

Holstein Foundation

2019 Dairy Bowl

Practice Questions

1. The average American household spends over \$2,000 annually on food, that eventually goes to waste. What dairy product represents twelve percent of consumer waste by weight?

Milk (Hoard's Dairyman)

2. What is the name of the forum initiated in 2008 by dairy farmers that brings together the dairy community to address the changing expectations of consumers through a framework of shared best practices?

The Innovation Center for U.S. Dairy (Hoard's Dairyman)

3. What university earned top honors at the 96th Collegiate Dairy Products Evaluation Contest?

South Dakota State University (Hoard's Dairyman)

4. The concept of SMART goals has been used many times to define the writing of a business plan. What does the letter "A" represent in SMART?

Attainable (Hoard's Dairyman)

5. The bacterium *Moraxella bovis* has been implicated as the principle cause of what in cattle?

Pinkeye (Hoard's Dairyman)

6. For the first time this year, genetic evaluations for resistance to how many diseases were released by the Council on Dairy Cattle Breeding?

Six diseases (Hoard's Dairyman)

7. Since 2000, what country's dairy industry has expanded its dairy herd by 6.9 percent annually?

China (Hoard's Dairyman)

8. In the reproductive system of a dairy cow, what is the common name for the corpus luteum?
Yellow body (Hoard's Dairyman)
9. McDonald's has added what type of cheese slices, for sandwiches, to its menu?
White Cheddar slices (Hoard's Dairyman)
10. Regarding energy metabolism, what term is given to when an early lactation dairy cow loses body weight?
Negative energy balance (Hoard's Dairyman)
11. What is the key to making winter forage a high-quality feed?
Harvest technique (Hoard's Dairyman)
12. Where does the world's largest purebred livestock show take place?
North American International Livestock Expo or Louisville, KY (Hoard's Dairyman)
13. If a cow has a calving ease score of two, what type of birth was observed?
Slight problem (Red Book)
14. Name the 2018 *Hoard's Dairyman* editorial intern.
Christy Achen (Hoard's Dairyman)
15. Adding cellulose nanofibrils from what plant, to ice cream has been found to reduce melting?
Banana plant (Hoard's Dairyman)
16. What is the term for a farm's unique identification number that is part of the National Animal Identification System?
Premises I.D. (Holstein Pulse)
17. To maintain profit margins, a dairy farmer should be monitoring and making decisions based on the herd's IOFC. What do the initials IOFC stand for?
Income Over Feed Costs (Hoard's Dairyman)

18. What are supernumerary teats in dairy cattle?

Extra teats that are nonfunctional (Holstein Foundation)

19. The sixth round of NAFTA negotiations took place in January. Since its inception, U.S. ag exports have grown to \$38.6 billion. What country is the top dairy customer?

Mexico (Hoard's Dairyman)

20. Supplementing progesterone is beneficial how many days post-insemination, which results in higher conception rates?

3 to 7 days (Hoard's Dairyman)

21. No matter what solution is used in a footbath, it needs to be a minimum of how many feet long?

10 feet long (Hoard's Dairyman)

22. There were 100,000 more dairy cows sent to packing plants last year. Even so, heifer inventories remain ample due to what?

Sexed semen (Hoard's Dairyman)

23. Grass or alfalfa silages that are ensiled with too much moisture result in the formation of an undesirable organic acid that has a strong odor. What is the name of this acid?

Butyric acid (Hoard's Dairyman)

24. Name the world's largest pizza company.

Domino's (Hoard's Dairyman)

25. What is the current U.S. legal limit for somatic cells in milk?

750,000 cells/ml (Hoard's Dairyman)

26. Which type of fly is responsible for grubs or warbles in cattle?

Heel fly (Hoard's Dairyman)

27. Name the world's leading dairy product exporter.

New Zealand (Hoard's Dairyman)

28. The milk ring test is used to test for what disease?
Brucellosis or bangs disease (Hoard's Dairyman)
29. Solar panels should be in an area free of dust and debris and placed facing in what direction to maximize sun exposure?
South (Hoard's Dairyman)
30. Pneumonia detection in calves has gotten easier with what highly accurate and rapid tool?
Ultrasound (Hoard's Dairyman)
31. Who is responsible for inventing the continuous cream separator in 1878?
Dr. Gustav De Laval (Other)
32. The disease Cryptosporidiosis in calves is caused by a protozoan parasite. Which section of the digestive system does "crypto" primarily affect?
Small intestine (Dairy Herd Management)
33. When a calf dies on the farm, veterinarians often conduct a postmortem exam to find out the cause of death. What is the technical name for this exam?
Necropsy (Hoard's Dairyman)
34. What state currently regulates used tires for bunkers and piles? The ordinance is meant to eliminate the use of whole tires that catch and retain water.
New York (Hoard's Dairyman)
35. Part of a successful ringworm treatment plan is washing infected animals with what type of shampoo?
Iodine-based shampoo (Hoard's Dairyman)
36. What inaugural event teamed farmers from across the country with professional football players and was sponsored by Land O'Lakes during the 2018 Super Bowl?
Farm Bowl (Hoard's Dairyman)

37. When do cows normally drink half of their daily water intake?
After milking (Hoard's Dairyman)
38. What is the name for the large, open-air barns that provide a comfortable group resting and walking area as opposed to barns with individual stalls and concrete walkways?
Bedded pack barn (Hoard's Dairyman)
39. After planting, what is the best strategy to promote a good stand of alfalfa?
Weed control or fertilization (Hoard's Dairyman)
40. What state accounted for 18.47 percent of the nation's milk flow last year. That's the lowest market share for this state since 1999.
California (Hoard's Dairyman)
41. Many individuals, organizations and media outlets are surprised when ICE audits of dairy operations find that a significant amount of our foreign-born labor are here without proper authorization. What does ICE stand for?
Immigration and Customs Enforcement (Hoard's Dairyman)
42. What is the tissue called that surrounds a cow's heart?
Pericardium (Hoard's Dairyman)
43. What government organization conducts research on genetic traits for dairy cattle?
Animal Genomics and Improvement Laboratory (AGIL) (Hoard's Dairyman)
44. What term describes the amount of heat required to raise the temperature of one gram of water from 14.5 degrees C to 15.5 degrees C?
Calorie (Dairy Herd Management)
45. What is the average ash content in grasses?
6 to 8% (Progressive Dairyman)
46. A calf's immune system is not fully functional until how many months of age?
5 to 8 months (Hoard's Dairyman)

47. The most desirable grains of sand for deep-bedded stalls fall uniformly in what size?
0.1 to 2.0 millimeters (Hoard's Dairyman)
48. Semen straws should be cut how far below the sealed end at a 90-degree angle?
¼ inch (Hoard's Dairyman)
49. In order to produce GMO-free milk, what percent of the cow's ration must be sourced from non-GMO ingredients?
55% (Hoard's Dairyman)
50. A purple tinged corn plant is usually a sign of what nutrient deficiency?
Phosphorus (Other)
51. What lab measurement accounts for the total fiber remaining after a forage sample is incubated in rumen fluid for 240 hours?
Undigested neutral detergent fiber (Hoard's Dairyman)
52. What is the most widely implemented strategy to improve the feeding value of kernels found in corn silage?
Kernel processor (Hoard's Dairyman)
53. The two largest human genomic testing companies, Ancestry and 23andMe, have combined to genotype 8 million people around the world. How many dairy cattle have been genotyped?
2 million (Hoard's Dairyman)
54. In our current food system, animal derived products provide what percent of the protein of the essential amino acids available for human consumption in the U.S.?
46 to 50% (Hoard's Dairyman)
55. As reported in the *Agriland* publication, farms from what country were caught in calf fraud? More than 2,000 farms reported multiple births in 10 percent of the cows, as this country has strict emissions rules implemented by the government.
Netherlands (Hoard's Dairyman)

56. Where are the offices for the Council on Dairy Cattle Breeding located?
Bowie, Maryland (Holstein Pulse)
57. What term describes an animal's personal space, surrounding their body?
Flight zone (Hoard's Dairyman)
58. In regard to herd health what do the initials VCPR stand for?
Veterinary-client-patient relationship (Hoard's Dairyman)
59. If you're trading on the futures market, what marketing tool would be used by someone who owns a commodity such as milk and will sell it sometime in the future?
Short hedge (Hoard's Dairyman)
60. What term describes the study of the functions of the living body and its organs?
Physiology (Other)
61. What is the number one mistake in all estate planning?
Failure to write a will (Hoard's Dairyman)
62. What are the two general classes of probiotics?
Fungi and bacteria (Progressive Dairyman)
63. What is the measure of how well cows turn feed into milk?
Feed efficiency (Hoard's Dairyman)
64. How many gallons of blood are in a 1,400-pound cow?
9 to 9-1/2 gallons (Hoard's Dairyman)
65. Cross-ventilated barns are an adaptation of what cow cooling technology?
Tunnel ventilation (Hoard's Dairyman)

66. Who is the current Executive Director of National Dairy Shrine?
Dave Selner (Hoard's Dairyman)
67. Lots of energy dollars are spent needlessly because of bulk tank compressor or condensing unit did not allow for an adequate supply of air volume to cool what gas as it goes through the radiator?
Freon (Hoard's Dairyman)
68. For heifers two to six months of age, what is the recommended group size?
8 to 10 head (Hoard's Dairyman)
69. Hoof horn is a specialized outer layer of skin, also known as what?
Epidermis (Hoard's Dairyman)
70. Where is the appropriate place to measure airflow, while cows are lying in their stalls?
Cow's head level (Hoard's Dairyman)
71. What is the name of the cavity that contains the heart and lungs?
Thoracic (Other)
72. What is the name of the colorless tissue fluid that arises from arterial blood and surrounds the udder tissue?
Lymph (Other)
73. What is the main source of energy in forages?
Cellulose (Other)
74. Slick-haired Holsteins are better at regulating what?
Body temperature during heat stress (Progressive Dairyman)
75. Define digesta.
Partially digested feed material found in the small intestine (HF Workbooks)

76. When hoof trimming, a measure should be taken on the front wall of the inside claw on the hind feet. How many inches should this measure be?

3 inches (Dairy Herd Management)

77. What is the name of the condition where there is a buildup of fat in the body organ that produces bile?

Fatty liver (Hoard's Dairyman)

78. To enroll in the new Margin Protection Program, where did you need to set up a meeting?

Farm Service Agency office (Hoard's Dairyman)

79. What is the major component of connective tissue found in meat?

Collagen (Other)

80. At home, cows can meet their physical needs in the process of making milk by eating, drinking, resting, ruminating and what else?

Socializing (Hoard's Dairyman)

81. Milk is a food name that legally is subject to a SOI, disseminated by the Food and Drug Administration. What does SOI represent?

Standard of identity (Hoard's Dairyman)

82. What is the name of the college dairy science student competition that applies theory and learning to a real-world dairy, while working as part of a team?

North American Intercollegiate Dairy Challenge (Hoard's Dairyman)

83. Fertility issues result in significant revenue losses due to costs of more days open and replacing cows lost to reproductive culling. Nonpregnant cows are how many times more likely to be culled than pregnant cows?

7 to 7.5 times (Hoard's Dairyman)

84. Who is considered the father of modern genetics?

Gregor Mendel (Other)

85. What is the more common name for erythrocytes?

Red blood cells (Dairy Herd Management)

86. Just twenty years ago, America's top 10 dairy processors were entirely U.S. – based organizations. Now what is the division percentage between domestic and foreign entities?

50-50 split (Hoard's Dairyman)

87. Regarding dairy herd management, what term describes the number of sick animals in a certain period?

Morbidity rate (Dairy Herd Management)

88. If the milking machine milk to rest pulsation ratio is set at 55:45, what percent of the time is the inflation open?

55% open (Other)

89. What is the name of the event that attracts 100,000 attendees in California, featuring a three-day farm show for agriculture technology and innovation?

World Ag Expo (Hoard's Dairyman)

90. The top three reasons why farms install robots are the ability to milk more cows with less labor, improved lifestyle and what else?

Human health benefits (Hoard's Dairyman)

91. What is the predominant class of immunoglobulins found in bovine colostrum?

IgG (Other)

92. A total stimulation time of how many seconds is considered sufficient to initiate milk let-down?

10 to 12 seconds (Hoard's Dairyman)

93. Winter grains can be grown with optimum management for production of high-quality forage. Name one of the two primary grains.

Winter triticale or winter rye (Hoard's Dairyman)

94. Which branch of the immune system is responsible for pathogen-specific, antibody production and other similar mechanisms that drive an enhanced, targeted response to pathogens?

Acquired (adaptive) immunity (Hoard's Dairyman)

95. In 1979, the first prostaglandin product came to the marketplace. What is this product commercially known as?

Lutalyse (Hoard's Dairyman)

96. Manure related air emissions do not have to be reported under CERCLA. What does CERCLA stand for?

Comprehensive Environmental Response, Compensation and Liability Act (Hoard's Dairyman)

97. Iodine is necessary for making which hormone and is particularly important during pregnancy for normal fetal brain development?

Thyroid hormone (Hoard's Dairyman)

98. From a pure business standpoint, PACs can pay huge dividends for those in dairy circles. What does PAC stand for?

Political Action Committee (Hoard's Dairyman)

99. What two dairy organizations are now back on track having their meetings in the same city, starting in 2021?

American Dairy Science Association (ADSA) & American Society of Animal Science (ASAS) (Hoard's Dairyman)

100. What is the technical term for the class of chemicals used to kill internal parasites in cattle?

Anthelmintics or dewormers (Dairy Herd Management)

101. At the World Forage Analysis Superbowl the samples are all analyzed and ranked using a milk-per-ton value or what else?

Relative forage quality (RFQ) (Hoard's Dairyman)

102. What is the name of the iron-binding protein found in milk that has anti-microbial activity?

Lactoferrin (Holstein Foundation)

103. If your current veterinarian isn't female, chances are the next one you hire will be. Numbers provided by the AABP show that a growing segment of their population is women. What does AABP stand for?

American Association of Bovine Practitioners (Hoard's Dairyman)

104. Regarding milk processing, what is make allowance?

The cost of turning milk into cheese (Hoard's Dairyman)

105. What quality attribute is the most important factor according to beef buyers?

Food safety (Hoard's Dairyman)

106. Due to the School Meal Flexibility Rule published in 2017 by USDA, what type of fluid milk returned to school meal programs?

Flavored 1% milk (Hoard's Dairyman)

107. Properly bedded cow mattresses should have how many inches of bedding at all times?

1 to 3 inches (Hoard's Dairyman)