



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2013/2014

**SECOND YEAR SECOND SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN ANIMAL SCIENCE WITH
INFORMATION TECHNOLOGY**

(MAIN CAMPUS)

**AAN 206: GROWTH AND DEVELOPMENT OF
LIVESTOCK**

Date: 2nd April, 2014

Time: 2.45 – 5.00pm

INSTRUCTIONS:

- Answer ALL questions.



Instructions:

Answer all Questions

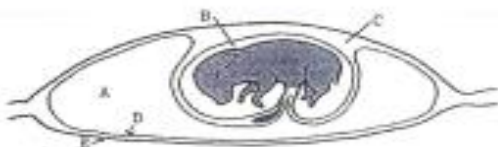
SECTION A: 30 MARKS

1. Distinguish between the following terminologies as used in growth and development
 - a. Morula and blastocyst (2 marks)
 - b. Hyperplasia and hypertrophy (2 marks)
 - c. Oligolecithal and Telolecithal eggs (2 marks)
 - d. Myogenesis and myofibre (2 marks)
 - e. Caul fat and marbling fat (2 marks)

2. Complete the table below by indicating the gestation/incubation period in the following species (1 mark each)

	Animal Species	Gestation/ incubation period (in months)
i	Cattle	
ii	Pigs	
iii	Chicken	
iv	Duck	
v	Sheep	

3. Briefly describe embryonic growths and development in sheep (5 marks)
4. List the three endocrine secretions that are important in regulation of growth and development in animals (3 marks).
5. From a growth and development perspective, briefly explain the probable cause of short stature of the West African Dwarf Goat (2 marks)
6. The diagram below represents the foetal growth of a piglet. Label the parts A to E (5 marks)



SECTION B: 40 MARKS

7. Discuss the concept of chronological age vis a vis physiological age in development of livestock. (10 marks)
8. Discuss the effect of light on:
 - a. Growth and reproduction of temperate sheep (8 marks)
 - b. Egg laying patterns of chicken (7 marks)
9. Curing campaigns to reduce obesity, the target community was sensitized on the importance of consuming lean meat. Discuss the response of producers in achieving the low fat beef desired by the market (15 marks)