****

**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2019/2020**

**SECOND YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOTRICHOLOGY AND BIOLOGICAL SCIENCE**

**SBT 2230: INTRODUCTION TO PLANT MORPHOGENESIS**

**DATE: APRIL, 2020 TIME: 2 HOURS**

INSTRUCTIONS: ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

**QUESTION ONE: 30 MARKS**

a. Describe morphogenesis *in Vitro.* (6 marks)

b. i. Distinguish between differentiation and de-differentiation. (2 marks)

 ii. Briefly describe organogenesis. (4 marks)

c. Outline the significance of plant propagation. (6 marks)

d. Describe seed development. (6 marks)

e. Explain how germination can be induced (6 marks)

**QUESTION TWO: 20 MARKS**

Discuss the theories of embryogenesis.

**QUESTION THREE: 20 MARKS**

Discuss seed dormancy.

**QUESTION FOUR: 20 MARKS**

Discuss the economic importance of seeds.