



UNIVERSITY OF EMBU

2019/2020 ACADEMIC YEAR

SECOND SEMESTER EXAMINATIONS

FOURTH YEAR EXAMINATION FOR THE DEGREE OF BACHELOR SCIENCE IN RANGE MANAGEMENT

ARM 406: RANGE RESOURCE ECONOMICS AND POLICY

DATE: OCTOBER 13, 2020

TIME: 8:30 AM – 10:30 AM

INSTRUCTIONS:

Answer Question ONE and ANY Other TWO Questions

QUESTION ONE (30 MARKS)

- a) Range resources in Kenya are key in supporting both the local and national economies. Based on this brief and on the basis of a specific range resource, **explain** the relevance of the following concepts in sustainable range resource management;
- i) Net Present Value (4 marks)
 - ii) Internal Rate of Return (4 marks)
 - iii) The Market (4 marks)
- b) Based on a county of your choice, **describe** the role of range resources in household wealth creation (5 marks)
- c) In the context of range resources, **explain** how a good understanding of economic principles may be used to manage these resources more efficiently (5 marks)
- d) An investor intends to develop the lower parts of Embu County. You have been approached to provide an opinion on the suitability of the area for extensive beef

production. **Describe** 4 (four) strategies that the investor may adopt to enhance the competitiveness of the proposed investment (8 marks)

QUESTION TWO (20 MARKS)

Incentive measures may influence and promote sustainable range resources. Given the constraints faced in Kenya in promoting sustainable range resource management, there may be a need to introduce and implement feasible incentive measures. Based on this information;

- a) Describe four (4) types of incentive measures applicable to sustainable management of range resource management in Kenya (8 marks)
- b) Explain four (4) characteristics of an efficient incentive measure (4 marks)
- c) **Describe** four (4) constraints faced in the design and implementation of incentive measures in range resource management (8 marks)

QUESTION THREE (20 MARKS)

Range resources productivity in Kenya is on the decline over the years as. One of the avenues for addressing the decline is through the formulation of a robust range resources policy through a participatory process. Based on this information;

- a) **Explain** policy within the context of range resource management (10 marks)
- b) Describe the steps in policy formulation cycle (10 marks)

QUESTION FOUR (20 MARKS)

- a) Range resource products are faced with serious market uncertainties. **Explain** three (3) measures necessary to minimize such uncertainties (6 marks)
- b) **Describe** four (4) factors that may contribute to price shocks of a range resource of your choice (8 marks)
- c) Kenya is one of the participants in the regional trade of range resource products including honey, livestock, and gum arabica among others. **Describe** three (3) measures the country needs to develop and sustain to enhance her competitiveness in the regional market of the aforementioned range resource products (6 marks)

QUESTION FIVE (20 MARKS)

The design of range resource management projects should include tests on financial and economic viability and sustainability, as well as the demonstration of their respective values to both the local and national economies. On the basis of this brief,

- a) **Explain** four rangeland characteristics that should be taken into consideration in the development of a range management project of your choice (5 marks)
- b) Describe the most important economic problem faced in range resource management (5 marks)
- c) Differentiate between financial and economic analysis (5 marks)
- d) Outline the relevance of Opportunity Cost and the Cost Benefit Analysis (CBA) in developing range resource management investment options (5 marks)

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