FACULTY	HEALTH SCIENCES & VETERINARY MEDICINE		
SCHOOL	VETERINARY MEDICINE		
DEPARTMENT	PARA-CLINICAL STUDIES		
SUBJECT	SYSTEMIC PATHOLOGY		
SUBJECT CODE	V3803AS		
DATE	NOVEMBER 2024		
DURATION		**MARKS**	150

SECOND OPPORTUNITY EXAMINATION

Examiners: Dr. J. Yabe and Dr. D. Mudimba

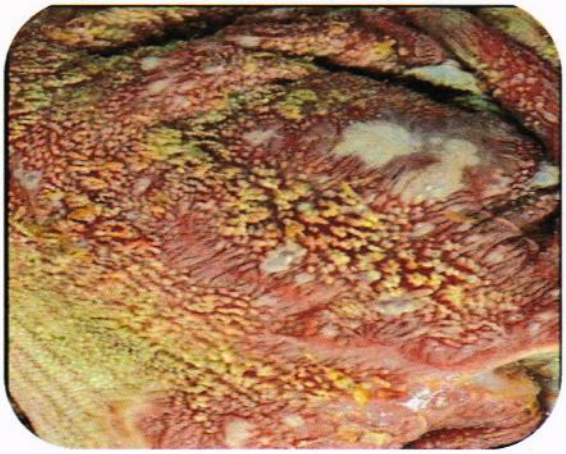
Internal Moderator: Prof Charles Ntahonshikira

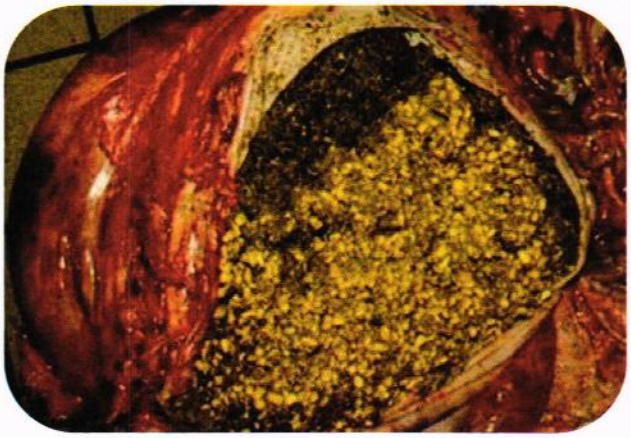
External Moderator: Professor G. Marruchella

This exam paper consists of 6 (six) pages including this front page.

QUESTION 1 [22]

The pictures below are from a steer that broke into the grain store house and afterwards was found dead in the kraal.





a. Describe the lesions on the left picture. [3]
b. Give the cause and diagnosis of this condition. [2]
c. Discuss the pathogenesis of how these kinds of lesions develop and what eventually kills the animals. [7]
d. Describe the lesions that will develop if the animal survives. [3]
e. Discuss how you would conduct the diagnosis of this condition. [3]
f. Describe how you would differentiate the lesions of this conditions caused by bacteria from those that are caused by fungi. [4]

QUESTION 2 [14]

a. Define and classify the term "hydrocephalus". [3]
b. Describe the primary and secondary lesions of cerebral trauma. [2]
c. Describe the pathological features of infarctions of the grey and white cerebral matter. [2]
d. Describe the pathological features of thiamine deficiency in carnivores and ruminants. [3]
e. Give a brief description of the microscopic features of the terms "central chromatolysis" and its diagnostic significance. [4]

QUESTION 3 [14]

The picture below shows an embolic pneumonic lung from a cow that died acutely after showing signs of respiratory distress and bilateral epistaxis.

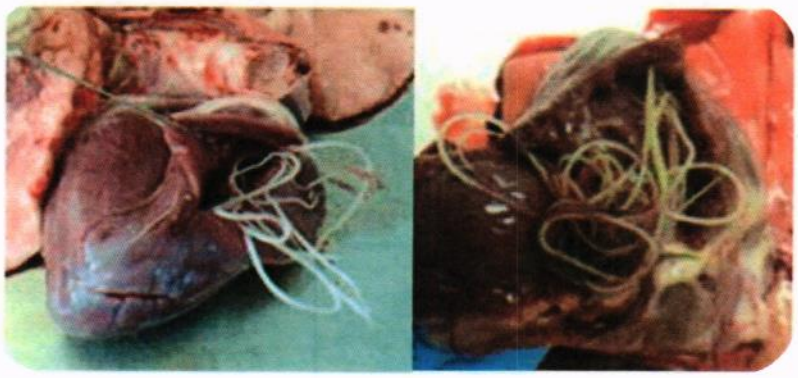


a. Describe the distribution of the lesions shown. [2]

b. Describe the gross and microscopic lesions associated with this condition. [5]
c. Name the common portal of entry for the causative agent of this type of pneumonia.
d. List 4 causes of this type of pneumonia in cattle. [4]
e. Name any other cause of this kind of pneumonia in dogs. [1]
f. Name the common sequelae of this condition. [1]

QUESTION 4 **[10]**

The pictures below were obtained from a dog that died of heart failure.



a. Give your diagnosis. [1]

b. State the side of the heart and the blood vessel that is the usual predilection site of this parasite. [1]

c. Explain how the dog ended up with heart failure. [5]

d. State the long-term effect of this condition. [3]

QUESTION 5 **[10]**

As a practicing veterinarian, you are presented with an intact male dog that has a clinical history of increase in the size of the testis. On physical examination, you notice a

firm mass on one testis and decide to remove it. There is evidence that the dog is feminized.

a. What would be your tentative diagnosis? [1]
b. Describe the gross features you would see. [4]

c. Describe the pathogenesis and sequelae of the feminization seen herein. [5]

QUESTION 6 **[20]**

PART A [5]

Describe the pathological features of cirrhosis.

PART B [5]

Describe the cutaneous manifestations of hepatic failure.

PART C [10]

Answer the following questions about cystic ovaries in animals.

a. Name three common non-neoplastic cysts found in ovaries. [3]
b. Name most common cyst seen in cows above and describe the gross features of the named cyst. [3]
c. Briefly describe 4 extraovarian lesions of cystic ovaries in cows [4]

QUESTION 7 **[10]**

PART A **[5]**

Write short notes on **any TWO (2)** of the following:

i. Pathogenesis of Orf (Contagious ecthyma) [5]
ii. Epitheliogenesis imperfecta (aplasia cutis) [5]
iii. Cutaneous mast cell tumours in dogs [5]

QUESTION 8 **[10]**

Answer the following questions about testicular tumors in dogs.

a. Name three important testicular tumors common in dogs. [3]
b. Name the tumor that appears lobulated, large and firm to hard. [1]

c. Name the testicular tumor that causes feminization in dogs. [1]

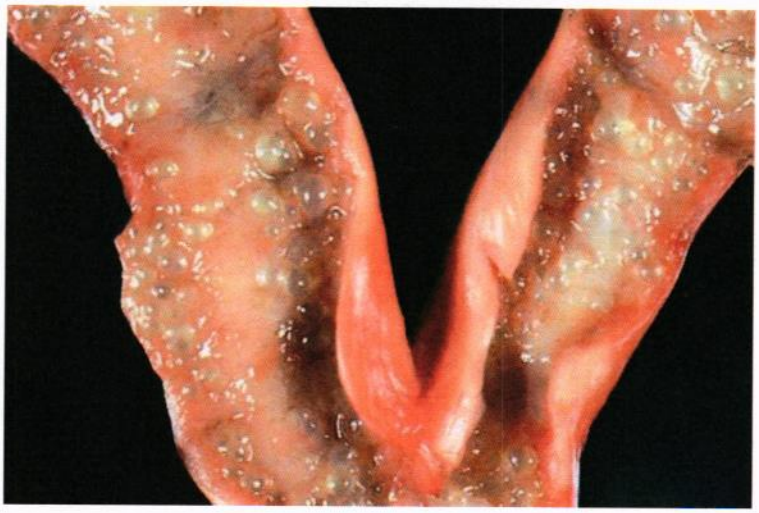
d. Describe the sequelae and pathogenesis for feminization of the tumor in c above. [5]

QUESTION 9 [10]

Describe the pathological features of rickets in animals.

QUESTION 10 [10]

The gross picture shown below was obtained from the uterus of a cat. Examine the picture carefully and answer the following questions.



d. Describe the gross lesions seen. [2]
e. What would be your diagnosis? [1]
f. Name the causes (factors) leading to this condition in various animal species. [4]

g. Name the common morphological sequela seen in bitches. [1]

QUESTION 11 [10]

PART A [5]

Compare and contrast seminoma and sertoli cell tumor in dogs.

Features	Seminoma	Sertoli cell tumor	Score
Origin			
Size			
Consistency			
Appearance			
Histopathology (neoplastic cells)			
Sequelae			

PART B [5]

The picture below shows a prostrate that was obtained from a male intact dog in the post mortem hall at Neudamm campus, University of Namibia. Answer the following questions.



a. Describe the gross lesions seen on this prostate. [1]
b. What would be your diagnosis? [1]
c. Name three common morphological sequelae seen in this condition. [3]

QUESTION 12 **[10]**

PART A [5]

Describe the pathology of exertional Myopathies in Horses.

PART B [5]

Describe the pathology of osteoporosis in animals

END OF SECOND OPPORTUNITY EXAMINATION