



Poultry Evaluation Career Development Event

WRITTEN EXAM KEY

1. Hens that have laid large numbers of eggs are usually bleached in all the body parts. What is the approximate number of weeks should it take for the bottom of the foot to fade?

A. 0 to 2
B. 3 to 4
C. 4 to 5
D. 8 to 12

Reference: B-7

AFNR Standard: AS.06.03.03.c Evaluate and select animals to produce superior animal products based on industry standards.

2. The U.S. Standards for Quality of Individual Shell Eggs uses different factors as the basis to determine egg quality. Of the factors listed below, which one does not fit into the Standards for Quality of Individual Shell eggs?

A. cleanness and soundness of shell
B. shell color
C. size of air cell
D. white or yolk

Reference: B-22

AFNR Standard: FPP.03.01.03.b Examine and evaluate inspection and harvesting of animals using regulatory agency approved or industry-approved techniques.

3. When candling an egg, the maximum depth of an air cell for a Grade A quality should be:

A. up to 1/8"
B. 1/8" to 3/16"
C. greater than 3/16"
D. Less than 1 inch

Reference: B-25

AFNR Standard: FPP.03.01.01.c. Outline procedures to assign quality and yield grades to food products according to industry standards.

4. Pronounced ridges _____.

A. Detract from the appearance of the egg while increasing the soundness/strength of the egg.
B. Decrease shell soundness/strength and detract from the appearance of the egg.
C. Should be marked as an NG (nongradable) Quality.
D. None of the above.

Reference: B-34

AFNR Standard: FPP.03.01.04.c. Evaluate and grade food products from different classifications of food products.

5. Some Further Processed Poultry Meat Products are Whole Muscle Boneless or Bone-In Products: These products go through a five-step process flow starting with Portioning. What is the final process step these products go through before packaging?

A. Glazing
B. Portioning
C. Marination
D. Predust/Batter/Bread

Reference: B-38

AFNR Standard: FPP.03.01.02.b. Assemble procedures to perform quality-control inspections of raw food products for processing.

6. When identifying poultry parts, the part that is the inner pectoral muscle (pectoralis minor, underlying the pectoralis major) along the breastbone. It is a boneless, skinless portion of white meat. Tendons may be present. This part should be identified as:

A. Boneless/Skinless split breast
B. Pectoralis Major
C. Pectoralis Minor

D. Tenderloin

Reference: B-47

AFNR Standard: AS. 06. 02. 03. c. Apply knowledge of anatomical and physiological characteristics of animals to make production and management decisions.

7. For a typical egg laying operation, the production goals are to produce an average of one dozen table eggs for every 3.0 to 3.5 pounds of feed provided, and to gather 240 to 350 eggs per hen housed during the _____ week laying period.

A. 35 to 52
B. 52 to 80
C. 80 to 95
D. 100 to 135

Reference: C-3

AFNR Standard: AS.04.03.04.c. Select and assess animal performance based on quantitative breeding values for specific characteristics.

8. The supplying of producers with the services and materials necessary for production, including the processing and marketing of products to meet the consumer's needs is called.

A. Agribusiness
B. Ag Communication
C. Ag Education
D. Ag Marketing

Reference: C-9

AFNR Standard: ABS.01 .02.02.a. Identify the meaning and importance of goals and objectives in AFNR business enterprises.

9. The muscles of poultry have distinct purposes to assist poultry to be mobile and assist in flight. The muscle that flexes the knee joint and extends the thigh is the _____ muscle.

A. Adominus
B. Peroneus
C. Satorius
D. Semitendinosus

Reference: C-17

AFNR Standard: AS.06.02.01.c. Correlate the functions of animal cell structures to animal growth, development, health and reproduction.

10. The _____ is a cavity for the entrance of the genital, urinary, and digestive tracts.

A. Cecum
B. Cloaca
C. Glandular Stomach
D. Follicular Membrane

Reference C-23

AFNR Standard: AS.06.02.01.c. Correlate the functions of animal cell structures to animal growth, development, health and reproduction.

11. The _____ system consists of a number of glands that produce secretions called hormones.

A. Alimentary
B. Endocrine
C. Reproductive
D. Urinary

Reference: C-25

AFNR Standard: AS.06.02.01.c. Correlate the functions of animal cell structures to animal growth, development, health and reproduction.

12. When candling a fertile egg, a healthy embryo causes the egg to have a _____ appearance.

A. Dark
B. Clear
C. Cloudy
D. Red

Reference: C-29

AFNR Standard: AS.06.02.02.c. Apply the processes of meiosis and mitosis to solve animal growth, development, health and reproductive problems.

13. _____ is the ability of an organism to produce disease in poultry.

- A. Bacteria
- B. Disease
- C. Infection
- D. Pathogenicity

Reference: C-38

AFNR Standard: AS.07.01.03.b. Identify and describe common illnesses and disorders of animals based on symptoms and problems caused by wounds, diseases, parasites and physiological disorders.

14. _____ Disease, is a highly contagious viral disease of young chickens characterized by high mortality, anorexia, diarrhea, and depression. It is caused by a virus that has a preference for lymphoid tissue, primarily the bursa of Fabricius.

- A. Cholera
- B. Fowl Pox
- C. Gumboro
- D. Infectious Laryngotracheitis

Reference: C-47

AFNR Standard: AS.07.01.03.b. Identify and describe common illnesses and disorders of animals based on symptoms and problems caused by wounds, diseases, parasites and physiological disorders.

15. Which of the following terms indicates without oxygen?

- A. Anaerobic
- B. Aerotolerant organism
- C. Antioxidant
- D. Obligate organisms

Reference: C-60

AFNR Standard: AS.08.01.01.b. Assess methods of reducing the effects of animal agriculture on the environment.

16. A moisture content considered proper for successful aerobic composting would be?

- A. 20% to 30%
- B. 30% to 40%
- C. 40% to 50%
- D. 50% to 60%

Reference: C-62

AFNR Standard: AS.08.01.01.b. Assess methods of reducing the effects of animal agriculture on the environment

17. During grow out of broilers, the temperature target for best performance ranges from ___°F on day one to near ___°F or lower just before catch at time for slaughter. What are these temperatures?

- A. 80°F and 75°F
- B. 90°F and 70°F
- C. 95°F and 70°F
- D. 99°F and 75°F

Reference: C-68

AFNR Standard: AS.06.03.02.c. Choose, implement and evaluate sustainable and efficient procedures (e.g., selection, housing, nutrition and management) to produce consistently high-quality animals that are well suited for their intended purposes.

18. The scientific name for the ancestor of the domestic chicken, red jungle fowl is:

- A. Anser anser
- B. Gallus gallus
- C. Gallus melegrus
- D. Phasianus Phasianus

Reference: C-78

AFNR Standard: AS.07.01.03.b. Identify and describe common illnesses and disorders of animals based on symptoms and problems caused by wounds, diseases, parasites and physiological disorders.

19. The turkey was domesticated in Mexico over 2000 years ago by the

- A. Aztecs
- B. Choushatas
- C. Mexico
- D. Navaho

Reference: C-79

AFNR Standard: AS.01.01.01.c. Evaluate the implications of animal adaptations on production practices and the environment.

20. A _____ is a segment of DNA that carries a blueprint for the function of a cell.

- A. Chromosome
- B. DNA
- C. Gene
- D. Genotype

Reference: C-81

AFNR Standard: AS.06.02.01.c. Correlate the functions of animal cell structures to animal growth, development, health and reproduction.

21. _____ are complex organic macromolecules containing carbon, hydrogen, oxygen, nitrogen, and usually sulfur.

- A. Carbohydrates
- B. Lipids
- C. Proteins
- D. Minerals

Reference: C-83

AFNR Standard: AS.03.02.02.c. Select and utilize animal feeds based on nutritional requirements, using rations for maximum nutrition and optimal economic production.

22. Single stomach, or monogastric, animals require 22 amino acids in their body. Those animals can manufacture a portion of the 22 non-dietary essential amino acids, but cannot store the amino acids in their bodies. As a result, they must get a daily dose of protein containing which of the following?

- A. Adequate dietary methionine levels to cover the shortage.
- B. Dietary protein exclusively from plant feedstuffs.
- C. Dietary nitrogen levels to build these odd amino acids.
- D. The other 10 dietary essential amino acids.

Reference: C-84

AFNR Standard: AS.03.01.01.c. Assess nutritional needs for an individual animal based on its growth stage and production system.

23. Animals need very small amounts of some types of minerals that are called Trace Minerals. Which of the following would be listed as a Trace Mineral?

- A. Biotin
- B. Choline
- C. Cobalt
- D. Sodium

Reference: C-86

AFNR Standard: AS.03.01.02.b. Correlate a species' nutritional needs to feedstuffs that could meet those needs.

24. According to the Section, Marketing Poultry Products in the Poultry Science Manual, in the U.S., food is packaged and sold in a/an _____ market.

- A. Consumer-driven
- B. Fad or Niche-driven
- C. Finance-driven
- D. Regulatory-driven

Reference: Marketing Poultry Products C-98, Page 1

AFNR Standard: ABS.05.03.01.b. Assess alternative marketing strategies as related to marketing principles for AFNR businesses (e.g. value-adding, branding, niche marketing, etc.)

25. Food safety is an important part of the marketing program when the company's products are branded. In addition, the HACCP system is implemented in all facilities to prevent the potential of hazards associated with the branded poultry products. HACCP refers to:

- A. Hazard Analysis and Crucial Controller Positioning
- B. Hazard Analysis and Central Control Points
- C. Hazard Analysis and Critical Control Points
- D. Hazard Analysis and Crucial Control Points

Reference: *Marketing Poultry Products*, C-98, Page 4

AFNR Standard: FPP.01.03.01.a. Identify and summarize purposes of food storage procedures (e.g., first in/first out, temperature regulation, monitoring, etc.).

26. If broiler litter contains 25% moisture, then one ton will contain:

- A. 800 pounds dry matter
- B. 1,500 pounds dry matter
- C. 1,600 pounds dry matter
- D. 1,800 pounds dry matter

Reference: C-65

AFNR Standard: ESS.04.02.01.c. Develop a plan for solid waste disposal for a given situation that considers the environmental hazards, economic realities and social concerns associated with this task.

27. If a house of 6-week-old Broilers eat between 26 to 30 pounds of feed per day per 100 birds, what is the total feed consumption for a house containing 29,500 birds per day?

- A. 1.3 tons to 1.5 tons
- B. 2 tons to 4 tons
- C. 2.6 tons to 3 tons
- D. 3.8 tons to 4.4 tons

Reference: C-65

$$29,500/100 = 295; 295 \times 26 = 7,670; 7670/2000 = 3.835$$

$$29,500/100 = 295; 295 \times 30 = 8,850; 8850/2000 = 4.425$$

AFNR Standard: AS.03.02.01.c. Select appropriate feedstuffs for animals based on a variety of factors (e.g., economics, digestive system and nutritional needs, etc.).

28. If the soil nutrient value of broiler litter contains 1.2% phosphorus as P₂O₅, then a ton will contain:

- A. 12 pounds of phosphorus
- B. 20 pounds of phosphorus
- C. 24 pounds of phosphorus
- D. 48 pounds of phosphorus

Reference: C-64

$$2,000 \times 0.012 = 24 \text{ pounds}$$

AFNR Standard: ESS.04.02.03.c. Evaluate the appropriateness of composting methods in different situations

29. Dry-Stack Storage Systems with a gable-roofed structure is an option for storing large quantities of manure in a dry environment. What is the total cost of a 40-foot by 60-foot structure at \$3.75 per square foot?

- A. \$4,500
- B. \$8,400
- C. \$9,000
- D. \$10,400

Reference: C-59

40 ft. x 60 ft. = 2400 square feet; 2400 sq. feet x \$3.75 = \$9,000

AFNR Standard: ESS.04.02.01.c. Develop a plan for solid waste disposal for a given situation that considers the environmental hazards, economic realities and social concerns associated with this task.

30. How many pounds of ground corn (9% protein) and pounds of soybean meal SBM (44% protein) needed to formulate a ton of 22% crude protein mix?

- A. 63 pounds of corn; 37 pounds of SBM
- B. 900 pounds of corn; 1,100 pounds of SBM
- C. 1,257 pounds of corn; 743 pounds of SBM
- D. 1,560 pounds of corn; 440 pounds of SBM

Reference: C-95

Using Pearson's Square

Corn	9	22
Desired		22
SBM	44	13
		35 total parts

Corn: $22 \div 35 = 0.6285 \times 2000 = 1,257$ pounds

SBM: $13 \div 35 = 0.3714 \times 2000 = 743$ pounds

AFNR Standard: AS.03.02.02.c. Select and utilize animal feeds based on nutritional requirements, using rations for maximum nutrition and optimal economic production.