



MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRIBUSINESS MANAGEMENT AND TRADE

FOURTH YEAR SPECIAL/ SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT

AGB 409: AGRICULTURAL INNOVATIONS AND INTELLECTUAL PROPERTY

RIGHTS

DATE: 22/1/2021

TIME: 2.00-4.00 PM

INSTRUCTIONS:

Answer question one and any other two questions

QUESTION ONE (30 MARKS)

- a) Define the following terms
 - i. Agricultural innovation (2 marks)
 - ii. Agricultural innovation system (2 marks)
 - iii. Innovation hub (2 marks)
- b) Explain five main factors that influence adoption of an agricultural innovation in Kenya (5 marks)
- c) What is the role of policy in promoting agricultural innovations and technologies? (5 marks)
- d) Explain main steps of the initiation phase of establishing an innovation platform (6 marks)
- e) With examples, explain four areas where intellectual property rights can be applied in the agricultural sub-sector (8 marks)

QUESTION TWO (20 MARKS)

- a) Outline five main challenges facing maize value chain in Kenya and explain how innovation platform approach could be applied to address the challenges (10 marks)

- b) Describe the innovation platform for technology adoption value chain approach using orange fleshed sweet potatoes as an example (10 marks)

QUESTION THREE (20 MARKS)

- a) Describe five priority Sub-sectors for the Science, Technology and Innovation Policy (10 marks)
- b) Differentiate between the National Agricultural System (NARS), Agricultural Knowledge Information Systems (AKIS) and the Agricultural Innovation Systems (AIS). In each category describe the stakeholders, approaches, policy roles, capacities and outcomes (10 marks)

QUESTION FOUR (20 MARKS)

- a) A cassava innovation platform in Kitui has developed a cassava based product which is now ready for commercialization. What advice would you give to the innovation platform on the stages to follow in registering their product, promoting and commercializing it (10 marks)
- b) With relevant examples, discuss five agricultural innovation strategies in Kenya (10 marks)

QUESTION FIVE (20 MARKS)

- a) Describe the innovation platform for technology adoption value chain approach (4 marks)
- b) What are the three key elements of an agricultural innovation system (6 marks)
- c) Explain five steps of registering copyrights in Kenya (10 marks)