



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 - Meru-Kenya

Tel: +254(0) 799 529 958, +254(0) 799 529 959, + 254 (0) 712 524 293,

Website: info@must.ac.ke Email: info@must.ac.ke

University Examinations 2022/2023

SECOND YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE IN AGRICULTURE, AND BACHELOR OF EDUCATION
SCIENCE

AAA 3250: ANNUAL CROP PRODUCTION

DATE: APRIL 2023

TIME: 2 HOURS

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

QUESTION ONE (30 MARKS)

- a) Distinguish between System for Rice Intensification (SRI) and convention flooded rice production (5 marks)
- b) Describe the appropriate soil and nutrient management for wheat (*Triticum aestivum*) production (5 marks)
- c) Discuss the agronomic constraints that cause low yields of cow pea (*Vigna unguiculata* (L.) and green gram (*Vigna radiata* (L.)) in Kenya (8 marks)
- d) Discuss the soil types suitable for production of sweet potato (*Ipomea batatas*) (6 marks)
- e) Outline strategies to increase production of Cotton (*Gossypium hirsutum* L.) in Kenya (6 marks)

QUESTION TWO (20 MARKS)

- a) List any 3 pests and 3 diseases that attack cereal crops in Kenya (3 marks)

b) Discuss the appropriate soil moisture management during production of maize (*Zea mays*)
(8 marks)

c) Outline key considerations in variety selection during production of rice (*Oryza spp.*) in Kenya
(9 marks)

QUESTION THREE (20 MARKS)

Outline the production practices for dry bean (*Phaseolus vulgaris* L.) under the following aspects:

- a) Land preparation (5 marks)
- b) Planting (4 marks)
- c) Nutrient management (6 marks)
- d) Harvesting (5 marks)

QUESTION FOUR (20 MARKS)

Describe the production of groundnut (*Arachis hypogaea* L.) an important oil crop under the following aspects

- a) Soils and land preparation (6 marks)
- b) Plant and seed germination (5 marks)
- c) Nutrient management (5 marks)
- d) Harvesting (4 marks)