A farmer near Windhoek is having constant respiratory problems in his feedlot cattle. Briefly outline what you would advise this farmer under the following headings.
   a) Differential diagnoses [4]
   b) Predisposing factors [10]

2. You are presented with the animal depicted in the picture below. Study the picture below (Fig 1.1) and answer the questions which follow:

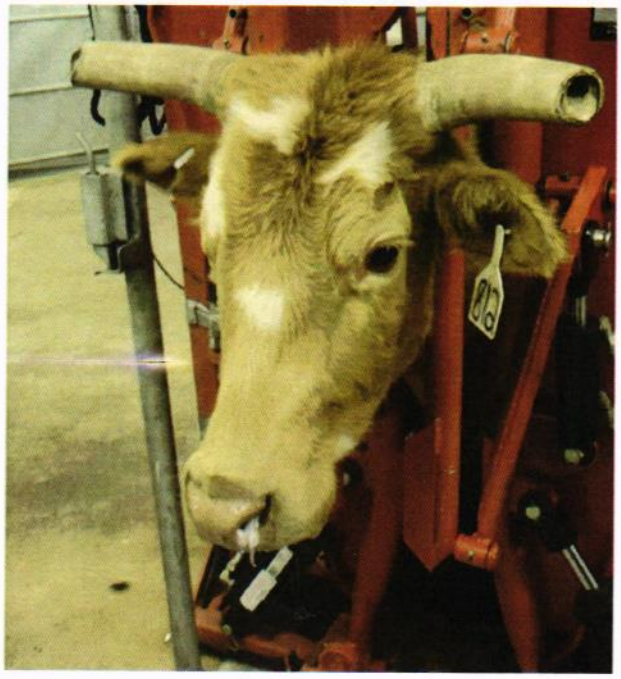


Fig 1.1

   a) What abnormalities can you see in the picture? [2]
   b) List three differential diagnoses [3]
   c) What is the most likely diagnosis? [1]
   d) How would you handle this case? [4]
   e) What advice would you give to the farmer? [3]

3. You are presented with a dairy cow exhibiting the clinical signs depicted in Fig. 2.1. The post-mortem findings for the same cow are illustrated in Fig. 2.2.

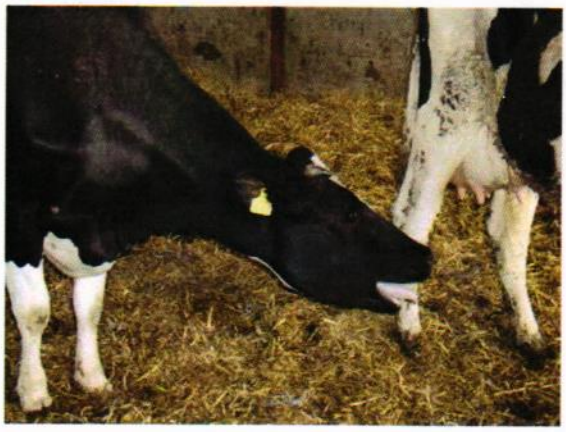


Fig. 2.1



Fig. 2.2

a) What is your diagnosis? [1]
b) List four differential diagnoses for this disease. [2]
c) How would you confirm this disease in a live animal? [3]
d) What is re-infection syndrome with respect to this disease? [2]
e) What will be your advice to the farmer? [3]

4. A commercial farmer reports that over the past two weeks, his cattle have exhibited various clinical signs, including respiratory distress, neurological symptoms, abortions, lameness, mastitis, testicular swelling, and ear problems. After a thorough investigation, you suspect a single pathogen may be responsible for this wide range of symptoms.

a) What is the most likely diagnosis? [1]
b) How would you confirm your diagnosis? [2]
c) How would you handle this problem? [2]

5. An emerging commercial farmer reports a sudden spike in respiratory symptoms among his cattle over the past seven days. Upon further questioning, you learn that the entire herd was dewormed approximately ten days ago.

a) What is the most likely diagnosis? [1]
b) What are the eight main predisposing factors for this disease in cattle? [4]

6. You conduct a post-mortem on a cow at a farm. The pictures below (Figs 3.1 & 3.2) show your findings.

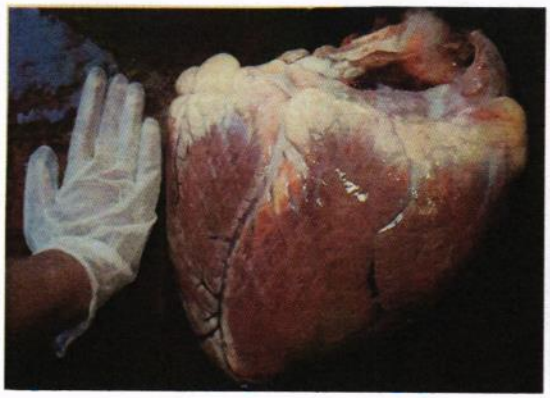


Fig 3.1



Fig 3.2

a) What abnormalities can you see? [2]

b) What is your diagnosis? [1]

c) List four pathogens that are commonly associated with this condition. [4]

d) What clinical signs would you expect to see in a cow with this condition? [6]