NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF AGRICULTURAL SCIENCES
DEPARTMENT OF ANIMAL SCIENCE AND FISHERIES
2025_2 EXAMINATIONS

Course Title: Analytical Techniques for Animal Production I
Course Code: AGR 305
Credit Unit: 2
Total Score: 70 Marks
Time Allowed: 2 Hours
INSTRUCTION:
Answer question 1 (30 marks) and any 2 (two) questions (20 marks each)

1a) Explain to a novice the meaning of these terms

i. Descriptive Statistics (2 marks)
ii. Control (1mark)
iii. Scatter Graph (2 marks)

b) Mr Bako's friend wants to collect samples for his experiment. What are the points you would advise him to consider? (7 marks)
c) State five (5) possible sources of systematic error in an experiment you wish to carry out. (5 marks)
d) The height at withers and weight of nine Balami sheep are as follows

Height at body withers (cm)	7	6	8	4	6	9	7	2	8
Body weight (kg)	20	19	20	15	19	20	18	9	20

i. With the aid of a graph show the relationship, between the two traits (X axis-height in cm) (Y axis in-Kg)
ii. Describe the relationship (13 marks)

2a) Bunni is an Animal Science student and wants to conduct an experiment on broilers, what six (6) basic steps should be taken before designing the research? (6 marks)
b) Discuss the difference between empirical, classical and subjective probabilities. (6 marks)
c) Probability is useful in predicting the future. Explain the two guiding laws of probability. (8 marks)

3a) Sani is an Animal Science student on industrial attachment in a laboratory what must he put into consideration when collecting samples for analysis? (6 marks)
b) What are the different types of samples you can collect for analysis? (9marks)
c) Define proximate analysis and mention the 6 main parts (5 marks)

4a) Sample treatment/preparation is necessary for effective chemical analysis. Discuss the available sample preparation methods. (12 marks)
b) How will you determine an endpoint in volumetric analysis (6 marks)
c) Give the application of filtration in Animal Science. (2 marks)