



MACHAKOS UNIVERSITY

University Examinations for 2022/2023 Academic Year

SCHOOL OF AGRICULTURE, ENVIRONMENT AND HEALTH SCIENCES

DEPARTMENT OF AGRICULTURAL SCIENCES

FOURTH YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (AGRICULTURAL EDUCATION AND EXTENSION)

AEE 435: AGRICULTURAL EXTENSION AND RURAL DEVELOPMENT

DATE:

TIME:

INSTRUCTIONS: Answer **Question ONE (Compulsory)** and Any other **Two** Questions.

QUESTION ONE (COMPULSORY 30 MARKS)

- a) Explain the following terms/concepts as they apply to rural development. (5 marks)
 - i) Sustainable livelihoods
 - ii) Agricultural transformation
 - iii) Poverty trap
 - iv) Food system
 - v) Nutrition security
- b) Explain five operational principles of extension education that make it relevant in rural development interventions. (5 marks)
- c) Explain five ways through which agricultural extension can make contribution to smallholder agricultural transformation in rural areas of developing countries (5 marks)
- d) Explain three channels through which an efficient smallholder food system in rural areas can contribute to economic growth in a developing country. (6 marks)
- e) Explain five ways in which achievement of food security in arid and semi-arid areas of can contribute towards sustainable development of those regions. (5 marks)
- f) Explain four factors that have slowed down sustainable development initiatives in rural Africa. (4 marks)

QUESTION TWO (20 MARKS)

- a) Discuss five ways in which prudent exploitation of natural resources in rural areas can contribute to sustainable development of those regions. (10 marks)
- b) Recommend five ways through which rural people's capacity to actively participate in development programmes can be improved. (10 marks)

QUESTION THREE (20 MARKS)

- a) Discuss the five main dimensions of poverty that are prevalent in rural areas. (10 marks)
- b) Detail a five-point strategy that county governments in Kenya can employ to tackle the poverty menace. (10 marks)

QUESTION FOUR (20 MARKS)

- a) Explain how biodiversity conservation is central to the achievement of the African Agriculture Transformation Strategy objectives. (10 marks)
- b) Discuss the five principles on which this strategy is anchored. (10 marks)

QUESTION FOUR (20 MARKS)

- a) Explain the meaning of the concept of sustainable development using its four dimensions. (6 marks)
- b) Suggest three interventions that can be used to create an entrepreneurial culture in rural communities, where farmers produce what they can market rather than trying to market what they produce. (6 marks)
- c) Using a schematic diagram, present the resource to consumption framework for sustainable rural development. (8 marks)