Team Activity 7

Kansas State University
R. Scott Beyer

All members may work together on the scenario below and answer the following questions:

Dr. Beyer and his students wanted to grow a flock of broilers at the poultry farm at Kansas State University. This was to be a project to raise funds for scholarships. The diagram of the poultry house is attached. This was a student project, so they were responsible for management of the birds. They wanted to put 10,000 broilers in the house to grow out to a body weight of about 5 pounds. They prepared the house by disinfecting, then cleaning, followed by dusting and sweeping the concrete floor. When the chicks arrived, they had heated the house to a comfortable 82 degrees and they placed the chicks near the food and water. Since they were planning to grow these birds over a 14 week period, they ordered 75 tons of feed so they wouldn't run out. The water was supplied by nipple-type drinkers according to the diagram. The students dug a pit out back of the building to dispose of dead birds and manure from the poultry house. They adjusted the control of the fan system to deliver over 110 cubic feet of air per minute, and adjusted the lighting system to be on for 24 hours per day. One student named 'Dave' was elected to be responsible to gather eggs 3 times per day and store them in the cold room.

When the birds were sent to the processing plant, there were complaints of numerous leg problems and breast blisters on the birds. The processed whole birds were then sold in the university meat store labeled as ‘fresh young New York dressed poults’. The processed birds were packaged WOG. They were held at 52 degrees F in the cooler. The breast yield was almost 39% of the carcass weight.

1. If the birds should have gained 1 pound for every 3 pounds of feed they consumed to reach the goal of 5 pounds, then the amount of feed the students ordered was:
   a. too much b. too little c. just right d. can't tell

2. The number of chicks they ordered for the house was
   a. not enough b. too many c. just right d. can't tell

3. The air flow for these birds was
   a. too high b. just right c. inadequate d. can't tell

4. The breast blisters at the processing plant were probably caused by
   a. disease b. cold temperatures c. crowding
   d. lack of litter

5. The number of eggs Dave should expect to collect during the last week is
   a. 24 dozen b. 160 dozen c. 1,250 dozen d. none

6. The water lines in the house are:
   a. too long b. placed in the wrong direction c. too short
   d. the wrong kind

7. According to the diagram, winter ventilation would be provided by:
   a. an exhaust fan b. side curtains c. a tube fan d. end doors

8. The temperature for the house when the chicks were delivered was:
   a. too cold b. just right c. too hot
   d. not enough information given

9. A better way to dispose of dead birds, instead of using the pit, would be to:
   a. feed them to wild animals b. compost them
   c. dry them and place in the garbage.
   d. place them in plastic bags and then in the garbage.

10. The term 'WOG' means:
   a. without giblets b. with our grace c. weight on grams d. without gizzard

11. These birds had a breast yield of about 39%. This amount of breast meat yield is:
   a. less than expected b. more than expected c. exactly as expected.

12. The length of time it took to grow out the birds was:
   a. less than expected b. more than expected c. exactly as expected

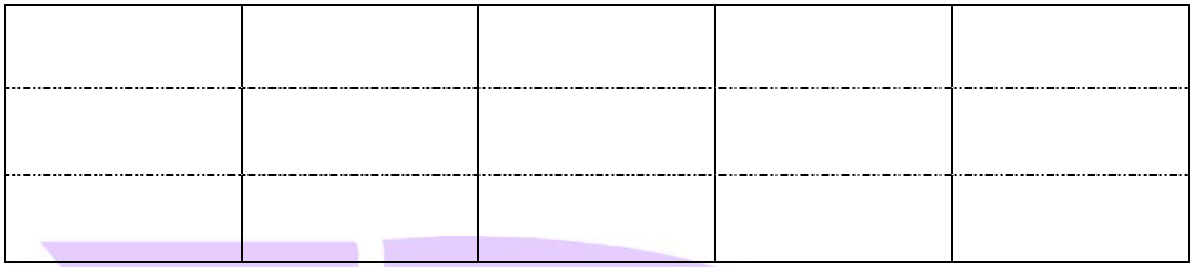
13. The temperature for storing the processed meat product was too high by today's standards. The correct temperature for refrigeration should be:
   a. 23 degrees F b. 32 degrees F c. 40 degrees F d. 50 degrees F

14. Let's say that you decided to allow more space to grow the birds than is standard practice. How many birds could you grow in the building if you decided to allow 5 square feet per bird?
   a. 500 b. 600 c. 1200 d. can't tell from the information given.

15. The label referred to "poult". What should have been in the package?
   a. a pigeon b. a chicken c. a young egg-type hen d. a turkey

Poultry House Design

40ft



400ft

Feed Line
Water Line