



MACHAKOS UNIVERSITY

University Examinations for 2021/2022 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (AGRICULTURAL EDUCATION AND EXTENSION)

AEE 413: AGRICULTURAL INFORMATION MANAGEMENT

DATE: 8/12/2021

TIME: 2.00-4.00 PM

INSTRUCTION TO CANDIDATES: Answer *ALL* questions from Section A and any other *TWO* from Section B.

SECTION A: COMPULSORY

QUESTION ONE (30 MARKS)

- a) Give the meaning of the following terms as used in agricultural information management.
- Data
 - Information
 - Knowledge (3 marks)
- b) Suggest three ways that can be used to prevent errors from creeping into agricultural information (3 marks)
- c)
 - Describe the three main characteristics of an information society. (3 marks)
 - Suggest three ways through which smallholder farmers in the country can benefit from the information society. (3 marks)
- d) Explain any five factors that have hindered the application of information communication technologies (ICTs) in agricultural services in Kenya. (5 marks)
- e)
 - Explain the concept agricultural information resource management. (2 marks)
 - Explain the three classes of information resources that are of concern to a manager in agricultural extension organization. (3 marks)
 - Explain five common challenges of agricultural information resource management. (6 marks)

SECTION B (40 MARKS)

ANSWER ANY TWO QUESTIONS FROM THIS SECTION

QUESTION TWO (20 MARKS)

- a) Assuming you are working in a public agricultural organization, discuss five measures you could take to ensure that the organization surpasses the agricultural information needs of its users. (10 marks)
- b) Explain five reasons that call for efficient agricultural information systems in Kenya. (10 marks)

QUESTION THREE (20 MARKS)

Discuss any five principles of effective agricultural information management. Use a relevant example in the discussion of each principle.

QUESTION FOUR (20 MARKS)

- a) Discuss the five benefits of maintaining accurate agricultural databases in Kenya (10 marks)
- b) Discuss five ways that can be used to ensure database integrity in the Kenyan agricultural sector. (10 marks)

QUESTION FIVE (20 MARKS)

- a) Discuss four concepts that form the basis for effective application of information and communication technologies (ICTs) in the management of agricultural information. (10 marks)
- b) Discuss the components that need to be put in place for effective management of technological information in the agricultural sector. (10 marks)