



FACULTY	AGRICULTURE, ENGINEERING & NATURAL SCIENCES		
DEPARTMENT	ENVIRONMENTAL SCIENCE		
SUBJECT	FUNCTIONAL BIODIVERSITY OF TERRESTRIAL ECOSYSTEMS		
SUBJECT CODE	EBB5972		
DATE	NOVEMBER 2021		
DURATION	3 HOURS	MARKS	120

SUPPLEMENTARY/SPECIAL EXAMINATION

EXAMINERS: PROF. I. MAPAURE (UNIVERSITY OF NAMIBIA)
PROF. J.K.E. MFUNE (UNIVERSITY OF NAMIBIA)

EXTERNAL MODERATOR: PROF. C. CHIMIMBA (UNIVERSITY OF PRETORIA)

This Examination paper consists of **four (4) pages** including the cover page

Instructions

- Candidates must answer ALL questions in Section A and ANY TWO questions in Section B.

UNIVERSITY OF NAMIBIA EXAMINATIONS

SECTION A

Answer ALL questions in this Section.

Question 1

1. Figure 1 below shows the relationship between soil moisture content and soil texture. Focusing on the comparisons between sand and clay, discuss what the figure shows with reference to moisture availability to plants. (6 marks)

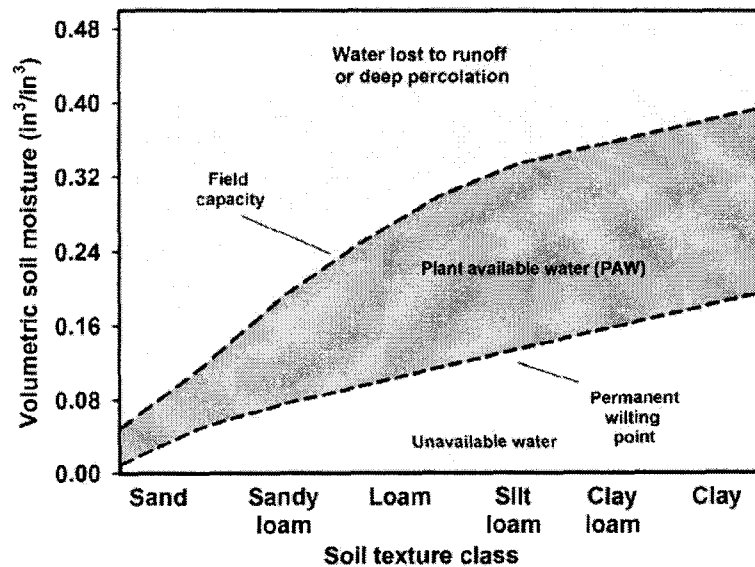


Figure 1. The relationship between soil moisture content and soil texture.

Question 2.

Using examples, discuss the concepts of species complementarity and species weighting. (10 marks)

Question 3

Explain the four major direct drivers of deforestation. (8 marks)

Question 4

Define 'fire season'. How would you use the knowledge of fire season to manage fire occurrence in tropical savannas ecosystem, especially in protected areas? (6 marks)

Question 3

Critically discuss physiological and behavioural adaptations of animals that live in arid or desert habitats. (30 marks)

Sub-total marks (Section B) = 60

Grand Total Marks = 120

*****END OF EXAMINATION PAPER*****