



KISII UNIVERSITY

UNIVERSITY EXAMINATIONS

SECOND YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN ANIMAL SCIENCE

SECOND SEMESTER 2024/2025

[JANUARY – APRIL, 2025]

ANHE 212: REPRODUCTIVE PHYSIOLOGY

STREAM: Y2 S2

TIME: 2 HOURS

DAY: TUESDAY, 3:00 - 5:00 P.M.

DATE: 08/04/2025

INSTRUCTIONS:

- 1. Do not write anything on this question paper.***
- 2. Answer ALL questions in section A and any TWO in section B.***

SECTION A; (30 MARKS)

1. Briefly explain the factors that interfere with the oestrous cycle in the female animal. (5 marks)
2. Outline the advantages of embryo transfer technology and the challenges it faces in developing countries. (5 marks)
3. Briefly describe the challenges of embryo transfer implementation in rural East Africa (5 marks)
4. Describe the steps taken in artificial insemination in dairy cattle. (5 marks)
5. Describe the following hormones, indicating their production and function in female reproduction:
 - a. Non-pituitary gonadal hormones (2.5 marks)
 - b. Gonadal hormones (2.5 marks)

6. Discuss oestrous synchronization highlighting its importance in livestock farming and indicate at what phase of the female reproductive cycle it should be done and why? (5 marks)

SECTION B; (40 MARKS)

7. Discuss in detail types and causes of infertility in a zero-grazed Friesian dairy cow (20 marks)
8. Discuss in detail the process of fertilization in animals (20 marks)
9. In detail explain the physiological functions of testosterone and oestrogen hormones in animal reproduction. (20 marks)