



UNIVERSITY OF EMBU

2016/2017 ACADEMIC YEAR

FIRST SEMESTER EXAMINATION

**THIRD YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
AGRIBUSINESS MANAGEMENT, BACHELOR OF SCIENCE IN AGRICULTURE
EDUCATION AND EXTENSION AND BACHELOR OF SCIENCE IN AGRICULTURE**

**AAS 306/AEB 301/AAS 313: LIVESTOCK PRODUCTION SYSTEMS/LIVESTOCK
MANAGEMENT SYSTEMS**

DATE: DECEMBER 1, 2016

TIME: 2:00-4:00PM

INSTRUCTIONS:

Answer Question ONE and ANY other TWO Questions

QUESTION ONE (30 MARKS)

- a) Define the following terms
- i. Hybridization (1 mark)
 - ii. Sex-reversal (1 mark)
- b) Explain two distinct features that distinguish production in the following systems
- i. Large scale and small scale cattle systems (2 marks)
 - ii. Ranching and pastoralism (2 marks)
- c) Write short notes on the following terms and concepts
- i. Zero grazing system (3 marks)

- ii. Swarming (3 marks)
- iii. Lighting program in layers (3 marks)
- d) Describe the three pillars of the Kenya vision 2030 (3 marks)
- e) Explain how livestock production is aligned in the Kenya Vision 2030 through the flagship projects (4 marks)
- f) Describe the viability or not of feedlot fattening in Kenya (3 marks)
- g) Describe commercial pig production under the Kenyan condition (3 marks)
- h) Name two breeds of layers commonly produced in Kenya (2 marks)
- i) Explain three reasons why farmers prefer sheep production to goat production in Kenya (3 marks)

QUESTION TWO (20 MARKS)

- a) Describe three methods of tilapia fingerling production commonly used in Kenya (6 marks)
- b) Explain four reasons why some farmers in rural areas of Nakuru County may not use artificial insemination (AI) for cattle breeding (4 marks)
- c) Describe situations where it may be economical to keep beef over dairy cattle (5 marks)
- d) Describe constraints to marketing of products from apiculture in Kitui county (5 marks)

QUESTION THREE (20 MARKS)

- a) You are to start a small dairy farm with 3 cows, describe 6 factors you may consider before venturing into the business of smallholder dairy production (6 marks)
- b) Describe the strategies that can be used to improve major sectors of the beef value chain (5 marks)

- c) The Kenyan dairy industry is dominated by smallholder farmers. Outline five reasons why farmers prefer smallholder dairy systems (5 marks)
- d) Describe four potential advantages of rearing pigs (4 marks)

QUESTION FOUR (20 MARKS)

- a) Describe 5 factors to consider in order to prevent spread of diseases in fish ponds (5 marks)
- b) Discuss the main stakeholders in the beef value chain citing their names, roles and direct and indirect support that they provide to the industry (6 marks)
- c) Describe two common pig production systems in Kenya (4 marks)
- d) Describe the specific constraints faced by stakeholders in the beef industry (5 marks)

QUESTION FIVE (20 MARKS)

- a) Discuss major constraints facing the dairy sector in the Kenyan highlands (5 marks)
- b) Discuss major constraints to fish production and marketing in Kenya (5 marks)
- c) Describe 2 features of an agro-ecological zone suitable for pig production in Nairobi (4 marks)
- d) Describe factors that have contributed to success of tilapia production in Kenya (6 marks)

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