

2008 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. Which of the following selection criteria is not considered when evaluating broiler breeders for future meat production?
 - A. finish
 - B. blindness in one eye or both eyes
 - C. length of muscling in the breast
 - D. depth of muscling in the breast
2. In the evaluation of egg-type hens, loss of pigmentation (i.e., “bleaching”)
 - A. is a good, or reasonably good indicator of the number of eggs laid by a hen.
 - B. is not influenced by pigment in feed.
 - C. is not influenced by the size of the hen.
 - D. is an evaluative factor that may not be superseded by other selection factors.
3. Which of the following statements about the evaluation of laying hens is most correct?
 - A. Handling quality refers to the flightiness of the hen.
 - B. Molting rate is an indication of pigmentation.
 - C. Molting rate is an indication of handling quality.
 - D. Feathers of high producing hens maybe frayed, ragged, dirty and dull.
4. When referring to the soundness of an egg shell, the term “check” indicates
 - A. a small scratch exists on the shell surface.
 - B. the egg has a fine, hairline (or “hair-like”) crack.
 - C. the egg should be assigned a quality grade of “B”.
 - D. the egg should be assigned a quality grade of “AA”.
5. Which of the following statements about air sacs is not correct?
 - A. Air sacs provide a reserve supply of air for flying birds.
 - B. There are many blood vessels found in the membranes composing the walls of air sacs.
 - C. Air sacs help regulate body temperature.
 - D. Air sacs reduce the specific gravity of flying birds.
6. Which of the following is not a part of a chicken’s skeleton?
 - A. ilium
 - B. maxilla
 - C. trapezius
 - D. ilium

7. An unusually large variation in hatch time was reported for eggs from the same farm. The eggs were placed in the same incubator cabinet at the same time. Which of the following factors might have caused this outcome?
- A. vibration and noise
 - B. uneven pre-warming
 - C. some of the eggs had darker tint
 - D. improper sealing of the eggs prevented carbon monoxide (CO) loss
8. Which of the following statements about removing (or “pulling”) chicks from a commercial hatcher is correct?
- A. Chicks should be removed immediately after separating from their shells.
 - B. It is feasible to remove chicks individually as they begin to dry.
 - C. All chicks should remain in the hatcher until they have dried completely.
 - D. Chicks are ready to be removed when most are dry and a few (5%) still have some moisture on the backs of their necks.
9. Which of the following factors would most likely reduce hatchability?
- A. gravitational acceleration
 - B. degree latitude
 - C. relatively high altitude
 - D. all of the above
10. Which of the following factors could be a probable cause for chicks hatching earlier than expected?
- A. low temperature during incubation
 - B. high relative humidity during incubation
 - C. low egg storage temperature
 - D. small eggs
11. The correct brooder heat setting should be determined by which of the following conditions?
- A. temperature and chick behavior
 - B. remote sensing
 - C. infra-red imaging
 - D. rate of propane usage
12. What procedure might be performed on the male breeder chick in the hatchery that could later maximize fertility and reduce injury to breeding hens when these birds mate?
- A. clip back toe nails
 - B. comb dubbing
 - C. vaccination
 - D. none of the above

13. Under optimal conditions how many healthy and vigorous broiler breeder males are needed per 100 female breeders, early in the laying cycle?
- A. 12 to 15
 - B. 10 to 11
 - C. 8 to 9
 - D. 100
14. For broiler breeders, increased day length beyond _____ hours of light is of questionable economic benefit.
- A. 8
 - B. 14
 - C. 17
 - D. 21
15. Which of the following is a reasonable number of broiler breeder hens for each nest hole (12" w x 12" h x 12" d), when using a conventional two-tier nest system?
- A. 12 hens per nest hole
 - B. 8 hens per nest hole
 - C. 4 hens per nest hole
 - D. 2 hens per nest hole
16. Which of the following would be considered an appropriate weight for 100 newly-hatched broiler chicks?
- A. approximately 4 pounds
 - B. approximately 9 pounds
 - C. approximately 18 pounds
 - D. approximately 25 pounds
17. When starting a flock of market broiler chickens, it is recommended that pre-heating the house should begin _____ hours prior to chick arrival.
- A. 12
 - B. 24 to 36
 - C. 36 to 48
 - D. 1
18. During cleaning, washing a turkey house with high-pressurized water will typically remove at least _____ percent of the residual microbial contaminants.
- A. 10 to 20
 - B. 40 to 50
 - C. 90 to 95
 - D. 100

19. Which of the following statements about the use of rice hulls during brooding of turkey poults is correct?
- A. Poults are likely to eat the rice hulls.
 - B. Rice hull dust predisposes poults to aspergillosis
 - C. Rice hull dust predisposes poults to eye irritation.
 - D. all of the above
20. For commercial market turkeys, prestarter diets may contain as much as _____ percent protein.
- A. 20.0
 - B. 25.0
 - C. 16.0
 - D. 29.0
21. Light affects layers by stimulating the pituitary gland to release _____, which, in turn, cause(s) increased growth of ova.
- A. LH and FSH
 - B. thyroxin
 - C. LH and GSH
 - D. progesterone
22. Which of the following is an appropriate performance goal for white egg-strain pullets or hens?
- A. 88% livability to 16 weeks
 - B. 45-week egg laying period (first egg to end of lay)
 - C. 425 hen-day eggs (to 60 weeks)
 - D. approximately 1.90 pounds of feed consumed per pound of eggs produced
23. Bantams are usually about _____ the size of their large fowl counterpart.
- A. 1/2
 - B. 1/3
 - C. 1/5
 - D. 1/10
24. Within the nomenclature of standard breed poultry, the term “variety” designates characteristics related to which of the following?
- A. shape
 - B. color or comb type
 - C. company
 - D. breeder or geographic region of origin

25. When chickens that produce brown-shelled eggs and chickens that produce white-shelled eggs are kept under the same conditions and fed the same feed, the brown shell eggs will
- A. be more nutritious.
 - B. be less nutritious.
 - C. be the same nutritionally as the white-shelled eggs
 - D. keep their quality much longer, be easier to candle and hatch more chicks in addition to being more nutritious and healthy.

Calculation Questions Follow

26. An egg production company has a goal of producing 490,000 eggs per week. If the average hen-day egg production is 80%, what size flock of laying hens would be required to meet the company's goal?
- A. 70,000
 - B. 87,500
 - C. 392,000
 - D. 612,500
27. For a broiler breeder flock, uniformity is expressed as the percentage of birds that fall within 15% of the average weight. A sample of 50 birds from a broiler breeder flock was weighed, and the total weight was 180 pounds. To determine the uniformity, the percentage of birds weighing between _____ pounds should be calculated.
- A. 0.54 and 1.08
 - B. 2.00 and 4.00
 - C. 3.45 and 3.75
 - D. 3.06 and 4.14
28. A grower hopes to produce market broilers in a facility that, due to property layout restrictions, will not permit its' width to exceed 40 feet. Following the recommendation of one nipple waterer for every 10 birds, she intends to install 3,000 nipples in the new house. If the grower's bird density goal for this house is 0.80 square feet per bird, the house should be built to what length?
- A. 175 feet
 - B. 600 feet
 - C. 500 feet
 - D. none of the above

- 29.** Market turkey hens are expected to weigh approximately 22 pounds at 18 weeks of age, with a feed conversion ratio (pounds of feed per pound of gain, FCR) of 2.60. Market turkey toms are expected to weigh approximately 34 pounds at 18 weeks of age, and the FCR should be approximately 2.40. If feed costs \$0.125/pound, calculate the feed cost per pound of live weight for the hens and toms.
- A. \$0.325/pound for hens; \$0.300/pound for toms
 - B. \$0.015/pound for hens; \$0.009/pound for toms
 - C. \$1.058/pound for hens; \$1.771/pound for toms
 - D. \$7.150/pound for hens; \$10.200/pound for toms
- 30.** The target body weight of 7-day old broiler chicks is 4 to 5 times the day-old weight. If a sampling of 500 7-day-old chicks weighs 100 kg, which of the following would have been a reasonable average weight per chick when they were 1 day old?
- A. 200 grams
 - B. 55 grams
 - C. 45 grams
 - D. 35 grams