



NATIONAL OPEN UNIVERSITY OF NIGERIA  
FACULTY OF AGRICULTURAL SCIENCES  
DEPARTMENT OF ANIMAL SCIENCE AND FISHERIES  
**2024 1 EXAMINATION-**

**COURSE CODE:** ANP 301

**COURSE TITLE:** INTRODUCTION TO NON-RUMINANT ANIMAL PRODUCTION

**CREDIT UNIT:** 2 CU

**TOTAL SCORE:** 70 MARKS

**TIME ALLOWED:** 2 Hours

**INSTRUCTIONS:** Attempt any four (4) questions with at least one (1) from each section

**SECTION A: POULTRY PRODUCTION**

1. a. What are feed additives?  
b. In a tabular form discuss five (5) exterior and three (3) interior qualities used for grading eggs.  
c. Discuss extensively the management practices of layers and give five characteristics of a good layer bird. (17.5 marks)
2. a. Briefly discuss processing techniques of table birds  
b. Discuss the two methods of incubation.  
c. Discuss management of broilers. (17.5 marks)

**SECTION B: RABBIT PRODUCTION**

3. a. What is kindling?  
b. Discuss pregnancy detection in rabbits  
c. Discuss on any three important diseases of rabbits (17.5 marks)
4. a. Identify five (5) signs of a healthy rabbits  
b. Provide a template of a doe record card  
c. Write short notes on the nutritional requirement of rabbits: (17.5 marks)
  - i. Water
  - ii. Protein
  - iii. Energy
  - iv. Fats

**SECTION C: SWINE PRODUCTION**

5. a. What is colostrum?  
b. Mention six (6) factors to consider for selection of boar for service  
c. Discuss management of pigs from grower to finisher (17.5 marks)
6. a. Differentiate between endoparasite and ectoparasite and give two examples each  
b. Discuss ways to minimize stress in piglet.  
c. Describe the stages in the signs of heat in gilt/sows and comment on recommended practices during heat period (17.5)