



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
*University Village, Nnamdi Azikiwe Expressway, Plot 91, Cadastral Zone, Jabi, Abuja*  
**Faculty of Agricultural Sciences**  
*POP Question 2021\_I*<sub>7836</sub>

**Course Title: Monogastric Nutrition**

**Course Code: ANP 505**

**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)**

Question one

- a) With the aid of a table compare and contrast the digestive tracts of poultry, swine and rabbit (10 marks)
- b) Briefly explain feeding behavior in pigs (5 marks)
- c) A poultry farmer drew your attention to some feeding standard tables he saw on the internet; advice him on some of the limitations of those feeding standard (5 marks)
- d) What do you understand by Caecotrophy in rabbits (4 marks)
- e) Give the meaning of Phytobiotics and probiotics (6 marks)

Question two

- a) Critically examine seven (7) nutritional limitations of poultry and swine (7 marks)
- b) Mr Kuje a poultry farmer wants to prepare feed for his birds; explain to him (4) factors that will affect utilization and digestibility of the feed. (8 marks)
- c) Some of the ingredients used in feed formulation usually pass through heating process; mention (5) effects of this process on the feed ingredients (5 marks)

Question three

- a) Explain to Mrs Elim a potential poultry farmer why she should include fibre in her poultry diets (7 marks)
- b) Although feeding standards have limitations it still has uses; highlight three (3) uses of feeding standards (3 marks)
- c) Briefly examine
  - i. Aflatoxin toxicity in poultry (5 marks)
  - ii. Zearalenone Toxicity in Swine (5 marks)

Question four

- a) The level of water intake by monogastric animals is not static; suggest nine (9) reasons for this observation. (9 marks)
- b) List six (6) water quality indices (3 marks)
- c) Give the meaning of metabolic water and Water-soluble vitamins (3 marks)
- d) As a farmer you want to formulate ration for your poultry; state five (5) factors you must consider before formulating the ration. (5 marks)