



NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF AGRICULTURAL SCIENCES
DEPARTMENT OF ANIMAL SCIENCES AND FISHERIES
2023_1 POP EXAMINATION

Course Title: Feed Formulation

Course Code: ANP 508

Credit Unit: 2

Total Score: 70 Marks

Time Allowed: 2 Hours

INSTRUCTION:

Answer Compulsory question 1 (30 marks) and any 2 questions (20 marks each)

1. a) What information does Mrs Mada need before formulating feed for her poultry. (3 marks)
b) Mr Bako raised an observation that insects have destroyed his grain and feed ingredients: suggest reasons for increase insect infestation (9 marks)
c) Mention three (3) ways we can control insect infestation in warehouses (3 marks)
d) What are the points to note if you want to analyse feed in the laboratory through chemical methods (10 marks)
e) What storage guidelines must Musa put in place to keep his feed ingredients in good condition (5 marks)
2. a) Mr Saleh is an intending livestock farmer: advise him on the benefits of including roughage in his animal diet (11 marks)
b) Explain how management practises can affect storage of feeds (9 marks)
3. a) There are about six conventional livestock feed formulation methods: explain the following common methods
 - i. Pearson Square
 - ii. Simultaneous Equation
 - iii. Trial and Error (9 marks)
b) Quality control is crucial in feed production: explain the checklist you will use for quality control of feed (11 marks)
4. a) Mrs Sule is considering using compound feed in her poultry farm: advise her on what she stands to gain in using compounded feeds (12 marks)
b) The process of manufacturing feed is a means whereby raw materials can be converted into a suitable well balanced animal feed: what are the two (2) main reasons why feed millers use hot processing and discuss two (2) types of hot processing methods (8 marks)