

**MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY**

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**University Examinations 2015/2016**

FOURTH YEAR, FIRST SEMESTER EXAMINATION FOR BACHELOR OF SCIENCE BIOLOGICAL

**SBT 2450 : PLANT GROWTH & DEVELOPMENT**

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

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

**QUESTION ONE – (30 MARKS)**

1. Distinguish between plant growth and development. (2 Marks)
2. Explain briefly how transport of natural hormones in plants occurs. (3 Marks)
3. Describe the following processes in plants;
4. Vernalization (3 Marks)
5. Photoperiodism (3 Marks)
6. Describe the formation of the female gametophyte in flowering plants. (5 Marks)
7. Explain parthenocarpy in plants. (4 Marks)
8. State there commercial applications of plant growth substances in agriculture and forestry. (3 Marks)
9. Explain the meaning of the following terms: (3 Marks)
10. Senescence
11. Phytochrone system
12. Morphogenesis
13. Explain how growth of plants can be assessed in the green house. (4 Marks)

**QUESTION TWO (20 MARKS)**

Discuss the role of phytohormones in plants. (20 Marks)

**QUESTION THREE (20 MARKS)**

Discuss the plant growth curve. (20 Marks)

**QUESTION FOUR (20 MARKS)**

Describe the different types of plant movements. (20 Marks)