Uganda Martyrs University

Faculty of Agriculture

Final Examination: 2015-2016

Bachelors of Science in Agriculture Year Two

Module: AG/06 Sustainable Animal Husbandry

Time: 09:30 am – 12:30 pm Date: Monday 11th July 2016

Instructions:

- *Read and understand the questions before answering*
- *Answer any 4 questions*
- *Start each answer on a separate answer sheet*

1a. Distinguish between livestock management system and livestock production system **(5 marks)**
1b. The Government of Uganda is using livestock as a tool to fight rural poverty but the results from this initiative are disappointing probably due to failure by government to understand the priority reasons why livestock farmer rear animals. As an expert, state five priority reasons of smallholder mixed farmers and traditional livestock keepers in rearing livestock **(5 marks)**
1c. Outline two major livestock production systems practiced in Uganda **(5 Marks)**
1d. Discuss any five different criteria used in classification of livestock production systems globally **(10 marks)**

2a. Define the term animal health **(4 marks)**
2b. Explain any three ways through which infectious diseases can be controlled in animal husbandry **(6 marks)**
2c. State any five production losses due ill health in animals
2d. Discuss any five effects of climate on animal production **(10 marks)**

3a. Define the term sustainable livestock production **(5 marks)**
3b.Livestock has been accused of being one of the biggest contributor to climate change and global warming. State the ways through which livestock contributes to climate change **(4 marks)**
3c. Explain the different steps that can be taken by farmers and government towards sustainable livestock production **(16 marks)**

4a. The ongoing debate globally is that Agriculture must produce food to feed the world's 7 billion population but research shows that livestock is very inefficient in converting nutrients to animal products compared to crops due to double conversion of nutrient constituents. Define the term double conversion of nutrient constituents **(3 marks)**
4b. Discuss some of the reasons justifying continued keeping of livestock despite the fact that livestock are very inefficient in converting nutrients to animal products compared to crops **(6 marks)**

4c. Indigenous breeds of livestock have been accused of low productivity compared to exotic breeds and one way that has been promoted in improving productivity of indigenous breeds of livestock has been cross breeding. Results from crossbreeding programs are mixed but in most parts of the developing world the results are disappointing. Discuss the major structural and environmental constraints of livestock improvement through cross breeding in Uganda. **(16 marks)**

5a. Part of Lake Victoria has been leased out to private entities to carry out cage fish farming as opposed to pond fish farming which is the traditional way of growing fish. Outline five benefits of cage fish farming compared to pond fish farming **(10 marks)**
5b. State five problems of cage fish farming **(5 marks)**
5c. Explain any 5 routine management practices for a successful cage farming business enterprise **(10 marks)**

6a. State four important parameters for an ideal poultry house design you will recommend to a prospective farmer who is interested in rearing commercial layer birds **(8 marks)**
6b. List any five factors that may predispose layer birds to diseases or poor productivity **(5 Marks)**
6c Define the term ventilation in poultry housing **(2 marks)**
6d. Outline five benefits of ideal ventilation in poultry housing **(5 marks)**
6e. State the effects of the following conditions in the poultry house
i. Too high relative humidity **(2.5 marks)**
ii. Too low relative humidity **(2.5 marks)**

7a. Define the term body condition score of a dairy cow? **(5 marks)**
7b. State three reasons why dairy farmers should body condition score their dairy animals **(3 marks)**
7c. List four likely conditions to occur on a farm when a d airy animal is over conditioned **(4 marks)**
7d. After your studies at UMU you are employed by Nkozi Sub County as an livestock extension officer. You are approached by the Farm manager of EVF to handle a case of cattle disease. Briefly explain a systematic approach you would follow in handling this practical disease condition **(8 marks)**
7e. Suggest ways through which beef productivity can enhanced from extensive rangelands **(5 marks)**

8a. Define the term apiculture **(2 marks)**
8b. Uganda has a conducive climate that would be ideal for honey production. Unfortunately, Uganda has not been able to achieve self-reliance in honey production. Discuss with relevant examples at least five reasons why Uganda has not achieved self-reliance in honey production **(15 marks)**
8c. Explain the meaning of the following terms and highlight the conditions leading to the occurrence in an apiary.

- Absconding **(5 marks)**
- Swarming **(3 marks)**