

#### NATIONAL OPEN UNIVERSITY OF NIGERIA

University Village, Nnamdi Azikiwe Expressway, Plot 91, Cadastral Zone, Jabi, Abuja

# Faculty of Agricultural Sciences

POP Questions 2021\_27836

Course Title: Introduction to Animal Products Processing and Preservation

Course Code: ANP 303.

Credit Unit: 2

**Total Score:** 70 Marks Time Allowed: 2Hours

**INSTRUCTION:** 

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

Question one

- a) As a manager in a farm with 500 layers how would you advice the attendants to preserve, clean, handle and store the eggs. (10 marks)
- b) Mention one (1) disease that can be contacted by consumption of raw milk (1 mark)
- c) Evaluate the meat industry in Nigeria (10 marks)
- d) Outline nine (9) uses of animal by-products of internal origin (9 marks

## Question two

- a) Describe three (3) methods of freezing meat and meat products (9 marks)
- b) Briefly describe traditional cold smoking techniques (3 marks)
- c) Mr Bala wants to start packaging his meat products, enlighten him on (5) qualities of a good packaging material (5 marks)
- d) State the meaning of the following
  - i. Hypertrophy
  - ii. Hyperplastia
- iii. Accretion (3 marks)

## Question three

- a) Give the formula of growth rate (1 mark)
- b) Eggs are often used in industrial processing; discuss three (3) attributes of egg that make this possible (9marks)
- c) Outline five (5) factors that influence birth weight (10 marks)

#### **Ouestion four**

- a) Explain the Pasteurization, homogenization and separation processes in milk products production (12marks)
- b) Mr kofi's farm wants to assess the quality of their eggs; what are some of the external and internal factors that will be used for the assessment (5 marks)

- c) State the full meaning of TBC and (SCC) in milk production (2 marks) d) Give two (2) milk products that can be got after processing (1mark)