



FACULTY	AGRICULTURE, ENGINEERING AND NATURAL SCIENCES		
QUALIFICATION	B.A. GEOGRAPHY AND ENVIRONMENTAL STUDIES (HONOURS)		
DEPARTMENT	ENVIRONMENTAL SCIENCE		
SUBJECT	BIOGEOGRAPHY		
SUBJECT CODE	GHE3642		
DATE	NOVEMBER 2022		
DURATION	2 HOURS	MARKS	70

UNIVERSITY OF NAMIBIA EXAMINATIONS: SPECIAL/ SUPPLEMENTARY EXAMINATION

Examiner: Ms. Margaret N. Angula (University of Namibia)

External Moderator: Prof M.D. Simatele (University of Witwatersrand)

This paper consists of 4 pages including this cover page.

Answer all questions

Instructions.

1. Work in an orderly manner and present your work neatly.
2. While most of the marks will be awarded for content, candidates are encouraged to use their own ideas to promote critical thinking and demonstrate own understanding of what is being asked for.
3. Number your questions correctly and clearly.
4. Answer all the questions

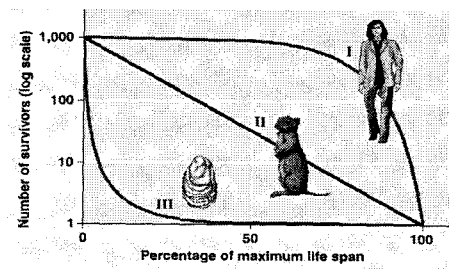
1. **Define** the following terms:

- a) Food Chain (2)
- b) Population ecology (3)
- c) Facilitation in Ecological succession (3)

2. Describe the difference between a primary producer and a primary consumer? (2)

3. The following factors are responsible for the geographic distribution of plants and animals: Wind, Temperature and light factors. Briefly explain how that happens? (9)

4. The Figure below illustrates different types of survivorship curves. **Describe** type I. (3)



5. Briefly describe the two characteristics of population dynamics, namely: Density and Dispersion. (6)

6. The following are interspecific interactions among animal species in a given community: **Briefly explain each of them.**

- a) Competition (2)

b) Symbiosis (Mutualism) (2)

7. Describe the defensive adaptation strategy employed by the following animals to avoid predators?

a) The Canyon tree frog (2)

b) The Hawkmoth larva (2)

8. The table below presents species found in two communities in Namibia.

Community	Species found in the area	Individuals of each species
Oskop	A	4
	B	4
	C	4
	D	4
Ohanje	A	2
	B	2
	C	8
	D	4

a) Describe the relative abundance of species C and D in the Ohanje community? (4)

b) Which community is said to be more diverse? (1)

9. Differentiate between a resistant and a resilient community. (4)

10. Provide the differences between r- selected and k-selected life histories. (6)

11. Differentiate between dominant species and invasive species (4)

12. Describe any three factors that could regulate the density of a given population. (6)
13. Describe the Grassland Biome. (5)
14. What characterise a Marine Environment? (4)

TOTAL MARKS

70