

## 2009 National FFA Poultry Evaluation CDE Management Exam

**Directions: Please, read each item carefully. Using a No. 2 pencil, bubble the letter on your scan sheet that corresponds with the correct answer.**

1. The table egg industry includes egg laying operations, pullet rearing operations, and \_\_\_\_\_ farms that produce eggs from which egg laying pullets are obtained.
  - a. broiler
  - b. breeder
  - c. poult
  - d. pullet
  
2. How many pounds of feed per dozen eggs produced would be required in a typical egg laying operation?
  - a. 3 to 3.5 pounds of feed
  - b. 3.5 to 4 pounds of feed
  - c. 4 to 4.5 pounds of feed
  - d. 4.5 to 5 pounds of feed
  
3. In turkey grow-out operations,
  - a. most turkeys are raised in large open range facilities.
  - b. most farms utilize the Broad Breasted Bronze turkey.
  - c. male and female poults are separated and taken to separate grow-out farms.
  - d. most turkey farms have a capacity of 1600 to 1800 birds.
  
4. In 2005, the annual per capita consumption of poultry in the United States was
  - a. 45% of all meat consumed.
  - b. more than the pounds of beef and pork (added together) consumed.
  - c. 51 pounds per capita.
  - d. None of the above answers is correct.
  
5. The *Genus* and *species* names of the turkey are
  - a. *Numida meleagris*.
  - b. *Gallus domesticus*.
  - c. *Gallus gallus*.
  - d. *Meleagris gallapavo*.

6. In mammals, the pectoral muscles account for less than 1% of the total body weight. However, the pectoral muscles in avians account for \_\_\_\_\_ to \_\_\_\_\_ of the total body weight.
- a. 5% to 15%
  - b. 15% to 25%
  - c. 25% to 35%
  - d. 10% to 15%
7. Which of the following statements is not accurate regarding the air sacs of a bird?
- a. The air sacs appear to function like bellows.
  - b. The air sacs have intense areas and concentrations of blood vessels.
  - c. The air sacs aid in efficient circulation of air through the lungs.
  - d. The air sacs are unique to birds and certain reptiles.
8. The function of the ingulvies is to
- a. connect the proventriculus to the duodenum.
  - b. grind larger particles of food.
  - c. connect the ventriculus and the proventriculus.
  - d. store and soften food.
9. Which of the following statements is accurate regarding the anatomy and physiology of avians?
- a. Avian red blood cells are nucleated.
  - b. Avians have a urinary bladder.
  - c. Avians excrete highly concentrated urine as urea.
  - d. Both a and b are correct answers.
10. In a newly fertilized egg, the small white structure on the yolk's surface is the
- a. blastodisc.
  - b. blastoderm.
  - c. chalazae.
  - d. albumen.
11. The peak times of chick embryo mortality during incubation occur when?
- a. day 4 and 18
  - b. day 7 and 21
  - c. day 4 and 28
  - d. day 18 and 21

12. Disease control measures (biosecurity) include which of the following practices?
- reducing contact between birds and infectious organisms
  - maintaining sanitary conditions
  - strengthening the bird's defenses against invasion by infectious organisms
  - All of the above answers are disease control practices.
13. A bird's body has natural resistance or immunity to infection. Compared to turkeys, chickens' reduced susceptibility to blackhead is related to \_\_\_\_\_ immunity.
- Inherited immunity.
  - Acquired immunity.
  - Passive immunity.
  - Sustainable
14. A sick chicken is exhibiting several major gross symptoms: lesions on skin and in mouth accompanied by a drop in egg production. Which of the following diseases cause poultry to display the symptoms described?
- Cholera
  - Fowl Pox
  - Newcastle
  - Marek's
15. Waste collection in poultry operations include which of the following methods?
- collection pits located beneath caged layers
  - concrete or earthen floors of high-rise layer houses
  - earthen floors of broiler houses
  - All of the above answers are waste collection methods.
16. Key ingredients for successful aerobic composting include proper carbon to nitrogen ratio, proper moisture content, and adequate oxygen. What is considered proper moisture content of the mixture to be composted?
- 10% to 20%
  - 20% to 30%
  - 30% to 40%
  - 40% to 50%
17. Which of the following poultry manures contains more calcium?
- broiler
  - turkey
  - egg layer
  - The manures produced by these types of poultry contain similar amounts of calcium.

18. When analyzed, poultry manures are often found to contain from 1% to 2.5% nitrogen. Which of the following factors is the reason these values should not be used to determine fertilizer application rates?
- Nitrogen volatilizes and may be lost during storage.
  - The plant root cannot absorb nitrogen derived from poultry manure.
  - Nitrogen at this level is toxic to most plants when applied at recommended rates.
  - None of the above answers is correct.
19. In a poultry building, too much air flow during cold weather results in a wet building, because
- the cold air flowing through the building does not have time to warm up and pick up much moisture.
  - cold air holds a lot of moisture, which is transferred to the litter when the cold air enters the building.
  - increased ammonia production during cold weather causes moisture to be “trapped” in the litter.
  - cold birds consume more water, resulting in wet litter.
20. Which of the following statements is most correct?
- Evaporative cooling works effectively in most of the United States.
  - Evaporative cooling and tunnel ventilation are not compatible.
  - Evaporative cooling is not economical in most poultry operations.
  - Evaporative cooling is not effective for feathered poultry.
21. Which of the following statements about evaporative cooling pads is most correct?
- Evaporative cooling pads should be installed as close as possible to exhaust fans.
  - Evaporative cooling pads function best if the pad is supplied with more water than is actually evaporated.
  - Ideally, evaporative cooling pads should be installed along the complete length of the building.
  - The cooling capacity of an evaporative cooling pad can be significantly increased by the use of pre-chilled water.
22. Which federal agency has primary responsibility through the Poultry Product Inspection Act to regulate poultry processing?
- U.S. Department of Homeland Security
  - U.S. Department of State
  - U.S. Department of Defense
  - U.S. Department of Agriculture

23. Which of the following statements about poultry processing is most correct?
- a. Grading of poultry is mandatory.
  - b. Inspection of poultry is mandatory.
  - c. The temperature to which poultry must be chilled during processing is 34°F.
  - d. All of the above answers are correct
24. Some consumers prefer to buy table eggs with brown shells. Brown-shelled eggs are usually more expensive because
- a. they are healthier.
  - b. they taste better.
  - c. they are produced by birds that are less efficient than White Leghorns.
  - d. they have to be imported from countries that raise birds that lay brown-shelled eggs.
25. Which of the following statements is most correct?
- a. Today, 20-30% of the chickens sold in the U.S. are sold as whole birds.
  - b. Consumers became more aware of dietary fat and cholesterol levels during the 1950's.
  - c. By 2000, about 56% of poultry meat produced was exported.
  - d. None of the above
26. Your broiler litter is a bit wet and sticky. When analyzed it contained 45% moisture. How many pounds of moisture would be in one dump truck load of this litter if the truck held 8 tons of litter?
- a. 720,000 pounds
  - b. 35,556 pounds
  - c. 16,000 pounds
  - d. 7,200 pounds
27. A poultry house contained exhaust fans that were each capable of moving 10,000 cubic feet of air flow per minute. If six fans were in operation, and the air flow was measured at 3.00 cubic feet of air flow per minute per bird in the house, how many birds did the house contain?
- a. 20,000 birds
  - b. 30,000 birds
  - c. 3,333 birds
  - d. 5,000 birds

28. A flock of 21,875 broilers (with an average body weight of 6.25 pounds) was processed, and the average carcass WOG (without giblets) weight was 4.00 pounds. If 28,000 total pounds of breast meat was obtained from these birds, what was the breast yield, expressed as a percent of the carcass WOG weight?
- a. 20.5%
  - b. 32%
  - c. 19.5%
  - d. 38%
29. In a particular poultry house, exhausted air contained 105 grains of water vapor per pound of air exhausted. The air coming into the house brought with it 33 grains of moisture per pound of air. In one minute, 4,500 pounds of air entered the house, and 4,500 pounds of air exited the house. What was the net amount of moisture removed from the house, in gallons? (NOTE: 1 pound of water = 7,000 grains; 1 gallon of water = 8.35 pounds)
- a. 13.4 net gallons of water removed
  - b. 8.08 net gallons of water removed
  - c. 46.29 net gallons of water removed
  - d. 5.54 net gallons of water removed
30. An FFA student had a flock of 50 laying hens, that each produced a total of 300 eggs in a 70-week laying period. If the hens consumed 3.4 pounds of feed per dozen eggs produced, how much total feed was consumed?
- a. 51,000 pounds of feed
  - b. 4,412 pounds of feed
  - c. 4,250 pounds of feed
  - d. 729 pounds of feed