



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

**FACULTY OF HEALTH, NATURAL RESOURCES AND APPLIED SCIENCES
SCHOOL OF AGRICULTURE AND NATURAL RESOURCES SCIENCES
DEPARTMENT OF AGRICULTURAL SCIENCES AND AGRIBUSINESS**

QUALIFICATIONS: BACHELOR OF SCIENCE IN HORTICULTURE	
QUALIFICATIONS CODE: 07BHOR	LEVEL: 7
COURSE CODE: CEY720S	COURSE NAME: CROP ECOPHYSIOLOGY
DATE: NOVEMBER 2024	PAPER: 1
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER:	DR MALIATA ATHON WANGA
MODERATOR:	DR PAMWENAFYE NANHAPO

INSTRUCTIONS
<ol style="list-style-type: none">1. Answer all the questions.2. Write neatly and clearly.3. Mark all answers clearly with their respective question numbers.4. All written work MUST be done in blue or black ink.5. No books, notes and other additional aids are allowed.

PERMISSIBLE MATERIALS

1. Calculator
2. Examination paper
3. Examination script

**THIS QUESTION PAPER CONSISTS OF 1 PAGES
(Excluding This Front Page)**

Question 1

Provide a brief define or a short note on the terminologies below:

[20 Marks]

- | | |
|----------------------|-----|
| A. Photosynthesis | (2) |
| B. Respiration | (2) |
| C. Transportation | (2) |
| D. Plant development | (2) |
| E. Plant growth | (2) |
| F. Ecophysiology | (2) |
| G. Acclimatization | (2) |
| H. Adaptation | (2) |
| I. Abiotic stress | (2) |
| J. Water potential | (2) |

Question 2

Provide a brief discussion on the topics below:

[80 Marks]

- | | |
|---|------|
| A. Major plant hormones and their functions. | (10) |
| B. Major plant tissues and their functions. | (10) |
| C. Three types of photosynthesis. | (10) |
| D. Plant physiological response mechanisms to salinity stress. | (10) |
| E. Plant physiological response mechanisms to drought stress. | (10) |
| F. Plant physiological response mechanisms to light duration and intensity. | (10) |
| G. The conceptual framework of Soil-Plant-Atmosphere Continuum (SPAC). | (10) |
| H. Ecological interaction and abiotic stress in agroforestry farming systems. | (10) |