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**University Examinations 2016/2017**

THIRD YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF FOOD SCIENCE AND TECHNOLOGY, BACHELOR OF FOOD SCIENCE AND NUTRITION.

**AFT 3303: MEAT SCIENCE**

**DATE: DECEMBER, 2016 TIME: 2 HOURS**

**INSTRUCTIONS: -** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE (30 MARKS)**

1. In relation to meat science, explain the following terms. (5 marks)
2. Lairage
3. Shackling
4. Meat ageing
5. Exsanguitiation
6. Post-mortem
7. Explain five key quality parameters that should be considered when purchasing meat cuts in a butcher. (5 marks)
8. (i) Explain six factors to consider when selecting an animal for slaughter (3 marks)

(ii) Explain the changes that occur in frozen meat during storage (3 marks)

(iii) State four ways in which eggs are graded prior to market dispatch (2 marks)

(iv) List four criteria in which a good slaughter method should be selected in an abattoir (2 marks)

1. (i) Explain the principle judgement behind ante-mortem inspection of meat animals (2 marks)

(ii) Explain six importances of smoking fish to both seller and buyer (2 marks)

(iii) Briefly outline how fish fillet is canned from captured fish (4 marks)

(iv) State the difference between DFA and PSE in meat (2 marks)

**QUESTION TWO (20 MARKS)**

1. Discuss five different methods in which meat is processed/preserved (10 marks)
2. Describe the physio-chemical changes in meat muscle during storage after slaughter. (10 marks)

**QUESTION THREE (20 MARKS)**

1. Explain how poultry (chicken) is slaughtered in poultry industry as well as highlighting how each stage is achieved. (10 marks)
2. Discus various modes of transport commonly used in transportation of animals to be slaughtered. (10 marks)

**QUESTION FOUR (20 MARKS)**

1. Describe how wastes from Kenya Meat Commission are managed so as to maintain suitable working environmental condition (8 marks)
2. With respect to sausage manufacture, explain the following
3. Classification of sausages (2 marks)
4. Ingredients used and their roles (3 marks)
5. Procedural production of sausage (7 marks)