



NATIONAL OPEN UNIVERSITY OF NIGERIA
Faculty of Agricultural Sciences
Department of Animal Science and Fisheries
First Semester Examination, April 2019

Course: ANP306: Animal Physiology Reproduction and Growth
Credit Unit: 2
Time Allowed: 2 hours.

INSTRUCTIONS: Answer question one (Compulsory: 25 Marks) and any other THREE (15 marks each)

QUESTION 1

- i. Highlight five (5) methods that a farm manager uses to collect semen in most farm animals. 2 marks
- ii. State five (5) methods of farm animal semen storage and preservation.
Give the degree centigrade and shelf life of the stated methods 12 marks
- iii. Enumerate the principles and application of semen preservation 8 marks
- iv. List 6 factors affecting fertility during artificial insemination 3 marks

QUESTION 2

- i. What is parturition? 2 marks
- ii. What are the problems associated with maintaining high reproductive efficiency? 3 marks
- iii. Explain briefly the different stages of parturition 9 marks

QUESTION 3

- i. What is implantation of embryo? 1 marks
- ii. Briefly describe the concept of fertilization in mammals 5 marks
- iii. Elucidate on the activities of three types of signals that stimulate and inhibit hormone secretion. 9 marks

QUESTION 4

- i. Enumerate five (5) principal hormones produced by the anterior lobe of the pituitary and state the condition under which they are released. 8 marks
- ii. What are the functions of follicle stimulating hormone and luteinizing hormone 4 marks
- iii. What are responsible for vasopressin release under the conditions of low blood volume (hypovolemia) and increased osmotic pressure of the blood. 3 marks

QUESTION 5

- i. What is artificial insemination? 2 marks
- ii. State the classification of types of placentation according to their gross shape. Give one example of each. 5 marks
- iii. What are the advantages and disadvantages of Artificial insemination? 8 marks

QUESTION 6

- i. Define the term Diabetes mellitus? 2 marks
- ii. Highlight the three primary types and effects of Diabetes mellitus. 6 marks
- iii. What are the established causes of Hypoglycemia of Cortisol that results in Cushing's Syndrome 4 marks
- iv. Highlight maternal requirements for normal birth of an animal. 3 marks