

1. Timothy, orchardgrass and tall fescue fall into which category of grasses? pg 24 – Jan 10
  - a. Warm season
  - b. C4
  - c. Cool season
  - d. Legume
  
2. Who is known as one of the fathers of near infrared (NIR) analysis? pg 89 – Feb 10
  - a. Bert Stewart
  - b. W.D. Hoard
  - c. John Shenk
  - d. Stephen Babcock
  
3. Which breed is at the highest risk for developing copper toxicity? Pg 158 – March 10
  - a. Ayrshire
  - b. Holstein
  - c. Jersey
  - d. Brown Swiss
  
4. Milk nitrogen efficiency (MNE) is an index developed to assess the efficiency of nitrogen use in the dairy cow. Research indicates what is a maximum MNE value? Pg 197 – March 25
  - a. 20 to 35 percent
  - b. 40 to 45 percent
  - c. 60 to 65 percent
  - d. 80 to 95 percent
  
5. Some plant species are salt tolerant and can be used to reestablish a vegetative cover on manure stacking sites. Which crop should not be used to accomplish this task? pg 9 – Jan 10
  - a. Corn
  - b. Winter wheat
  - c. Barley
  - d. Sunflowers
  
6. Yield losses in legume crops almost always occur on fields with a lower than normal soil pH for which reason? pg 95 – Feb 10
  - a. Some nutrients become more available to the plant
  - b. Additional nitrogen fixation occur in legumes
  - c. Diseases are less severe
  - d. Persistence is lost in perennials
  
7. What is an ideal pH for herbicide spray water? pg 116 – Feb 25
  - a. 2 to 3

- b. 6 to 7
  - c. 9 to 10
  - d. 12 to 14
8. Worldwide, there are how many weeds known to be resistant to three or more herbicides? pg 238 – Apr 10
- a. 5
  - b. 14
  - c. 36
  - d. 50
9. A drought tolerant variety of which crop has received nonregulated status from USDA Animal and Plant Health Inspection Service? pg 71 – Feb 10
- a. Soybeans
  - b. Carrots
  - c. Wheat
  - d. Corn
10. Compared to dairy, which received \$750 million in funding from the last farm bill, how much does the U.S. spend on food stamps annually? pg 75 – Feb 10
- a. \$10 million
  - b. \$80 million
  - c. \$30 billion
  - d. \$70 billion
11. Which financial calculation measures the ability of a business to make loan payments for the year before income taxes are paid and a depreciation deduction is taken? pg 311 Apr 25
- a. Cash flow
  - b. Current ratio
  - c. Net worth
  - d. EBITDA (Earnings before interest, taxes, depreciation and amortization)
12. It is estimated that Americans consume how many milligrams of salt each day? pg 12 – Jan 10
- a. 1,000 to 1,500
  - b. 1,900 to 2,300
  - c. 3,400 to 3,500
  - d. 4,500 to 4,700
13. A growing number of consumers will only eat food produced within 100 miles of their home. What are these consumers commonly known as? pg 43 – Jan 25
- a. Carnivores
  - b. Herbivores
  - c. Omnivores
  - d. Locavores

14. According to the Institute of Medicine, 2,000 milligrams per day is the maximum daily intake level of which mineral? pg 487 – Aug 10
- Calcium
  - Sodium
  - Hydrogen
  - Oxygen
15. At 41°F, a calf that is fed four quarts of milk per day, with 20 percent fat content will have a growth potential of how many pounds per day? pg 76 – Feb 10
- 0.5 pound
  - 0.0 pound
  - 1.0 pounds
  - 1.8 pounds
16. How many seconds after initial teat stimulation should the milking unit be attached? pg 589
- 10 to 15 seconds
  - 30 to 40 seconds
  - 90 to 120 seconds
  - 150 to 200 seconds
17. Even with an SCC (somatic cell count) of 200,000 cows experience a loss of approximately how many pounds of milk per day? pg 14 – Jan 10
- 0.5
  - 2.6
  - 5.9
  - 10.3
18. At first breeding, heifers should be what percent of their dam's mature body weight? pg 536 – Aug 25
- 10 percent
  - 45 percent
  - 55 percent
  - 85 percent
19. During the cooler months, how many inches of bunk face should be removed per day? pg 253 – Apr 10
- 1 to 5 inches
  - 6 to 12 inches
  - 24 to 36 inches
  - 42 to 63 inches
20. When unsaturated fatty acids are present in the rumen and incomplete biohydrogenation occurs, what is likely to result? pg 417 – June
- milk fat depression

- b. ketosis
  - c. displaced abomasum
  - d. lower milk yield
21. In a mixed stand, grasses will rapidly remove which nutrient before alfalfa has a chance to use it, causing alfalfa to starve to death? Pg 24 – Jan 10
- a. Oxygen
  - b. Copper
  - c. Calcium
  - d. Potassium
22. A new record mailbox price, \$3.91 above 2010 values, was set in 2011. What was the 2011 mailbox price? pg 236 – Apr 10
- a. \$16.29
  - b. \$12.99
  - c. \$20.20
  - d. \$21.45
23. This modern version of a partnership can include one individual or a combination of several persons. It helps carry on a business or hold assets and creates a “shell” protecting individual members? pg 712 – Oct 25
- a. LLC (Limited liability company)
  - b. C- corporation
  - c. S- corporation
  - d. FLP (family limited partnership)
24. In 2010, American farmers produced how many calories of food per American each day? pg 82 – Feb 10
- a. 1,500
  - b. 2,500
  - c. 3,900
  - d. 5,200
25. By the year 2050, it is estimated that what percentage of the world’s population will live in urban areas? pg 192 – March 25
- a. 30
  - b. 50
  - c. 70
  - d. 90
26. In the U.S. how many people received benefits from the Supplemental Nutrition Assistance Program in 2011? The program was formerly known as food stamps. pg 391 – June
- a. 45,000
  - b. 450,000
  - c. 4.5 million

- d. 45 million
27. The NAHMS Dairy study from 2007 estimated that at least what percent of U.S. operations with 500 cows or more have Johne's disease? pg 81 – Feb 10
- a. 35
  - b. 50
  - c. 76
  - d. 95
28. Which of the following is **NOT** a main surveillance method for bovine viral diarrhea virus (BVDV)? pg 201 – March 25
- a. Vaccinating against the virus
  - b. Bulk milk testing
  - c. Testing for the virus in individual cattle
  - d. Testing for antibody responses
29. When breeding dairy cattle, where should semen be deposited? pg 587
- a. Uterine body
  - b. Rumen
  - c. Uterine Horn
  - d. Cervix
30. Which member of the Young Dairy Leaders Institute's inaugural class was named the 2011 Distinguished Alumnus? Pg 143 – March 10
- a. Marilyn Hershey
  - b. John Pagel
  - c. Bonnie Mohr
  - d. Becky Payne
31. Somatic cells in milk are a more common name for which immune system cells? pg 14 – Jan 10
- a. Killer T
  - b. Red blood cells
  - c. Memory
  - d. Leukocytes
32. What is an inflammation of the mammary gland caused by the release of leukocytes and other defense mechanisms responding to an invasion by pathogens more commonly known as? pg 398 – June
- a. Bovine Leukosis Virus
  - b. Hyperkeratosis
  - c. Pink eye
  - d. Mastitis

## **Buildings and Equipment**

1. Free stalls for prefresh cows should be how many inches wide? Pg 97 – Feb 10
  - a. 30 inches
  - b. 45 inches
  - c. 54 inches
  - d. 72 inches
  
2. Across all animal agriculture sectors, it is estimated that how many digester systems were operational in the U.S. at the end of 2011? pg 227 – April 10
  - a. 27
  - b. 94
  - c. 176
  - d. 400
  
3. When cooling cows during the summer months, farms need enough fan capacity to achieve air speeds of how many miles per hour? Pg 304 – Apr 25
  - a. 2 to 4
  - b. 10 to 12
  - c. 22 to 26
  - d. 50 to 55
  
4. For prefresh cows, how many inches of bunk space should be targeted? pg 222 – March 25
  - a. 15
  - b. 30
  - c. 60
  - d. 100
  
5. At its maximum, stocking density should not exceed what percent for a group of lactating cows in a four-row barn because resting time drops greatly ? pg 449 – July
  - a. 80 to 85
  - b. 90 to 110
  - c. 115 to 120
  - d. 195 to 200