



MACHAKOS UNIVERSITY

University Examinations for 2021/2022 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

THIRD YEAR SECOND SEMESTER EXAMINATION FOR
BACHELOR OF SCIENCE (AGRICULTURAL EDUCATION AND EXTENSION)

AEE 301: AGRICULTURAL EXTENSION AND TECHNOLOGY TRANSFER

DATE: 14/12/2021

TIME: 11:00 – 1:00 PM

INSTRUCTIONS: Answer Question One (Compulsory) in Section A and any Two Questions in Section B

SECTION A: (COMPULSORY)

QUESTION ONE (30 MARKS)

- a) Define the following terminologies
- (i) Rural transformation (2 marks)
 - (ii) Technology (2 marks)
 - (iii) Innovation (2 marks)
- b) Explain three challenges facing ICT in agricultural production and marketing (6 marks)
- c) Explain the rationale for agricultural extension in Kenya (6 marks)
- d) Describe three tasks in which mass media channels of communication are well suited in extension service delivery (6 marks)
- e) Explain three challenges that farmers face in extension service provision. (6 marks)

SECTION B: ANSWER ANY TWO QUESTION (40 MARKS)

QUESTION TWO (20 MARKS)

- a) Explain the grassroots strategy for rural development in Kenya. (5 marks)
- b) Explain five reasons why strong research-extension-farmer linkages are necessary for a developing country like Kenya (5 marks)
- c) Describe the characteristics of the five adopter categories of a technology or innovation (10 marks)

QUESTION THREE (20 MARKS)

- a) Describe the six stages of technology or innovation adoption process (12 marks)
- b) Describe four project evaluation approaches (8 marks)

QUESTION FOUR (20 MARKS)

- a) Describe five general phases of a project (10 marks)
- b) Describe five phases involved in designing an effective extension programme. (10 marks)

QUESTION FIVE (20 MARKS)

- a) Explain five factors that affect effective extension service delivery in Kenya. (10 marks)
- b) Discuss five basic principles of agricultural extension work. (10 marks)