

**MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**P.O. Box 972-60200 – Meru-Kenya.**

**Tel: 020-2069349, 061-2309217. 064-30320 Cell phone: +254 712524293, +254 789151411**

**Fax: 064-30321**

**Website:** [**www.must.ac.ke**](http://www.must.ac.ke) **Email:** **info@must.ac.ke**

**University Examinations 2015/2016**

FIRST YEAR, FIRST SEMESTER EXAMINATION FOR BACHELOR OF SCIENCE IN BIOLOGICAL SCIENCES AND BACHELOR OF EDUCATION SCIENCE

**SBA 3100: SURVEY OF PLANT KINGDOM**

**DATE: NOVEMBER, 2015 TIME:** $2 $**HOURS**

**INSTRUCTIONS:** *Answer question* ***one COMPULSORY*** *and any other* ***two*** *questions.*

**QUESTION ONE – (30 MARKS)**

1. Explain briefly the following terms in relation to plants.
2. Phyllidium (2 Marks)
3. Prothallus (2 Marks)
4. Protonema (2 Marks)
5. Seta (2 Marks)
6. Rhozoids (2 Marks)
7. State any other four properties of plants other than being photosynthetic multicellular Eukaryotes. (4 Marks)
8. Explain the factors that place charophysians (chlorophyte) as the most probabe Algal ancestor of plants (Any five) (5 Marks)
9. Distinguish between hydromes and leptoms. (3 Marks)
10. Describe the four main body forms of algae. (6 Marks)
11. Explain the mechanisms of asexual reproduction in moss. (2 Marks)

**QUESTION TWO (20 MARKS)**

Attempt a Bifurcation scheme of the plant kingdom into the twelve main divisions.(20 Marks)

**QUESTION THREE (20 MARKS)**

Discuss the challenges and adoptions of terrestrial plants to life on land as opposed to that of their aquatic ancestors the algae. (20 Marks)

**QUESTION FOUR (20 MARKS)**

Explain the reasons for the success of Anthophytes over the other spermatophytes.(20 Marks)

**QUESTION FIVE (20 MARKS)**

Compare and explain the life cycles across the Bryophytes, Pteridophytes and spermatophytes. (20 Marks)