



NATIONAL OPEN UNIVESITY OF NIGERIA

Faculty of Agricultural Sciences

Department of Animal Science and Fisheries

POP Examination SEPTEMBER 2020

Course: ANP306: Physiology of Animal 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. What are hormones? 2 marks
- ii. State four (4) different groups of steroids that help to control metabolic activities in an animals 2 marks
- iii. Describe the three types of hormone molecules that are often found in animals. 12 marks
- iv. Elucidate on the activities of three types of signals that stimulate and inhibit hormone secretion. 9 marks

QUESTION 2

Write short notes on the following principal hormones produced by the anterior lobe of the pituitary:

- 1) Somatotropin (Growth hormone)
- 2) Corticotropin; Adreno-corticotrophic Hormone (ACTH)
- 3) Thyrotropin (Thyroid Stimulating Hormone)
- 4) Prolactin or lactogenic hormone
- 5) Gonadotropic hormones

i. QUESTION 3

Highlight the five (5) methods used to collect semen in most farm animals

- i. What is the function of the following parts of the bull reproductive system: 1. Scrotum 2. Testes 3. Epididymis 4. Vas Deferens 5. Spermatic Cord 6. Vesicular Glands 7. Prostate 8. Urethra 9. Bulbourethral Glands 10. Penis (10 marks)

Itemize the established causes of hypoglycaemia? 5 marks

QUESTION 4

- i. Define the term Diabetes mellitus? (2 marks)
- ii. Describe the effects of three primary types of Diabetes mellitus. (6 marks)
- iii. What are the established causes of Hypoglycemia of Cortisol that results in Cushing's Syndrome (6 marks)

QUESTION 5

- ii. What is artificial insemination? (2 marks).
- iii. Highlights the five (5) methods used to collect semen in most farm animals. (5 marks)
- iv. What are the advantages and disadvantages of Artificial insemination? (8 marks)
- v. Highlight the principles of semen preservation (4 marks)

QUESTION 6

- i. Highlight five (5) maternal requirements for normal birth of an animal. (6 marks)
- ii. Explain briefly the different stages of parturition (9 marks)