



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
THIRD YEAR FIRST SEMESTER UNIVERSITY EXAMINATION FOR THE DEGREE
OF BACHELOR OF ANIMAL SCIENCE

2016/2017 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

COURSE CODE: AAS 3315

COURSE TITLE: ANIMAL REPRODUCTION AND TECHNOLOGY

EXAM VENUE:

STREAM:

DATE:

EXAM SESSION:

TIME:2 HOURS

Instructions:

- 1. Answer ALL questions in section A and ANY other 2 Questions 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.**

SECTION A : 30 MARKS

ANSWER ALL QUESTIONS IN THIS SECTION

1. a. List four general Signs of Estrus (**2marks**)

b. State gestation Length of the following animals; (**2 marks**)

Cattle: _____ Days

Sheep: _____ Days

Swine: _____ Days

Horses:_____ Days

c. State the parturition names in the following Species (**2 marks**)

Cattle: _____

Dogs: _____

Swine: _____

Horses:_____

d. Outline the practical steps you will take when doing Artificial Insemination. (**4 Marks**)

2. a) Write short notes on the ovary. (**3 marks**)

b) List the secondary sex organs and three accessory sex glands including function of each (**3 marks**)

c) Highlight the difference between horse and dogs penis (**4 Marks**)

3. a) Retained placenta (in animals) is associated with a deficiency of essential micromineral. Which mineral is it? (**1 mark**)

b) Briefly describe the process of fertilization. (**5 marks**)

c) Define the term silent heat. (2 marks)

d) Oxytocin is a hormone produced from the posterior pituitary. Briefly outline the main functions of this hormone. (2 Marks)

SECTION B : 40 MARKS

ANSWER ANY TWO QUESTIONS IN THIS SECTION

4. You have been consulted by large scale dairy farmer to advice on reproductive performance of the herd. Discuss how you will evaluate the herd. (20 Marks)

5. You have been asked to investigate a bull said to be '*infertile*' based upon the fact that the forty (40) cows, with which he has been running, have been seen to be repeatedly returning to oestrus. Assuming that the bull is responsible rather than the cows: (20 marks)

a. What would be the most important questions you would ask when taking a history? (5 Marks)

b. Describe your physical examination of the bull's genital tract. (5 Marks)

c. What infectious diseases should you consider? (5 Marks)

d. Briefly, how would you collect and evaluate a semen sample? (5 Marks)

6. Embryo transfer is one step in the process of removing one or more embryo from the reproductive tract of a donor female and transferring them to one or more recipient females. Discuss steps for embryo transfer in cattle