



**EMBU UNIVERSITY COLLEGE**  
**(A CONSTITUENT COLLEGE OF THE UNIVERSITY OF NAIROBI)**

**TRIMESTER EXAMINATIONS 2013/2014**

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

**ART624: INTEGRATED SYSTEMS IN ANIMAL PRODUCTION**

**DATE: AUGUST 5, 2014**

**TIME: 5.00 – 8.00PM**

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**INSTRUCTIONS:**

**Answer ANY FOUR Questions.**

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**QUESTION ONE**

- a) Explain the concepts of Integrated Farming Systems (6 marks)
- b) Describe the main features of Integrated Farming Systems (4 marks)
- c) Explain the reasons for integrated farming systems in animal production (6 marks)
- d) Describe the various components of integrated systems in animal production (9 marks)

## **QUESTION TWO**

- a) Discuss briefly three major factors that determine the choice of an integrated farming system (15 marks)
- b) Explain the basis for households' decision making (5 marks)
- c) Describe the role of biophysical factors in selection of Integrated Farming Systems in rainfed areas (5 marks)

## **QUESTION THREE**

- a) State the four forms of integration (4 marks)
- b) Describe the roles of livestock in integrated farming system (6 marks)
- c) Give the strategies that can be used by pastoralist and conservation groups to co-exist in integrated wildlife and pastoralism/ranching (6 marks)
- d) Discuss the status and trends of natural resources at the livestock wildlife interface in Africa (9 marks)

## **QUESTION FOUR**

- a) Explain the benefits of two (2) different types of integrated livestock – livestock, management system in high potential areas (7 marks)
- b) Outline the reasons for non-adoption of certain practices related to small ruminant rearing in different agro-climatic zones (8 marks)
- c) Discuss how integrated rice, fish and livestock in Asia has been successful (10 marks)

## **QUESTION FIVE**

- a) Illustrate using a diagram how different resources flow in mixed crop-livestock systems (6 marks)
- b) State the direct and indirect benefits of holistic management of integrated livestock in conservation agriculture (8 marks)

- c) Explain how different kinds of nutrient losses can occur during crop cultivation and post-harvest (5 marks)
- d) Describe the activities that prevent or reduce nutrient losses (6 marks)

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