



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF HEALTH, NATURAL RESOURCES AND APPLIED SCIENCES

DEPARTMENT OF AGRICULTURE AND 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 2022	
DURATION: 3 HOURS	MARKS: 150

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

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

THIS QUESTION PAPER CONSISTS OF 3 PAGES (Excluding this front page)

QUESTION 1

Write short notes to define or explain the following terms:

- 1.1. Monitoring (2)
 - 1.2. Adaptive management (3)
 - 1.3. Modern Wildlife Technologies (2)
- [7]

QUESTION 2

Explain the difference between the following pairs of terms.

- 2.1. Total counts vs. Sample counts. (2)
 - 2.2. Immobilization vs. Tranquillization (2)
 - 2.3. Infectious vs Contagious diseases (2)
 - 2.4. Defoliants vs Desiccants (for a farmer) (2)
 - 2.5. Qualitative Data vs. Quantitative data (2)
- [10]

QUESTION 3

- 3.1. Wildlife monitoring is regarded as the surveillance of the natural environment or any of its components. *Briefly explain* the importance of wildlife monitoring for wildlife management. (7)
- 3.2. Dr Eroid Naomab purchased a farm in the central parts of Namibia and wants to determine the wildlife population on that property. As a Natural Resource Management student, *name five (5)* techniques that Dr Naomab may use to determine the wildlife population on his new farm. (5)
- 3.3. Dr Naomab is a strong believer in modern technology and wants to use modern technology to monitor wildlife on his property. He has been briefly introduced to the use of camera traps. *Explain* to Dr Naomab what a camera trap is (2), the importance of a camera trap (3) and how it is set up (4). (9)
- 3.4. Adaptive management is a tool used in Natural Resources Management to ensure effective and efficient management of natural resources. *List eight (8)* the importance of adaptive management toward Natural Resources Management. (8)

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QUESTION 4

- 4.1. Careful planning is the cornerstone of a successful game capture operation, this ensures high economical returns and reduces high mortality as a result of stress to the targeted animal. *Outline eight (8)* factors to consider when planning a game capture operation to ensure the success of the operation. (8)

- 4.2. You have been appointed as the head of the Game Capture Unit in the Ministry of Environment, Forestry and Tourism. **Name five (5)** strategies you would put in place to prevent stress in captured animals. (5)
- 4.3. After conducting a full moon waterhole game count, Dr Eroid Naomab observed that he has too many wild animals on his farm. **Mention four (4)** capture techniques that Dr Naomab can use to reduce the number of wildlife (herbivores and predators) on his farm. (4)
- 4.4. **List five** species that can be captured using a trap cage. (5)
- 4.5. What factors necessitate the use of chemicals (immobilization or tranquillization) when capturing wild animals, **name five**. (5)
- 4.6. **Name seven** factors that influence the susceptibility of wild animals to capture myopathy. (7)

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QUESTION 5

- 5.1. The keeping of wild animals in temporary holding facilities is necessary for the effective management of captured animals. **Outline six** factors that necessitate the keeping of wild animals in temporary holding facilities. (6)
- 5.2. Animals require specific nutrients to keep their bodies functioning effectively and efficiently when kept in temporary holding pans/facilities. **Provide six** essential nutrients required by wild animals to manage stress in holding pans/facilities. (6)
- 5.3. Briefly **discuss** the digestive system of a springbok. (10)
- 5.4. Using indicators to assess wildlife conditions is the easiest and most used practice in conservation. **Name four** qualities of a good indicator. (4)

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QUESTION 6

- 6.1. Truck drivers transporting wild animals have an important role to play in ensuring the safe delivery of animals in transport crates. **Name nine** responsibilities and duties of the truck driver during the transportation of wild animals. (9)
- 6.2. **Provide five** reasons why wild animals being translocated should not be offloaded at night. (5)

- 6.3. **Why** is it important to keep wild animals in temporary holding facilities before release? (5)

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QUESTION 7

- 7.1. **Discuss five (5)** possible negative effects of pesticides. (5)
- 7.2. **How** can Namibia control/prevent an outbreak of Rabies? (5)
- 7.3. Foot and Mouth disease (FMD) is a notifiable disease in Namibia. Write a report on the importance of the disease. **Explain why** it is a notifiable disease, how animals get it and how it can be spread. **(Do not comment on the clinical signs).** (10)
- 7.4. **What control measures** can a farmer take to stop his animals from consuming toxic plants or other poisons? (5)

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TOTAL: 150 MARKS