



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

**SECOND SEMESTER UNIVERSITY EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE IN ANIMAL SCIENCE**

2019/2020 ACADEMIC YEAR

REGULAR

(RE-SIT EXAM)

COURSE CODE: AAS 3411

COURSE TITLE: Dairy Production

EXAM VENUE:

STREAM: BSc. Animal Science, Y4, S1

DATE:

EXAM SESSION:

TIME: 2 HOURS

Instructions:

1. Answer ALL the questions in section A and any TWO in section B.
 2. Candidates are advised not to write on question paper.
 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.
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SECTION A [60 MARKS]

Answer ALL questions from this Section.

1. Explain the difference between the following terms:
 - a. Steaming up and Challenge feeding
 - b. Estrus and Oestrus cycle
 - c. Service period and Dry period
 - d. Lactation persistence and Lactation length
 - e. Oesophagyl groove and Omasum [20 marks]

2. Explain the **two** main factors that determine age at first calving in dairy heifers. [10 marks]

3. Briefly explain **three** aspects of the udder and **two** aspects of the general body conformation that are important when selecting dairy cows. [10 Marks]

4. Briefly explain the **two** important breed characteristics you would consider when selecting a dairy cow for a farmer in Bondo County whose objective is to produce milk for home consumption and local sales. [10 Marks]

5. Briefly explain **five** aspects milking environment that ensure clean milk production. [10 Marks]

SECTION B [40 MARKS]

Answer any TWO QUESTIONS from this Section.

6.
 - a. Explain the two critical aspects of feeding colostrum that should be observed in order for a new-born calf to derive full benefits of the colostrum? [10 Marks]
 - b. Explain the two critical management practices that directly enhance reproductive performance of dairy cattle. [10 Marks]

7. Discuss the feeding management of a calf from birth to weaning, citing the relation to its physiological and anatomical development. [20 marks]

8. Discuss the different phases of lactation in relation to feeding management of a dairy cow. [20 Marks]