

**MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**P.O. Box 972-60200 – Meru-Kenya.**

**Tel: 020-2069349, 061-2309217. 064-30320 Cell phone: +254 712524293, +254 789151411**

**Fax: 064-30321**

**Website:** [**www.must.ac.ke**](http://www.must.ac.ke) **Email:** [**info@must.ac.ke**](mailto:info@must.ac.ke)

**University Examinations 2014/2015**

FIRST YEAR, SECOND SEMESTER EXAMINATION FOR CERTIFICATE IN AGRICULTURE

**ANS 0130: RUMINANT HUSBANDRY**

**DATE: APRIL 2015 TIME: HOURS**

**INSTRUCTIONS:** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE – (30 MARKS)**

1. Define the following terms;
2. Synchronization
3. Wether
4. Debudding
5. Milk let down
6. Concentrate
7. List the signs of approaching parturition in cattle. (5 Marks)
8. State five advantages of keeping small ruminants as compared to large ruminants.(5 Marks)
9. Breeding is important in management of ruminants. Explain the management of a female sheep including signs of heat. (5 Marks)
10. Describe five routine management practices carried out in dairy calves. (10 Marks)

**QUESTION TWO (15 MARKS)**

1. Explain four reasons why castration is carried out in livestock. (8 Marks)
2. What is colostrum? Explain the significance of this product in the health and nutrition of young ruminants. (7 Marks)

**QUESTION THREE (15 MARKS)**

1. What is the importance of minerals in the diet of ruminants? (1 Mark)
2. Explain four deficiency symptoms of vitamin ‘A’ in dairy cattle. (4 Marks)
3. List and discuss five factors that influence dry matter intake in ruminants. (10 Marks)

**QUESTION FOUR (15 MARKS)**

1. List two breeds of each of the following livestock species. (5 Marks)
2. Dairy cattle
3. Rabbits
4. Indigenous chicken
5. Meat goats
6. Dual purpose cattle
7. Discuss contagious caprine pleuropneumonia (CCPP) indicating causative agent, symptoms and treatment. (5 Marks)
8. Define the term breed and describe the characteristics that make the sahiwal breed popular with farmers in arid and semi-arid lands (ASAL) (5 Marks)