FACULTY	Health Sciences and Veterinary Medicine		
DEPARTMENT	School of Veterinary Medicine		
SUBJECT	Clinical Diagnostics		
SUBJECT CODE	V3722CC		
DATE	November 2024		
DURATION	2 hours	**MARKS**	100

First Opportunity Examination Paper

Examiner: Dr A Marais

Internal Moderators: Dr A Raath

External Moderator: Dr A Celliers, Kansas state University

This question paper consists of 10 pages including this front page.

Instructions

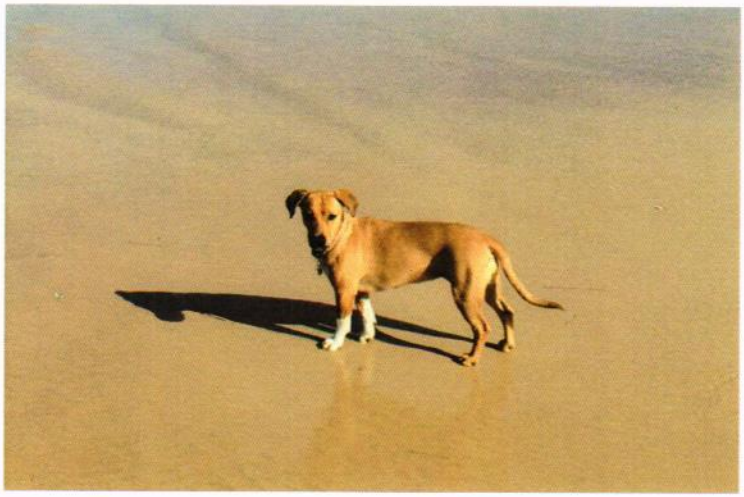
Any form of cheating, malpractice or academic dishonesty is forbidden

Please answer all the questions on the question paper

Question 1 (26)

a. The patient pictured below "Cleo", presents at your clinic.

Please provide the signalment. (6)



b. The patient above was presented to you with severe diarrhoea. List 5 pertinent pieces of information that should be obtained from the patient's history. For each, give a brief explanation of why that explanation is important. (10)

c. You do a thorough clinical exam on every patient. Please list the seven (7) most important aspects of your clinical exam relevant to **this particular patient**, and select three relevant ancillary tests or procedures you wish to perform. (10)

Question 2 (12)

a. Please draw a mature and an immature neutrophil. (6)

b. List 4 liver enzymes, and two pancreatic enzymes which can be measured in a serum biochemistry panel. (6)

Question 3 (21)

It is April in Namibia. The horse in the images below is a 4 year old Warmblood gelding that was presented with a complaint of reluctance to move, fast breathing and refusal to eat. The horse had appeared normal the night before, and was found like this in the morning.



On further examination, the following was found:
Respiratory rate: 32 breaths / min
The head appears symmetrical
There is airflow from both nostrils
The horse appears to have normal vision
Third eyelid and conjunctivae: pale, with small areas of haemorrhage
No swelling around Viborg's triangle
Heart rate: 60 beats per minute
Gut sounds: ¾ in all 4 quadrants
Temperature: 39.3˚C
Normal faecal balls passed
Skin tent: Normal

a. What is the correct name for the colour of the gelding? (1)

b. What does it mean that the horse is a gelding? (1)

c. Other than the parameters given, what should be examined on the head of the patient? (6)

d. Name 3 clinical abnormalities visible in the images? (3)

e. List the clinical abnormalities (Master problem list) excluding those in (d.) above, using the correct terminology. (5)

f. On auscultation of the lungs, expiratory crackles are heard. Does this finding correlate to the other clinical findings of the patient? Motivate your answer. (3)

g. What aspects of this patient's history are most pertinent to its current condition? (2)

Question 4 (18)

The patient on the image below was presented with an inability to walk due to swollen carpal joints. On clinical examination the patient had the following clinical findings: temperature 43.1°C, painful udder, watery faeces, respiration 22 breaths/min, heart rate 133 beats/min, left and right superficial cervical lymph nodes enlarged, capillary refill time <2seconds, pink moist and glistening oral cavity mucous membrane, distended abdomen.

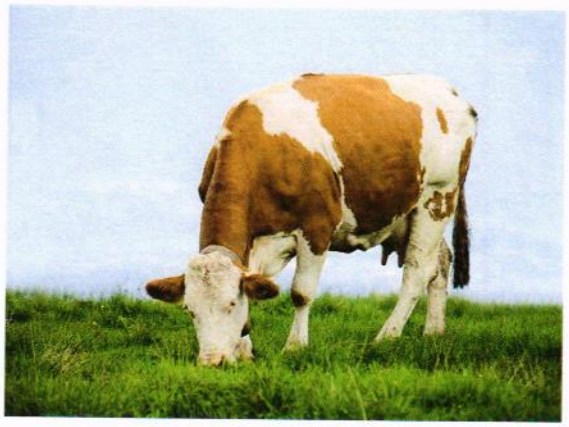


a. What is the signalment of the patient in the image above? (6)

b. Provide a Master Problem list of all clinical problems, indicated above, to the highest possible level. (12)

Question 5 (23)

A 5-year-old cow in the image below was presented with a history of difficulty in breathing of 1 and half day duration and intermittent coughing. On clinical examination the patient had the following clinical findings: temperature 37.1°C, watery discharge from the left nostril, respiration 42 breaths/min, heart rate 52 beats/min, capillary refill time >3seconds, positive jugular pulse.



a. What is the breed of the patient? (2)

b. What are two major problems of keeping the patient in (a) above in Namibia? (2)

c. Provide a Master Problem List for this patient. (12)

d. With reference to the history given in the question above, what is the likely affected organ system or systems? (2)

e. List all the anatomical structures drained by the sub iliac lymph nodes in a cow. (5)