TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF ENVIROMENT & HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR:

DEGREE IN MARINE RESOURCE

BSMR 16S/YEAR1/SEMESTER 1

AES 4103: FUNDAMENTALS OF MARINE BOTANY

END OF SEMESTER EXAMINATION

SERIES:AUGUST2017

TIME: 2HOURS

DATE: Pick DateSep2017

Instructions to Candidates
You should have the following for this examination
-Answer Booklet, examination pass and student ID
This paper consists of **TWO**Section(s). Attemptquestion ONE (Compulsory) and any other TWO questions.
Circle the correct answer in section A.

Question one (30 marks)

a. Explain the meaning of the term "Dichotomous key" (1mark)

b. Use the taxonomic key in the table below to answer the questions that follow

	Characteristic	Organism
1a.	It has no legs.	Eel
1b.	It has more than two pairs of legs.	Go to 2
2a.	It has three body parts	Go to 3
2b.	It has two body parts.	Tick
3a.	It has a proboscis.	Butterfly
3b.	It has no proboscis.	House fly

How would you identify from the linear key above?

     i.   The butterfly? (2 marks)

     ii.   The tick? (2 marks)

c. List two major characteristics that distinguish members of the kingdom Plantae from those of Animalia (4marks)

d. What is mangrove zonation? List four factors that influence mangrove zonation (5 mark)

e. List the various adaptations of dune vegetation to their environment (4marks)

f. Explain the various adaptations of seagrasses to their environment (6 marks)

g. Briefly explain the process of reproduction in the brown algae (6 marks)

Question two (20 marks)

Discuss the general body structure of diatoms, characteristics and their distribution

Question three (20 marks)

Discuss the various characteristics of the phylum Arthropoda

Question four (20 marks)

Discuss the characteristic of the mangrove community environment and their adaptations to the environments

Question five (20 marks)

Describe the corals under the following

i. The distribution

ii. The growth requirements

iii. Types

iv. Threats