

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY SCHOOL OF AGRICULTURE AND FOOD SCIENCE UNIVERSITY EXAMINATIONS FOR BACHELOR OF SCIENCE IN ANIMAL SCIENCE

1ST SEMESTER 2016/2017 ACADEMIC YEAR

REGULAR

COURSE CODE: AAS 3217

COURSE CODE TITLE: ANIMAL HOUSING, FARM STRUCTURES AND

BIOCLIMATOLOGY

EXAM VENUE: STREAM:

DATE: EXAM SESSION: ANIMAL SCIENCE

TIME: 2 HOURS

Instructions

- 1. Answer ALL questions in Section A (compulsory) and ANY TWO questions in Section B
- 2. Candidates are advised not to write on the question paper
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room

SECTION A [30 MARKS]

- 1. Discuss the following:
 - a. Loose fill insulation (2 marks)b. Rigid insulation (3 marks)c. Formed in place insulation (2 marks)
- 2. Describe the benefits of appropriate waste management on a farm (6 marks)
- 3. Discuss options for effective waste disposal in the farm (5 marks)
- 4. Describe design factors that must be considered in planning of farm structures? (7 marks)
- 5. Citing relevant examples, state the functions of 5 types of farm buildings. [5 marks]

SECTION B [40 MARKS]

- 1. a) . Define the following terminologies:
 - i. R-value (3 marks)
 - ii. Primary enclosures (4 marks)
 - iii. Bio climatic design (3 marks)
 - b) . Describe any three ways through which heat exchange between animals and its environment occurs (10 marks)
- 2. Discuss the critical aspects for confinement housing (20 marks)
- 3. Explain the importance of the following on farm structures (20 marks)
 - a. Ventilation (8 marks)
 - b. Sanitation (5 marks)
 - c. Noise control (7 marks)
- 4. a) Discuss the five factors that affect the animal's microenvironment. [10 marks].
 - b) Discuss the approaches to the mechanical ventilation in dairy farming. [10 marks].