

TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Applied & Health Sciences

Department of Environment & Health Sciences

University Examination for the Degree of Bachelor of Science in Marine
Resource Management

BSMR 15S/YEAR 1/SEMESTER 2

Code: AES 4109: SURVEY OF PLANT KINGDOM PAPER 2

SEMESTER EXAMINATION

SERIES: MAY/2016

TIME: 2HRS

Instructions to Candidates

This paper consists of FIVE questions

Answer question ONE (COMPULSORY) and any other TWO questions

This paper consists of one printed pages

QUESTION ONE (30 MARKS)

- a) (i) Name the two groups of the plant kingdom (2 marks)
(ii) Name the three groups of the non-flowering plants (3 marks)
- b) List the most familiar gymnosperms in the Division Coniferophyta (5 marks)
- c) State the main characteristics of gymnosperms (5 marks)
- d) (i) Name the 2 groups of flowering plants (2 marks)
(ii) State the major characteristics of flowering plants (3 marks)
- e) (i) What is anaerobic respiration? (2 marks)
(ii) State the processes or conditions when anaerobic respiration takes place (3 marks)
- f) (i) What is plant reproduction? (1 mark)
(ii) Differentiate between asexual and sexual reproduction (4 marks)

QUESTION TWO (20 MARKS)

Distinguish in terms of composition and structure between plant groups with 'no seeds' from plant groups with 'naked seeds' in classification of plants (20 marks)

QUESTION THREE (20 MARKS)

Describe the light reaction and dark reaction phases of photosynthesis process in plants (20 marks)

QUESTION FOUR (20 MARKS)

Asexual reproduction is common in higher plants and prokaryotes. Explain the major types of asexual reproduction (20 marks)

QUESTION FIVE (20 MARKS)

The productivity in coastal waters is associated with the availability of primary producers. Discuss

- (i) the composition in terms of taxa and abundance of these primary producers (10 marks),
and
- (ii) the sources of these primary producers (10 marks)