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: 08BNRS	**LEVEL:** 8
COURSE CODE: FMG821S	**COURSE NAME:** FOREST MANAGEMENT
DATE: JANUARY 2025	
DURATION: 2 HOURS	**MARKS:** 100

SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	Prof. Jonathan M. Kamwi
MODERATOR:	Mr. Nathanael Amadhila

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 1 PAGE (Excluding this front page)

1. What is forest increment? Discuss different types of increments. Discuss the graphical relationship between current annual increment and mean annual increment. [15]

2. Define forest sampling. Give advantages of sampling. Discuss different types of non-random sampling methods used in forestry. [15]

3. Sustainability is a defining construct with silviculture. Any manipulation of a forest must result in stand conditions that maintains site/stand productivity. What do we do in silviculture to maintain sustainable forest ecosystems? [10]

4. What is forest regeneration? Write in brief about natural and artificial regeneration of Forests. [10]

5. We examined reverse J-shape diameter distributions and their use in uneven-aged silviculture. How does selection system silviculture refashion stands to fit this structure? What are the key ecological underpinnings that cause this structure to be sustainable (i.e., reproducible through time). [10]

6. What are the most critical, negative impacts of logging on a forest site, and how do we minimize those impacts? [10]

7. Various procedures are available for estimating the merchantable volume of a sample plot of *Pterocarpus angolensis* in northern Namibia. List these procedures and the information needed to apply them. [10]

8. In forest inventory, various factors influence tree and stand variables and how they are measured. List as many of these factors as possible and discuss any three of them in relation to inventory of the *Pterocarpus angolensis* in northern Namibia. [10]

9. Discuss the types of human-caused forest disturbances with examples. [10]