



MACHAKOS UNIVERSITY

University Examinations for 2024/2025 Academic Year

SCHOOL OF AGRICULTURE, ENVIRONMENT AND HEALTH SCIENCES

DEPARTMENT OF AGRICULTURAL SCIENCES

FIRST YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT AND TRADE

AGR100: INTRODUCTION TO AGRICULTURE AND FOOD INDUSTRY

DATE:

TIME:

INSTRUCTIONS: Answer question *ONE* and any other *TWO* questions.

QUESTION ONE (30 MARKS)

- a) Explain five development phases in agriculture to the modern agricultural farming system
(5 marks)
- b) Explain why agriculture is defined as an art, science and business of producing crops and livestock
(3 marks)
- c) Distinguish between the following terms
 - i. Green and compost manure (2 marks)
 - ii. Straight and complex fertilizers (2 marks)
- d) With an example in each case, explain three benefits of value addition in crop and livestock production
(3 marks)
- e) Explain three reasons why farmers are advised to carry out proper livestock management practices
(3 marks)
- f) Explain three reasons why crop classification is important to agribusiness extension officer
(3 marks)
- g) Explain four factors considered by farmers in carrying out soil and water conservation measures
(4 marks)

- h) Explain two reasons why controlled grazing is important in livestock farming in the arid and semi-arid lands of Kenya (2 marks)
- i) With an example in each case, explain the role of the following management practices in livestock production (4 marks)
- i. Disbudding
 - ii. Ear tagging
- j) Describe three methods of synthetic fertilizer application in onion production (3 marks)

QUESTION TWO (20 MARKS)

- a) Explain six environmentally friendly strategies a farmer may employ to manage pests and diseases in crop production (12 marks)
- b) Explain four initiatives taken by the governments to manage post-harvest losses in crop production (8 Marks)

QUESTION THREE (20 MARKS)

- a) Explain five reasons why zoning of the country is important in crop and livestock production systems (10 marks)
- b) Discuss five roles of agriculture and food industry in enhancing economic growth in Kenya (10 marks)

QUESTION FOUR (20 MARKS)

- a) Explain five factors that affect the growth of food industry in Kenya (10 marks)
- b) Explain five reasons why crops are less competitive than the weeds (10 marks)

QUESTION FIVE (20 MARKS)

- a) Describe five cropping systems farmers may adopt to increase food supply (15 Marks)
- b) Explain five solutions to climate change in agriculture and food industry in Kenya (8 marks)