



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF ENVIRONMENT AND HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR:

THE DEGREE OF BACHELOR OF SCIENCE IN MARINE RESOURCE

BSMR 14S/YEAR2/ SEMESTER2

AAB 4207: PLANT STRUCTURE AND PHYSIOLOGY

END OF SEMESTER EXAMINATION

SERIES: APRIL 2016

TIME: 2 HOURS

DATE: 1 Apr 2016

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** Question(s). Attempt question ONE (Compulsory) and any other TWO questions.

QUESTION ONE (COMPULSORY)

- a. Define the following terms. 3 Marks
 - I. Vernalization.
 - II. Transpiration
 - III. Photoperiodism
- b. List THREE types of bacteria involved during nitrification in the nitrogen cycle. 3 Marks
- c. Differentiate between short day plant, long day plants and day neutral plants. 6 Marks
- d. List four hormones that regulate plant growth. 4 Marks
- e. Draw and label the plant cell. 4 Marks
- f. Differentiate between photosynthesis and respiration in plants. 6 Marks
- g. Outline 4 economic importances of the coastal dunes. 4 Marks

QUESTION TWO

Plant growth and development is entirely a hormonal process. Elaborate. 20 Marks

QUESTION THREE

Outline how plants perceive and respond to different tropic stimulations. 20 Marks

QUESTION FOUR

- a) Discuss the process of photosynthesis 12mks
- b) Explain four factors that contribute to photosynthesis success 8mks

QUESTION FIVE

- a) Define and explain the process of germination in plants.10mks
- b) Discuss the conditions that enhance germination in plants. 10mks