

# **TECHNICAL UNIVERSITY OF MOMBASA**

## FACULTY OF APPLIED AND HEALTH SCIENCES DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES UNIVERSITY EXAMINATION FOR: BACHELOR OF SCIENCE IN MARINE RESOURCE MANAGEMENT

## BSMR/16S/YEAR 2/ SEMESTER 2 AES 4109: SURVEY OF THE PLANT KINGDOM SPECIAL SUPPLEMENTARY EXAMINATION SERIES: SEPT. 2017 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. Mobile phones are NOT allowed in the examination room* 

#### Question one (30 Marks)

- a. State the major characteristics of of the conifers (4 marks)
- b. Name the 5 major divisions of the algae(4 marks)
- c. State four significance of respiration (4 marks)
- e. State the differences between cyclic and non-cyclic photophosphorylation (6marks)
- f. i) What is anaerobic respiration? (2 marks)

ii. State the processes or conditions when anaerobic respiration takes place (3 marks)

g. Explain any three sources of primary producers in the marine water (6 marks)

#### **Question two**

- a. Describe the various methods of asexual reproduction (16 marks)
- b. State the main difference between asexual and sexual reproduction (4 marks)

## **Question three**

Describe the life cycle of the fern (20 marks)

## **Question four**

Explain the factors that influence the rate of respiration (20 marks)

## **Question five**

- a. With a suitable diagram, describe the external morphological features of a plant (10 marks)
- b. Describe the main function of the stem of a plant (10 marks)