



UNIVERSITY OF EMBU
2021/2022 ACADEMIC YEAR

FIRST SEMESTER EXAMINATIONS
FIRST YEAR EXAMINATION FOR THE DEGREE OF MASTER OF SCIENCE IN
AGRICULTURAL RESOURCE MANAGEMENT

ART 601: AGRICULTURAL PRODUCTION SYSTEMS

DATE: DECEMBER 12,

TIME: 2:00PM-5:00PM

INSTRUCTIONS:

Answer ANY FOUR Questions

QUESTION ONE (25 MARKS)

- a) Discuss the reasons why mono cropping in coffee is being avoided in recent years. (15 marks)
- b) Elaborate on the alternative coffee production systems that are being advanced and explain why they are superior to mono-crop coffee plantations. (10 marks)

QUESTION TWO (25 MARKS)

- a) Explain the global importance of integrated crop livestock production systems as driver of sustainability. (15 marks)
- b) With reference to specific crops and livestock explain the coupling effect of this mixed production system. (10 marks)



ISO 27001:2013 Certified

Knowledge Transforms



ISO 9001:2015 Certified

QUESTION THREE (25 MARKS)

- a) Discuss the history of intensive livestock production in the last 100 years. (11 marks)
- b) Explain how modern poultry production methods have addressed the following issues;
 - i) Confinement vs non-confinement (7 marks)
 - ii) Animal welfare and housing requirements (7 marks)

QUESTION FOUR (25 MARKS)

- a) Discuss five indicators of agricultural productivity and efficiency. (15 marks)
- b) Explain how the indicators of productivity and efficiency can practically be measured in the field (10 marks)

QUESTION FIVE (25 MARKS)

- a) Discuss Agro-forestry policies in Kenya with reference to different geographical areas of the Country. (15 marks)
- b) Outline the possible initiative and opportunity that can lead to improvement in the agro-forestry production system. (10 marks)

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