

20



(University of Choice)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY

UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR

FOURTH YEAR SPECIAL/SUPPLEMENTARY EXAMINATIONS
FOR THE DEGREE OF

BSC. IN AGRICULTURE & BIOTECHNOLOGY

COURSE CODE: ACR406

COURSE TITLE: POSTHARVEST MANAGEMENT AND
TECHNOLOGY

DATE: 26.7.22

TIME: 11-1pm

Instruction to candidates

Answer ALL Question in Section A and anyother Two Questions from section B

MMUST observes ZERO tolerance to examination cheating

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

SECTION A: Answer ALL questions (40 marks)

Q1 Write brief notes on the following terms with respect to postharvest management:

- (a) Ripening of fruits (5 marks)
- (b) Maturity indices for crops (5 marks)
- (c) Ethylene and ripening of fruits (5 marks)
- (d) Moisture control in postharvest management (5 marks)

Q2. (a) Define the following terms:

- (i) Food Loss (2 marks)
- (ii) Food Waste (2 marks)

(b) List four secondary causes of postharvest losses (4 marks)

(c) Give three primary causes that may result from each of the secondary causes listed in 2(b) above (12 marks)

SECTION B: Answer ANY TWO questions (30 marks)

Q3. You are an extension officer newly posted to offer advisory services to farmers in Khwisero location of Kakamega County. You establish that the farmers there grow mostly maize and beans. Explain in detail the advice you would give them to help them minimize postharvest losses on their farms (15 marks)

Q4. Discuss cooling as a strategy for management of postharvest losses (15 marks)

Q5. Discuss the postharvest management challenges faced by small scale farmers in Kenya and suggest possible interventions (15 marks)