

## 2015 Iowa State Poultry Judging CDE Written Exam

### Version A

1. What is the name of the portion of the digestive system that secretes hydrochloric acid and the enzyme pepsin?
  - a. Rumen
  - b. Gizzard
  - c. Proventriculus
  - d. Crop
2. In egg laying operations, production goals are to gather \_\_\_\_\_ eggs per hen housed for an 80-week laying period.
  - a. 230
  - b. 350
  - c. 380
  - d. 400
3. A turkey hen marketed at 16 weeks of age usually weighs about \_\_\_\_\_ pounds.
  - a. 16
  - b. 18
  - c. 20
  - d. 22
4. Which is **NOT** an area of specialization in the poultry industry:
  - a. Veterinarian
  - b. Parasitologist
  - c. Equipment designer
  - d. a & b
  - e. None of the above
5. Chickens belong to which taxonomic **Family**?
  - a. Aves
  - b. *Gallus gallus*
  - c. Chordata
  - d. Phasianidae
6. What day of incubation do feathers start forming?
  - a. 2
  - b. 5
  - c. 9
  - d. 12
7. The function of the \_\_\_\_\_ muscle is to elevate the wing.
  - a. Pectoralis minor
  - b. Pectoralis major
  - c. Trapezium
  - d. Coccygis
8. Avian lungs are different compared to mammals because they...
  - a. Do NOT expand and contract.
  - b. Expand and contract twice as fast.
  - c. Terminate in "blind-ended" alveoli.
  - d. Are imbedded in the gizzard.

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9. During egg formation in laying hens, the egg spends \_\_\_\_\_ minutes in the \_\_\_\_\_ when forming the two shell membranes.
  - a. 15 minutes; Isthmus
  - b. 15 minutes; Infundibulum
  - c. 75 minutes; Isthmus
  - d. 75 minutes; Infundibulum
10. Which hormone inhibits ovary function and stimulates broodiness in hens?
  - a. Follicle stimulating hormone
  - b. Oxytocin
  - c. Luteinizing hormone
  - d. Prolactin
11. An important reason for **NOT** mating closely related birds is...
  - a. that they will fight.
  - b. to allow for whiter feathers.
  - c. that they will have difficulty finding the feeder.
  - d. to decrease the chance of getting the same mutation from both parents.
12. Protecting birds from infectious agents can be improved by..
  - a. Using "all-in/all-out" systems
  - b. Mixing incoming birds with the main flock when they arrive
  - c. Allowing a minimum of two week "down-time" between flocks
  - d. All of the above
  - e. a & c
13. Which disease does **NOT** have a vaccine as a preventative measure?
  - a. Infectious bronchitis
  - b. Aspergillosis
  - c. Newcastle
  - d. Marek's
14. Which waste storage system has the laying hen facility 15-30 feet above ground level where waste can be stored underneath for extended periods of time?
  - a. Settling tanks
  - b. Dry-stack
  - c. High-rise
  - d. In-house pits
15. The entire process of composting dead birds takes approximately how many days?
  - a. 30
  - b. 60
  - c. 90
  - d. 120
16. \_\_\_\_\_ is the air temperature measured with an ordinary thermometer.
  - a. Dry bulb temperature
  - b. Wet bulb temperature
  - c. Relative humidity
  - d. Water vapor content

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17. \_\_\_\_\_ is the rapid flow of air from a hole into an open space because of the difference in air pressure.
- Vapor pressure
  - Relative humidity
  - Cooling pads
  - Jet flow
18. Which steps of poultry processing are in the correct order?
- Grading, packaging, eviscerating
  - Withdrawal from feed, scalding and defeathering, catching and transport
  - Scalding and defeathering, evisceration, inspection
  - Mechanical cutting, distribution, stunning and killing
19. Beak trimming of layer chicks is performed from \_\_\_\_\_ days of age and the second trimming is performed when the birds are \_\_\_\_\_ weeks of age.
- 7 to 10 days; 2 weeks
  - 7 to 10 days; 4 weeks
  - 14 to 17 days; 4 weeks
  - 14 to 17 days; 12 weeks
20. If 80% of the growing pullets weight within \_\_\_\_\_% of the mean weight, flock uniformity is optimum.
- 10%
  - 15%
  - 20%
  - 25%
21. A **disadvantage** to using laying cages is that...
- hens are easier to manage.
  - there is less mortality.
  - less feed is required per dozen eggs.
  - egg shells receive cage marks.
22. The larger a pullet's \_\_\_\_\_ is when laying her first egg, the larger the eggs will be throughout laying.
- Crop
  - Feed trough
  - Body weight
  - Cage size
23. When managing the lighting for pullets, \_\_\_\_\_ light duration during the growing phase.
- Always increase
  - Never increase
  - Keep a constant
  - Never decrease
24. The last eggs laid within a clutch have \_\_\_\_\_ than the first eggs laid in that clutch.
- Lower shell quality
  - Higher shell quality
  - Better taste
  - More nutrients

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25. The typical incubation period for duck eggs is \_\_\_\_\_ days.
- 21
  - 23
  - 28
  - 35
26. A poultry house contains broiler chickens with an average body weight of 4.5 pounds and a total live weight of 145,800 pounds. A hot weather ventilation system is being used, and there are 12 fans running that are each capable of moving 15,000 CFM of air. Calculate the airflow in the house (in CFM per bird).
- 3.86
  - 4.50
  - 5.56
  - 6.02
27. At a dry bulb temperature of 70 °F, the air can hold 110 grains of moisture per pound of dry air. If the relative humidity is 75%, how many grains of moisture are in each pound of dry air?
- 75.5
  - 78.0
  - 80.5
  - 82.5
28. Layer pullets are being grown in cage brooders. The pullets require at least 2 inches of feeder space per bird and at least 48 inches<sup>2</sup> of floor space per bird. Each cage has 24 inches of feeder space and 440 inches<sup>2</sup> of floor space. How many birds should the producer place in each cage to meet both requirements?
- 9
  - 10
  - 11
  - 12
29. Layer pullets from 7-14 weeks of age require 1,375 kcal/pound, 1% calcium, 0.46% available phosphorous, and 0.17% sodium in their complete diet. There was a problem at the feed mill and only 10 pounds of sodium was used to make 8,000 pounds of finished feed. How many more pounds of sodium would have been needed to meet the requirement for the 8,000 pounds of feed.
- 1.4
  - 2.2
  - 3.6
  - 5.8
30. A flock of 155,000 commercial laying hens was transferred to a cage laying house. After several weeks of production, there has been 2.7% mortality since they were placed. Today 135,734 eggs were collected. What was today's % hen-housed egg production?
- 85.7
  - 87.6
  - 90.0
  - 92.3

**2015 Iowa State Poultry Judging CDE Written Exam**  
**Version A**  
**Answer Key**

1. C
2. B
3. C
4. E
5. D
6. B
7. A
8. A
9. C
10. D
11. D
12. E
13. B
14. C
15. B
16. A
17. D
18. C
19. B
20. A
21. D
22. C
23. B
24. A
25. C
26. B
27. D
28. A
29. C
30. B

## Live Animal Questions Class

(Hens)

1. Which hen has the highest degree of bleaching (beak, shanks, and top of the toes)?
2. Which hen has the lowest degree of bleaching (beak, shanks, and top of the toes)?
3. Which hen has the most fat across her abdomen?
4. Which hen has the least fat across her abdomen?
5. Which hen has the largest width between her pelvic bones?
6. Which hen has the least width between her pelvic bones?
7. Which hen has the largest width between her pelvic and keel bones?
8. Which hen has the least width between her pelvic and keel bones?
9. Did any of the hens show significant signs of molting?
10. Based on these factors, which hen is the most-persistent layer?

***10 Questions \* (5 Points/ Question) = 50 points  
To be answered concurrently with placing class.***