FACULTY	Health Sciences and Veterinary Medicine		
DEPARTMENT	SCHOOL OF VETERINARY MEDICINE		
SUBJECT	Wildlife Clinical Studies II		
SUBJECT CODE	V3801PC		
DATE	June 2024		
DURATION	2 HRS	**MARKS**	100

UNIVERSITY OF NAMIBIA

SECOND CHANCE EXAMINATION

Examiner: Dr. M. Jago & Dr. O. Aschenborn

Internal Examiner: Dr. O. Aschenborn & Dr. M. Jago

External Moderator: Dr. R. Burroughs

This question paper consists of 6 pages including this front page. Additional materials to be supplied: **None**
Instructions ***Answer ALL questions*** ***Write your answers on this paper*** ***Ensure your name and student number is clearly written on the cover page*** ***If you require extra space for an answer please write on the back side of the previous page and clearly indicate to which question your answer refers.***

STUDENT NAME:_____

STUDENT NUMBER:_____

Question 1.

i) **In general, the methods available to carry out euthanasia of the wild animal may be classified into 4 distinct physiological processes. What are they? (4 marks)**

ii) **List ten (10) aims of high-quality euthanasia. (10 marks)**

iii) **Describe the challenges with euthanasia of the free ranging wild animal and explain the two-stage process of euthanasia. (6 marks)**

Question 2.

i) **Describe five physiological responses which occur as a result of sympathetic nervous stimulation.** **(5 marks)**

ii) **The wild animal at the point of capture and during its subsequent captivity requires appropriate response to stress and the re-establishment of homeostasis in order to survive. These responses require the neuroendocrine system and the autonomic system to work closely together to produce a state of adaption in the face of stress. Describe in straight forward terms the relationship between the hypothalamic-pituitary-adrenocortical (HPA) axis and the autonomic nervous system (sympathetic and parasympathetic systems) and how these two systems work together to produce the necessary stress responses.** **(10 marks)**

iii) **Describe the pathogenesis of Capture Myopathy in terms of the body systems involved (do not describe the specific syndromes).** **(5 marks)**

Question 3.

You are required to carry out the immobilization of an adult male white rhino running in a 10,000 hectare game camp in order to load it into a crate and transport it sedated to a large game farm which is four hours drive away. The rhino is to be released directly into the veldt on arrival at the new game farm. Describe how you would carry out this translocation from beginning to end, focusing in particular on the veterinary medicines you would use and explaining the reasons for your choice of drugs (you do not need to supply actual dose rates or total doses). (20 marks)

Question 4. (20 marks)

i) **Describe in detail what a pulse oximeter measures.** **(3 marks)**

ii) **Describe in detail how a pulse oximeter works.** **(7 marks)**

iii) **List ten limitations of a pulse oximeter. (10 marks)**

Question 5.

You have immobilized a wildebeest with a combination of etorphine and medetomidine. What are the correct procedures to treat cardio-pulmonary arrest in in this animal? Also name the drugs you would use and how. (10 marks)

Question 6.

Trophy hunting is under a lot of international pressure as many organizations deem it unethical. Discuss arguments for and arguments against trophy hunting. (10 marks)