



UNIVERSITY OF EMBU

2019/2020 ACADEMIC YEAR

SECOND SEMESTER EXAMINATIONS

**FOURTH YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE
IN RANGE MANAGEMENT/AGRICULTURAL EXTENSION**

ARM 404: RANGE IMPROVEMENT AND REHABILITATION

DATE: OCTOBER 14, 2020

TIME: 2:00 PM – 4:00 PM

INSTRUCTIONS:

Answer Question ONE and ANY Other TWO Questions.

QUESTION ONE (30 MARKS)

- a) Differentiate between 'range improvement and range rehabilitation'. (5 marks)
- b) Highlight the implications associated with bush encroachments on rangelands productivity. (5 marks)
- c) Briefly discuss the strategies for rangeland improvement in the Kenyan Southern rangelands. (5 marks)
- d) Describe the principles of range reseeding. (5 marks)
- e) Describe the water development programs in the Kenyan grazing lands (5 marks)
- f) Elaborate on the various technologies available on 'artificial' regeneration of plants. (5 marks)

QUESTION TWO (20 MARKS)

Discuss the various rangelands rehabilitation strategies you would adopt to improve grazing areas of Laikipia County.



ISO 27001:2013 Certified *Knowledge Transforms*



ISO 9001:2015 Certified

QUESTION THREE (20 MARKS)

- a) Discuss the impact of using fires as a method of bush control in rangeland management (10 marks)
- b) Describe the rationale of the various range rehabilitation principles. (10 marks)

QUESTION FOUR (20 MARKS)

You have recently been employed as a range officer in Makueni county. What rationale would guide you to improve the grazing lands in that county?

QUESTION FIVE (20 MARKS)

Rangelands communities in Kenya are the poorest and least represented politically. Discuss the implications/threats associated with this scenario.

END

