JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

SECOND YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN HORTICULTURE 2024/2025ACADEMIC YEAR

REGULAR

COURSE CODE: APB 2212

COURSE TITLE: PLANT PROPAGATION AND NURSERY MANAGEMENT

EXAM VENUE: **STREAM: BSC. Horticulture**

DATE: **EXAM SESSION:**

TIME: 2 HOURS

Instructions:

1. **Answer ALL questions in section A and ANY other 2 Questions in section B**
2. **Candidates are advised not to write on question paper.**
3. **Candidates must hand in their answer booklets to the invigilator while in the examination room.**

SECTION A [30 MARKS]

Answer ALL questions in this section

1a.Giving examples from each, Explain the differences between sexual and asexual plant propagation. [6 marks]

b. Explain what chimera in plant propagation means. [4marks]

c. Outline the applications of micro propagation. [4 marks]

d. Explain what is meant by graft incompatibility. [5 marks]

e. Explain ecological factors important in the choice of a nursery site. [5 marks]

f. Differentiate between a cultivar and variety as applied in plant propagation. [3 marks]

g. Explain the functions of a production nursery. [3 marks]

h. Classify plant nurseries according to their diversification. [3 marks]

SECTION B [40 MARKS]

Answer ANY TWO questions in this section

2a. Explain the characteristics of a functional graft union. [8 marks]

b. Describe the sequence of graft union formation. [12 marks]

3a. Explain Apomixis in plant propagation, giving instances of its application. [10 marks]

b. Using examples, explain the role of hormones in plant propagation. [10 marks]

4a.Highlight the principles and practices of nursery establishment and management. [15 marks]

b. Explain nursery inventory control including financial management. [5 marks]