Holstein Foundation  
2020 Dairy Bowl  
Practice Questions

1. Dairy drives the U.S. economy by supporting how many jobs?  
   2.96 million (Dairy Herd Management March 2019, p. 6)

2. For a herd milking two times per day, what level should the automatic take-off be set to remove the machine?  
   1.5 – 1.8 pounds of milk per minute (Hoard's Dairyman)

3. Name the 2019 Holstein Elite Breeder award winner.  
   David Bachmann, Sr (Holstein Pulse)

4. What percent of pregnancies in first-lactation Holsteins result in dystocia?  
   19% (Hoard's Dairyman April 2019, p. 210)

5. Every $1 of U.S. dairy exports to Mexico generates how many dollars of economic activity in the U.S.?  
   $2.50 (Other April 2019, p. 14)

6. Ideally, high-quality alfalfa should contain what percentages of crude protein, acid detergent fiber and neutral detergent fiber?  
   20-30-40 (Hoard's Dairyman)

7. When constructing an animal mortality compost pile, it should be a minimum of how many feet from the nearest water source?  
   200 feet (Hoard's Dairyman)

8. The perfect soil contains what percent minerals?  
   45% (Hoard's Dairyman)
9. Hooves that are softer become injured more easily and may be more prone to severe claw lesions. Hooves that stay wet for more than what period of time are at a higher risk of lameness?

   One hour (Hoard's Dairyman)

10. What was the average somatic cell count in the U.S. in 2018?

    191,000 cells per mL (Hoard's Dairyman April 2019, p. 218)

11. What feed additive is introduced at harvest in order to stimulate fermentation, reduce dry matter loss, reduce ensiling temperature and boost digestibility?

    Silage bacterial inoculants (Hoard's Dairyman)

12. What percent do dairy companies contribute to the gross domestic product?

    1.9% (Dairy Herd Management March 2019, p. 6)

13. Fat mobilization is measured by what?

    Amount of non-esterified fatty acids (DHM 6/19)

14. Who was the leading sire of the 2018 National Holstein Show winners, based on the pedigree analysis?

    Val-Bisson Doorman-ET (Holstein 2018)

15. What is the desired pH level for soybeans?

    6.3 pH (Hoard's Dairyman)

16. What are the first two limiting essential amino acids?

    Methionine and lysine (Progressive Dairyman)

17. The best measure of cow comfort in free stall operations is the stall use index. How is the stall use index calculated?

    The number of cows laying down in a stall divided by the number of standing cows in a pen not eating at the feed bunk (Hoard's Dairyman)

18. Gout flare-ups could dwindle with a dose of what type of milk?

    Skim milk (Hoard's Dairyman)
19. What type of Holstein membership is offered for those individuals whose religion prohibits actual admittance into the association?

   **Associate** *(HAUSA Web Site)*


   **Dr. Mike Hutjens** *(Hoard's Dairyman 2019, p. 595)*

21. What dairy product broke the 1941 all-time production record last year?

   **Butter** *(Hoard's Dairyman March 2019, p. 171)*

22. When cows are resting, we expect to see at least what percent of them chewing their cuds?

   **58 to 62%** *(Hoard's Dairyman)*

23. Fatty livers account for an estimated how many millions in loses each year?

   **$60 million** *(Progressive Dairyman)*

24. Most ventilation companies offer a VSD fan that is automatically controlled by temperature-sensing technologies. What does VSD stand for?

   **Variable speed drive** *(Hoard’s Dairyman 5/19)*

25. Hilmar Cheese Company has entered into an agreement to sell its Turlock, CA milk powder facility to what organization?

   **California Dairies Inc.** *(Hoard’s Dairyman 6/19)*

26. What is the name of the final storage area of milk before the cow is milked?

   **Teat cistern** *(Hoard’s Dairyman)*

27. The American Simmental Association and the International Genetics Solutions have been studying which breeds are the best genetic complement to Holsteins. What they have found is that the best beef mating on Holsteins is semen from what bulls?

   **SimAngus bulls** *(Hoard’s Dairyman)*
28. Corneal ulcers can progress to the point where vision is permanently reduced or lost in the affected eye or what else can happen?

   Eye ruptures (Hoard's Dairyman 6/19)

29. In regard to semen tank management, an accumulation of frost at the top of the tank indicates a rapid evaporation of what?

   Liquid nitrogen (Hoard's Dairyman)

30. The average milk cow burns how many calories per day for maintenance?

   8,000 calories (Progressive Dairyman)

31. Name the milking component that encompasses the teat and expels milk from the udder.

   Inflation or milking liner (Hoard's Dairyman 5/19)

32. What is the name for products added to the diet to perform a certain job in the overall digestive process of the cow?

   Additives (Progressive Dairyman 5/19)

33. USDA’s Economic Research Service estimates feed makes up what percent of operating and total milk production costs?

   50 to 65% (Progressive Dairyman 5/19)

34. A rancid flavor in milk is associated with which component of milk?

   Milkfat, butterfat or fat (Other)

35. How should the behavior be of a healthy calf?

   Alert and lively (Hoard's Dairyman February 2012)

36. In regard to crops, what is the biggest criticism with red clover?

   Difficulty getting it dry (Hoard's Dairyman March 2015, p. 200)

37. In making cheese, milk is divided into solids and liquids. What are these two fractions called?

   Curds and whey (Other)
38. One horn fly can leave how many bites on an animal?  
   20 to 30 bites (Dairy Herd Management)

39. What country imports the most U.S. dairy products?  
   Mexico (Other April 2019, p. 14)

40. Standards for the FARM Animal Care Program are revised how often?  
   Every three years (Hoard's Dairyman March 2019, p. 182)

41. What slogan came out on top of PRWeek's 2019 "One shining slogan" bracket challenge?  
   Got Milk? (Hoard's Dairyman 6/19)

42. After calving, a dairy cow will slowly begin to increase her feed and dry matter intake. At how many days after calving does a cow reach maximum intake?  
   80 to 120 days (DHM 6/19)

43. What is the first line of therapy for any disease?  
   Prevention (Dairy Herd Management March 2019, p. 20)

44. How much does a unit of semen cost through Holstein Marketplace Sires?  
   $20 (Holstein Pulse January 2019)

45. There are two major problems that lead to poor milking efficiency: milking routines that result in delayed milk letdown and what else?  
   Overmilking (Dairy Herd Management April 2019, p. 16)

46. Fat is not deposited equally. Cattle will store fat on the top of the pelvis and where else first?  
   Over the spine (Hoard's Dairyman 6/19)

47. Science has shown us that cattle react to the world around them in response to the information they receive from their five senses. What are the five senses?  
   Sight, hearing, touch, smell and taste (Hoard's Dairyman)
48. When it comes to feeding milk powder most directions refer to ounces. Since most scales weigh in pounds you will need to divide your total number of ounces by what number in order to know how many pounds of powder to feed?

16 ounces (Progressive Dairyman 2019)

49. Gonadotropin releasing hormone is released from a specialized area in the brain. What is this area called?

Hypothalamus (Other)

50. How many years old is the Undeniably Dairy campaign?

Two years old (Hoard's Dairyman 5/19)

51. What nutrient is Greek yogurt higher in than traditional yogurt?

Protein (Dairy Herd Management)

52. This modern version of a partnership can include one individual or a combination of several people. It helps carry on a business or hold assets and creates a shell protecting individual members?

LLC (Limited liability company) (Hoard's Dairyman)

53. With sudangrass, harvest may occur as quickly as how many days after seeding?

45 days (Hoard's Dairyman 6/19)

54. Follicles on cystic ovaries are how big in diameter?

1 inch (Hoard's Dairyman)

55. What percent of a cow’s rumination occurs while it is lying down?

88 to 92% (Hoard’s Dairyman 6/19)

56. Hay contests are based on a combination of laboratory analysis and visual evaluation. Visual appearance includes leafiness, texture, maturity, and what else?

Color (Hoard's Dairyman)
57. According to the 2018 U.S. dairy statistics, which state has the greatest number of cows in the U.S.?
   *California* (Hoard's Dairyman March 2019, p. 155)

58. What is the Total Performance Index weighting for production traits?
   *46%* (Hoard's Dairyman 2018)

59. Which dairy breed has the lowest somatic cell count of any dairy breed?
   *Holstein* (Holstein Pulse October 2018, p. 4)

60. Name the world’s largest pizza company.
   *Domino’s* (Hoard’s Dairyman 2018)

61. Calving is described as occurring in how many stages?
   *Three stages* (Hoard’s Dairyman 2018)

62. Fall-seeded alfalfa should be planted how many weeks prior to the first freeze?
   *6 to 8 weeks* (Hoard’s Dairyman December 2017, p. 750)

63. For visual tag application, once you find the proper tagging location you should firmly squeeze the applicator until when?
   *You feel the snap of the tags attaching* (Holstein Pulse)

64. No matter what solution is used in a footbath, it needs to be a minimum of how many feet long?
   *10 feet* (Hoard’s Dairyman 2018)

65. In order to maximize sun exposure, solar panels should be placed facing in what direction?
   *South* (Hoard’s Dairyman 2018)

66. What percent of live calves will develop broken ribs during the birth process?
   *5 to 10%* (Hoard’s Dairyman 2018)
67. How often should farmers have their crop fields soil tested?
   Once every three years (Hoard's Dairyman 2018)

68. What is the standard pre-fresh time period before calving?
   3 weeks or 21 days (Progressive Dairyman October 2018, p. 42)

69. What is the loose skin of the underside of the neck called?
   Dewlap (Hoard's Dairyman 2018)

70. How much does it cost for a youth to become a junior member of Holstein Association USA, Inc.?
   $20 (HAUSA Web Site)

71. What low-fat dairy product is a must for maintaining luscious hair according to Women's Health magazine?
   Cottage cheese (Dairy Herd Management)

72. What disease is an enlargement of the abomasum with fluid and gas that causes movement to the left or right side of the abdominal cavity, usually requiring veterinary intervention?
   Displaced abomasum or twisted stomach (Hoard's Dairyman March 2018, p. 181)

73. What is the range of points for a Holstein cow that is scored Good Plus?
   80 - 84 points (HAUSA Web Site)

74. Experts agree that the key to early weaning is maintaining a dry feed intake of around how many pounds per day before eliminating milk from the diet?
   1.2 to 1.8 pounds per day (Dairy Herd Management)

75. On average, it takes 100 pounds of milk to make how many pounds of cheese?
   10 pounds (Other)

76. Which cow was the first to sell in public auction for over one million dollars?
   Allendairy Glamourous Ivy (Progress of the Breed 1985)
77. Which hormone released during parturition softens the cervical and vaginal tissues and causes the dense connective tissue and ligaments in the pelvic area to become more elastic?
   Relaxin or estrogen (Hoard's Dairyman)

78. What off-flavor in milk can be caused by large numbers of bacteria due to poor cooling?
   Sour, malty and/or high acid (Hoard's Dairyman)

79. What is the most common ocular disease of cattle?
   Pinkeye (Progressive Dairyman 2018)

80. Which stomach compartment is also known as manyplies?
   Omasum (HF Workbooks February 2014)

81. What does a cryoscope measure?
   Freezing point of milk (Hoard's Dairyman)

82. How many minutes will it take for a cow's heartbeat to slow down when stressed?
   20 to 30 minutes (Dairy Herd Management)

83. Which vitamin is essential for normal calcium and phosphorus metabolism?
   Vitamin D (Hoard's Dairyman)

84. What do we call a heifer born co-twin to a bull?
   Freemartin (Hoard's Dairyman September 2018, p. 584)

85. What U.S. state produced the most pounds of new milk in 2018?
   Texas (Hoard's Dairyman May 2019, p. 365)

86. How do hoof blocks improve healing?
   By removing the pressure from the affected foot (Dairy Herd Management July 2018)

87. When weight taping a heifer you should make sure her head is up, as what happens when the head is down?
   Chest or stomach expands (Progressive Dairyman July 2018, p. 35)
88. What is the name for an area of grassland between cropland or feedlots which takes up nutrients and prevents them from running off into waterways?
   Buffer strip (Hoard's Dairyman 2018)

89. Survivability of frozen sperm during the thaw process is approximately what percent?
   63 to 67% (Hoard's Dairyman 2018)

90. When drinking, cows like to stick their muzzles how many inches into the water?
   1 to 2 inches (Hoard's Dairyman March 2018, p. 177)

91. The top three benefits why farms install robots are the ability to milk more cows with less labor, improved lifestyle and what else?
   Human health benefits (less risk of repetitive motion injury from milking) (Hoard's Dairyman 2018)

92. What size fat globules add stability to low-fat cream, improving its ability to be whipped?
   Small (Hoard's Dairyman 2018)

93. A biosecurity plan includes both operational and structural aspects. One structural point is to have what type of area for new or returning animals?
   Quarantine (Hoard's Dairyman 2018)

94. To maintain high physiological quality, seed corn should be stored at 12.5 percent kernel moisture and at what temperature?
   50 degrees F (Hoard's Dairyman December 2017, p. 750)

95. What is the mainstay of treatment for rib fractures in calves?
   Rest (Hoard's Dairyman 2018)

96. According to Aaron Boone, what do baseball and chocolate milk have in common
   The number 9 - 9 innings to win a game and there are 9 essential nutrients in milk (Hoard's Dairyman July 2018)

97. How many minutes of cud chewing is needed for each pound of dry matter in the ration?
   12 - 20 minutes (Hoard's Dairyman)
98. What Holstein recognition program do the initials PBR stand for?
   Progressive Breeders' Registry (HAUSA Web Site)

99. What is the term used to describe the drying up of a dead fetus?
   Mummification (Hoard's Dairyman 2018)

100. Which animal was the first registered Holstein to result from embryo transfer?
    Rockalli Son of Bova (Progress of the Breed 1985)

101. Name the current president of National DHIA.
    George Cudoc (Other)

102. It is important to protect your ears around the farm. In what unit is the loudness or intensity of a sound measured?
    Decibels (Hoard's Dairyman November 2018, p. 689)

103. In what year was the Holstein Distinguished Junior Member program started?
    1922 (Progress of the Breed 1985)

104. Bovine spongiform encephalopathy is more commonly known as what disease?
    Mad Cow Disease (Hoard's Dairyman)

105. Iodine is necessary for making which hormone and is particularly important during pregnancy for normal fetal brain development?
    Thyroid hormone (Hoard's Dairyman 2018)

106. Cheesemakers add nonfat dry milk to the milk they receive from the farm to adjust the milk to an optimum fat-casein ratio. What is this process called?
    Standardizing (Hoard's Dairyman)

107. The fee for recording a Holstein transfer shall be how much at 45 days after sale?
    $12.50 (HAUSA Web Site)
108. A2 milk comes from cows with two copies of the A2 gene for what?
   Beta casein (Progressive Dairyman July 2018, p. 53)

109. Holstein Association USA sponsors what scholarship to a college dairy graduate pursuing a master’s degree in business administration?
   Robert H. Rumler Scholarship (HAUSA Web Site February 2015)

110. What Wisconsin based restaurant chain has been making a habit of thanking farmers?
   Culver’s (Progressive Dairyman 5/19)

111. Which animal is the only female to be named All-American in every class from calf to aged cow?
   Triune Papoose Piebe (Progress of the Breed 1985)

112. What is the common name for nitrogen dioxide found in recently filled silos?
   Brown gas (Hoard's Dairyman)