

**BONDO UNIVERSITY COLLEGE**  
**SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES**  
**SECOND YEAR FIRST SEMESTER 2013**

**SBT 201: GYMNOSPERMS AND ANGIOSPERMS TAXONOMY**

**INSTRUCTIONS:**

ANSWER ALL QUESTIONS IN SECTION A AND ANY TWO QUESTIONS IN SECTION B.

**SECTION A (30 MARKS)**

1. Draw and label the parts of a dicot seed. (4 marks)
2. Distinguish between the class Liliopsida and Magnoliopsida. (4 marks)
3. How many cellular nuclei does the pollen tube of angiosperms have? Name them and state the ploidy of each of these nuclei. (4 marks)
4. Differentiate between gymnosperms and angiosperms (4 marks)
5. Briefly describe double fertilization in angiosperms (4 Marks)
6. Outline the six principles of taxonomy (3 Marks)
7. Describe how the female gametophyte is formed in angiosperms (4 marks)
8. State the difference between the endosperm of gymnosperms and the endosperm of angiosperms (3 Marks)

**SECTION B (40 MARKS)**

11. Describe Herbarium techniques and their importance to angiosperm and gymnosperm taxonomy (20 marks)
12. Write an essay on the historical classification of Angiosperms (20 marks)
13. Discuss the diversity of gymnosperms (20 marks)
14. Describe the basic model of alternation of generations as it applies to gymnosperms and angiosperms, noting similarities and differences with other plant groups (20 Marks)