



(University of Choice)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY

UNIVERSITY EXAMINATIONS

2021/2022 ACADEMIC YEAR

SECOND YEAR SPECIAL/SUPPLEMENTARY EXAMINATIONS

FOR THE DEGREE OF BSC IN:

AGRICULTURE & BIOTECHNOLOGY &
AGRICULTURAL EDUCATION AND EXTENSION

COURSE CODE: ACR 203

COURSE TITLE: ANNUAL CROPS

DATE: 25/7/2022

TIME: 11-1PM

Instruction to candidates

Answer **ALL** Question in Section A and **ANY TWO** Questions in section B

MMUST observes ZERO tolerance to examination cheating

SECTION A

This paper consists of TWO (2) printed pages. Please turnover

SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION (40 Marks)

- Q1. (a) Give the common means of propagation for the following crops (5 marks)
- (i) Sorghum
 - (ii) Sweet potato
 - (iii) Irish potato
 - (iv) Arrow root
 - (v) Sunflower
- (b) Describe how each of the crops in (1a) above is harvested (5 marks)
- Q2. Briefly describe
- (a) The baking quality of wheat (5 marks)
 - (b) The malting quality of barley (5 marks)
- Q3. (a) List one pest and one disease of sorghum (2 marks)
- (b) For the pest in (3a) explain the damage it causes (2 marks)
 - (c) For the disease in (3a) give the causal agent, two symptoms and three management practices employed in its control (6 marks)
- Q4. Explain the botanical difference between potato (*Solanum tuberosum*) and sweet potato (*Ipomoea batatas*) (10 marks)

SECTION B: ANSWER ANY TWO QUESTIONS IN THIS SECTION (30 Marks)

- Q5. Discuss the production challenges faced by small scale farmers explaining how each of the challenges may be overcome (15 marks)
- Q6. Discuss the processing and economic importance of rice in Kenya (15 marks)
- Q7. Discuss the agronomic practices of one of the following crops (15 marks)
- (i) Arrow root (*Colocasia esculenta*)
 - (ii) Common beans (*Phaseolus vulgaris*)
 - (iii) Finger millet (*Eleusine coracana*)