

Tarleton State University 2022 Invitational CDE Poultry Exam

1. What quality grade would you give an egg with an air cell depth measuring $\frac{1}{4}$ inch?
 - A. AA
 - B. A
 - C. B
 - D. Loss
2. If chicks are huddled together around a brooder and sound noisy, the temperature is ____?
 - A. Too cold
 - B. Too hot
 - C. Too drafty
 - D. Just right
3. Which added ingredient improves the whipping properties of dried whole eggs and yolk products?
 - A. Carbohydrates
 - B. Proteins
 - C. Oils
 - D. Acids
4. Lack of proper drinker management during broiler growout could cause which of the following downgrades on carcasses observed in the processing plant?
 - A. Scratching
 - B. Bruising
 - C. Broken Limbs
 - D. Blisters (hock/breast)
5. What purebred chicken class does a chicken characterized by white skin, red ear lobes, and brown eggs belong too?
 - A. American
 - B. English
 - C. Mediterranean
 - D. Continental
6. A hen's reproductive system functions include all of the following except?
 - A. Reproduction
 - B. Filtration
 - C. Egg laying
 - D. Sex hormone secretion
7. A breeder can expect one dozen fertile eggs from how many pounds of feed?
 - A. 2.0
 - B. 3.5
 - C. 7
 - D. 12
8. What type of non-cage systems for layers can keep the birds outside and utilize a movable or stationary house for shelter and keeps the birds on fresh growing palatable vegetation?
 - A. Barn system
 - B. Aviary system
 - C. Range system
 - D. Enriched system
9. Yolk contents are retained by what membrane surrounding it?
 - A. Embryonic
 - B. Yolk sac
 - C. Vitelline membrane
 - D. Thick white
10. Which of the following is not a factor that influences total incubation time of an egg?
 - A. Humidity
 - B. Incubation temperature
 - C. Age of egg
 - D. Size of egg
11. On what day of a chick embryo development are toenails formed on the embryo?
 - A. 5
 - B. 6
 - C. 10
 - D. 11
12. How many species of coccidia are considered pathogenic to turkeys?
 - A. 6
 - B. 5
 - C. 4
 - D. 3

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13. The 3 major components of biosecurity include all of the following except?
 - A. Enforcement
 - B. Isolation
 - C. Traffic control
 - D. Sanitation
14. The peroneus performs which body function in the muscle system?
 - A. Flexes the toe
 - B. Extends the foot outward
 - C. Extends the toes downward
 - D. Moves the feathers
15. What is the popular water sanitizer used in commercial turkey water lines, because it is inexpensive to use and widely available?
 - A. Chlorine dioxide
 - B. Iodine
 - C. Chlorine
 - D. Hydrogen peroxide
16. The term for when an embryo is not oriented correctly in the egg is known as what?
 - A. Malformation
 - B. Misplacement
 - C. Malposition
 - D. Mortality
17. All of the following are disadvantages in using in-house pits for manure wastes except?
 - A. Pest problems
 - B. Cost
 - C. Equipment need
 - D. Toxic gases
18. Which of the following is not a function of a bird's air sacs?
 - A. Circulation of air through the lung
 - B. Gaseous exchange
 - C. Reserve supply of air
 - D. Lower the specific gravity of flying birds
19. Poultry bones are unique in the fact that they are ____ which make the skeleton lightweight.
 - A. Fused
 - B. Jointed
 - C. Solid
 - D. Hollow
20. All of following are poultry industry occupations related to research and engineering except?
 - A. Geneticist
 - B. Microbiologist
 - C. Environmentalist
 - D. Nutritionist
21. What type of storage is seen in caged hen operations and is described by accumulation of wastes in cone shapes on earthen or concrete floors?
 - A. Settling tanks
 - B. Floor storage
 - C. In-house pits
 - D. High-rise storage
22. The urinary system in a chicken is unique because it lacks what organ?
 - A. Spleen
 - B. Kidneys
 - C. Ureters
 - D. Bladder
23. Which federal agency monitors and investigates food borne disease outbreaks and complies baseline data against which to measure the success of changes in food safety programs?
 - A. Centers for Veterinary Medicine
 - B. Food Drug Administration
 - C. Animal (Veterinary) Drugs
 - D. Centers for Disease Control and Prevention
24. How many different forms of fowl pox are there?
 - A. 2
 - B. 3
 - C. 4
 - D. 5

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25. A broiler carcass with a large amount of meat missing from the bottom of the breast should be given a USDA grade of ____.

- A. A
- B. B
- C. C
- D. NG

28. What percent of tenders had to be trimmed?
(Remember: 2 pectoralis minor muscles per a carcass)

- A. 13.33%
- B. 12.42%
- C. 11.67%
- D. 12.23%

Grower Sam has a broiler flock of 30,000 birds. On day 42, these birds were loaded and transported to the processing plant. It was determined that these birds had an average weight of 6.72 lbs. and a feed conversion ratio of 1.60. After processing, it was determined that the average carcass weight was 4.56 lbs., which yielded an average of 1.11 lbs. of breast meat. From the carcass, tenders were further processed at the company's Research and Development lab to be sold to fast food restaurants. Tenders that weighed equal to or less than .17 lbs. could be cooked at 350°F and be done in 6 minutes. Tenders that weighed more than .17 lbs. could be cooked at 350°F and be done in 7.5 minutes. A typical batch consisted of 150 tenders. For uniform cooking, this meant that all tenders larger than .19 lbs. had to be trimmed down. 7,452 tenders had to be trimmed down. The average amount of meat that was trimmed and rendered from each tender was .01 lbs. Tenders were sold at \$2.08/lbs.

29. What was the approximate total amount of meat trimmed and rendered from the tenders?

- A. 70.82 lbs.
- B. 78.94 lbs.
- C. 73.61 lbs.
- D. 74.52 lbs.

30. How much money was lost from lack of uniformity?

- A. \$155.00
- B. \$153.11
- C. \$164.20
- D. \$147.31

Use the paragraph above to answer questions 26 – 30

26. What was the average feed consumption per a bird for this flock of broilers?

- A. 10.75 lbs.
- B. 11.17 lbs.
- C. 10.08 lbs.
- D. 10.57 lbs.

27. What was the average breast yield per carcass?

- A. 25.12%
- B. 22.84%
- C. 24.34%
- D. 23.03%