



NATIONAL OPEN UNIVERSITY OF NIGERIA
University Village, Nnamdi Azikiwe Expressway, Plot 91, Cadastral Zone, Jabi, Abuja
Faculty of Agricultural Sciences
2020_2 Examination

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 (25 marks) and any 3 questions (15 marks each)

Question one

- a) Briefly explain egg production in chicken (5 marks)
- b) Write briefly on heat treatment or Pasteurization, homogenization and separation in milk processing (12marks)
- c) Outline three (3) methods employed for live animal measures (6marks)
- d) Highlight two (2) carcass measures of evaluating body composition (2 marks)

Question two

- a) Differentiate the three (3) types of muscle found in livestock (9 marks)
- b) State six (6) usefulness of by-products that are found inside the body of the animal (6 marks)

Question three

- a) Briefly explain three (3) principal cooking methods for meat (6marks)
- b) Discuss the organization of the meat industry in Nigeria (8 marks)
- c) Enumerate two (2) ways of meat preservation (1mark)

Question four

- a) List two phases of growth (1 mark)
- b) Give the formula of growth rate (1 mark)
- c) State five (5) characteristics of prenatal growth (5marks)
- d) Discuss four (4) factors affecting birth weight (8 marks)

Question five

- a) state six (6) milk products that can be obtained after processing (3 marks)
- b) Mention four (4) the components of milk that make it nutritionally valuable (2 marks)

- c)Mention one (1) disease that can be contacted by consumption of raw milk (1 mark)
- d)Outline five (5) importance of somatic cell count (5 marks)
- e)Highlight four (4) characteristics of a good packaging material (4 marks)

Question six

- a)Briefly explain traditional cold smoking techniques (3 marks)
- b)Give three (3) reasons for meat preservation (3 marks)
- c)Discuss three (3) different methods for freezing meat and meat products (9 marks)