

TECHNICAL UNIVERSITY OF MOMBASA
FACULTY OF APPLIED AND HEALTH SCIENCES
DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN MARINE RESOURCE
BSMR 14S/YEAR2/ SEMESTER2
AAB 4207: PLANT STRUCTURE AND PHYSIOLOGY
SEMESTER EXAMINATION
SERIES: APRIL/MAY 2016
TIME: 2 HOURS

Instructions to Candidates

This paper consists of FIVE questions

Answer question ONE (COMPULSORY) and any other TWO questions

This paper consists of two printed pages.

QUESTION ONE (COMPULSORY)

- a. Define the terms below. 4mks
 - I. Seed germination
 - II. Seed Viability
- b. List TWO germination Inhibitors present in the seed. (2 marks)
- c. Differentiate between Annual, Biennial and perennial plants 3mks
- d. State the six processes of nitrogen cycle 6mks
- e. State 5 differences between C3 and C4 pathways 5mks
- f. List and define two types of plant responses to the environment 4mks
- g. Outline 3 economic importance of the coastal marsh 3mks

QUESTION TWO

Using a well labeled diagram outline the process of the nitrogen cycle 20mks

QUESTION THREE

Discuss the economic importance of the estuarine ecosystem in the coastal region 20 mks

QUESTION FOUR

The cell is the basic unit of life. Discuss Plant cell organelles and their functions. (20 marks)

QUESTION FIVE

Giving examples, elaborate how phytohormones control plant growth and physiology 20mks