NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF HEALTH, NATURAL RESOURCES AND APPLIED SCIENCES

SCHOOL OF AGRICULTURE AND NATURAL RESOURCE SCIENCES

DEPARTMENT OF NATURAL RESOURCES SCIENCES

QUALIFICATION: BACHELOR OF NATURAL RESOURCES MANAGEMENT	
QUALIFICATION CODE: 07BNRS	LEVEL: 7
COURSE CODE: WMH620S	COURSE NAME: WILDLIFE MONITORING AND HANDLING
DATE: NOVEMBER 2024	
DURATION: 3 HOURS	MARKS: 150

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	Mr. Helmuth Tjikurunda & Mrs Louise Theron
MODERATOR:	Mr. Jeremia Amutenya

INSTRUCTIONS
1. Answer ALL the questions.
2. Write clearly and neatly.
3. Number the answers clearly.

PERMISSIBLE MATERIALS

1. Examination question paper
2. Answering book
3. Calculator and Ruler

THIS QUESTION PAPER CONSISTS OF 2 PAGES (Excluding this front page)

QUESTION 1:

1.1. The design of a wildlife monitoring programme depends on several factors that managers must take into consideration for it to be effective. *List* eight (8) of these factors. (8)

1.2. Assessing the body condition of wildlife is an important part of wildlife monitoring. *List* five (5) indicators that are commonly used to assess the body condition of animals. (5)

[18]

QUESTION 2

2.1. Wildlife monitoring is a fundamental part of wildlife management. Briefly, *explain* why wildlife should be monitored. (7)

2.2. List the factors that affect the accuracy and precision of any wildlife monitoring method. (4)

2.3. *Explain* how you would ensure the successful night capture of problem causing lions in a conservancy. (3)

2.4. Provide three (3) symptoms of capture myopathy. (3)

[17]

QUESTION 3

3.1. Electronic data is often subjected to misuse, phishing and copyright infringements.
What are the issues you must consider in order to protect your electronic data? (6)

3.2. Wildlife capture operations are very costly and delicate. *List* any 5 factors that managers should consider when planning for a capture operation. (5)

3.3. Counting animals by means of an aerial census is not always possible due to various factors.

Name and explain six (6) factors that may hinder the countability of animals from the air. (9)

[20]

QUESTION 4

4.1. **Define** the term wildlife technology. (1)

4.2. Nowadays natural resource managers are shifting to the use of modern technology to monitor wildlife due to its effectiveness and efficiency.

Name 6 different kinds of wildlife monitoring technologies used to monitor and manage wildlife in game parks/reserves. (6)

4.3. *Explain* why modern technology is becoming increasingly important in the monitoring and handling of wildlife. (5)

4.4. *Explain* the difference between a) data management and b) data handling. (2)

4.5. Mass capture bomas must adhere to certain guidelines according to fir it to be successful. **Provide** any 5 of these guidelines. (5)

4.6. The construction of temporary holding facilities may be necessary in some cases. Name 5 factors that must be taken into consideration when constructing these facilities? (5)

4.7. **Explain** what is meant by rumination and provide 2 examples of animals that ruminate. (4)

[28]

QUESTION 5

5.1. **Define** the term adaptive management. (2)

5.2. Briefly **explain** the importance of adaptive management toward natural resources management. Give 4 points. (4)

5.3. The captured animals are an important cargo and must be transported as quickly and as fast as possible.

What are the factors managers should consider when preparing for the transportation of animals? Give 4 points. (4)

[10]

QUESTION 6

6.1. Wildlife capturing operations often subject captured animals to stress resulting from the resistance of their bodies to harmful and damaging external forces, causing weakness in the body of the animal. **List** 5 ways how you can prevent or reduce stress in captured animals. (5)

6.2. **Explain** the major difference between active and passive capture methods. (2)

6.3. Drivers of trucks in the capture operations have important duties as much as the whole capture team. **Explain** the responsibilities and duties of the truck drivers that ensured the successful transportation and delivery of the animals. (5)

6.4. Managers must ensure that captured animals are not offloaded at night by all means possible. Briefly, **explain** what can happen if animals are offloaded at night. (5)

6.5. Name 5 circumstances under which the use of chemicals (immobilisation and tranquillisation) is necessary during the capture of wildlife? (5)

6.6. Certain natural conditions make some animals to be susceptible to capture myopathy. **Explain** what capture myopathy is and **discuss** any 5 factors that make animals to become susceptible to this condition. (7)

6.7. **What** are the reasons why captured animals are sometimes not released immediately after capture, but are kept in temporary holding facilities or holding pens? (5)

6.8. **Name** 6 animals that are more susceptible to capture myopathy than others. (6)

QUESTION 7

Name the pathogen responsible for each of the following diseases (Scientific name!) (4)

Anthrax

Tuberculosis

Ngana

Babesiosis

[4]

QUESTION 8

How can Namibia control/prevent an outbreak of Rabies? (6)

[6]

QUESTION 9

Explain the economic losses for a farmer should his herd be infected with the FMD virus. (4)

[4]

QUESTION 10

10.1. You are working as an intern (trainee) at the State Veterinary Lab and a farmer just brought in the carcass of an Eland. Your supervisor allowed you to inspect the carcass and to make a diagnosis. After careful inspection, you informed your supervisor that you were convinced the animal died of Babesiosis. *Provide* 5 reasons/explanations to your supervisor to justify your diagnoses (based on the symptoms/lesions you observed). (5)

10.2. *Discuss* 6 (six) possible negative effects of pesticides. (6)

[11]

TOTAL: 150