

# Holstein Foundation

## 2022 Dairy Bowl

### Practice Questions

1. Which of the four stomach compartments lies just inside the abdominal cavity on the underside of the animal?

Abomasum

2. What size of fat globules add stability to low-fat cream, improving its ability to be whipped?

Small

3. Bunching of animals is the most common during what season?

Summer

4. For the Holstein classification program's linear trait, udder depth, the floor of the udder is measured relative to which other part of the cow's anatomy?

Hocks

5. Why should a weight tape not be pulled too tight or left too loose?

Overestimating or underestimating weight will occur

6. What is the ideal number of hours of rest per day for cows?

12 hours

7. What disease in cattle is treated by twenty-three percent calcium administered intravenously?

Milk fever, post parturient hypocalcemia, or parturient paresis

8. What is the name of the section of the cows back located between the chine and the rump called?

Loin

9. What structure connects muscle to bone?

Tendon

10. What President in 1944, signed a proclamation for a recognition week dedicated to farm safety?

Franklin D. Roosevelt

11. Do cows prefer diets that are bitter, salty, sour or sweet?

Sweet

12. What state received the highest mailbox price in 2020?

Florida

13. What is defined as a super-powered serum that has the potential to directly impact calves' health, growth, and productivity from day one through adulthood?

Colostrum

14. What is the number one driver of yogurt purchases?

Flavor

15. Cows prefer to ruminate when they are doing what?

Lying down

16. What color are healthy alfalfa roots?

White

17. Energy loss in the digestive tract is mainly in the form of what?

Manure

18. Pollination of alfalfa seed depends on what insect?

Bee

19. When reading bull proofs, what does the acronym PTA stand for?

Predicted Transmitting Ability

20. What is blamed for the vast majority of stillbirths and why rates are significantly higher in heifers than they are in older cattle?

Dystocia

21. A calf does not have the ability to produce its own antibodies until they are how old?  
2 to 3 weeks old
22. What operating expense is the single largest outlay of cash for a dairy?  
Feed expense
23. Cows can drink water at a rate of how many gallons per minute?  
3 to 5 gallons
24. What piece of farm equipment is used to narrow the swath for a baler or chopper and to move the wetter material at the bottom of the windrow through the outside?  
Rake or merger
25. Roasted soybeans are a very popular feeding source as they supply rumen-undegradable protein and what else?  
Fat
26. What is the name of the viral disease that causes inflammation of the brain and eventual death and can be transmitted to humans by a bite or scratch?  
Rabies
27. Eastriver Goldwyn Deb176 recently received what recognition?  
2020 Star of the Breed
28. Which vitamin can be synthesized by the skin when exposed to sunlight?  
Vitamin D
29. Reduced lignin alfalfa allows growers to extend the cutting interval by how long?  
1 week
30. What trade association represents artificial insemination business entities?  
National Association of Animal Breeders (NAAB)
31. What is defined as a response of the animal to a stimulus when it is associated with a negative situation?  
Stress

32. Food-In-Depth was founded to create full transparency and what else in the food chain?

Accountability

33. A rut is considered anything deeper than how many inches?

3 inches

34. How do hoof blocks improve healing?

By removing the pressure from the affected hoof claw

35. What is the advantage of using a time-lapse video?

Able to condense a long period of time into just a few minutes

36. Sugar beets grown specifically for use in feed for dairy cattle are an economical substitute for what?

Grains

37. 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 in order to know how many pounds of powder to feed?

16 ounces

38. Maize and sugarcane are major bioenergy crops right now but use how many more times water than cactus pear?

3 to 6 times

39. What percent of overall plastic production goes toward single use purposes?

50%

40. What is another name for a milking liner?

Inflation

41. What is defined as the death of a calf within 24 to 48 hours after delivery?

Stillbirth

42. Never use a needle larger than what gauge to inject a synchronization hormone?

18-gauge

43. Whole plant corn silage is typically harvested by cutting the stalk at what point?

Above the first node

44. Manure dropped from a healthy standing cow should form a pile roughly 8 inches in diameter and 2 ½ inches high with what in the center?

Dimple

45. Which of the cow's stomach compartments lies closest to the heart?

Reticulum

46. What are the two primary sources of exposure to environmental pathogens that cause mastitis in cows?

Moisture and manure

47. What breakdown on the Dairy Cow Unified Scorecard does width of chest and spring of rib fall under?

Dairy strength

48. The most common form of diarrhea is scours and is caused by what?

E. coli

49. In the U.S. 80% of all greenhouse gases stem from the use of what?

Fossil fuel

50. Excessive rates of pneumonia in dairy herds are not typically due to cold weather or drafts, but often due what?

Inadequate ventilation

51. Alfalfa flowers must be tripped and cross-pollinated to produce what?

Seed

52. Of the fat-soluble vitamins, which one can be synthesized in the rumen?

Vitamin K

53. Calorie labeling is now required for retail food establishments with more than 20 locations. Who requires this labeling?

U.S. Food & Drug Administration

54. What is the energy in a feed or diet that remains in the animal after it is digested called?

Digestible energy

55. What is a key component of the ruminant diet and can frequently account for over 50 percent dry matter intake through the inclusion of silage?

Fiber

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

Thyroid hormone

57. At least how many gallons of fluid need to be administered as fluid therapy to make a significant difference for a mature cow?

5 gallons

58. What structures carry the blood from the body back to the heart?

Veins

59. What term is used to describe a function of the total time a cow spends eating per day multiplied by the rate at which the animal consumes that feed?

Feed intake

60. What are the two principal types of mastitis?

Clinical and subclinical

61. How often should farmers have each of their crop fields soil tested?

Once every three years

62. Nine herds achieved what 2020 Holstein Association USA award that is broken into three herd size divisions?

Herds of Excellence

63. Elinor Purrier, who has been breaking athletic records, grew up on a dairy farm participates in what sport, training to compete in the Olympics?

Track and Field

64. Households in the U.S. waste nearly what percent of the food they buy?

31 to 33%

65. Within how many years, will most solar systems pay for themselves?  
10 to 15 years
66. What country is the a2 Milk company headquarters located in?  
Australia
67. A modern-day milk-fed veal animal is marketed at how many pounds?  
500 pounds
68. What percentage of heats can be classified as low intensity or short duration?  
25%
69. Normal labor during calving for a dairy cow takes how many minutes?  
60 to 70 minutes
70. In compliance with USDA's Animal Disease Traceability rule, Holstein Association USA  
officially sells what type of official ear tags?  
840 tags
71. What is the term used to describe the removal of the horn producing skin cells before  
attachment to the skull?  
Disbudding
72. An imbalance in magnesium can result in what metabolic disease?  
Grass tetany
73. How many trace minerals are considered essential for dairy cows?  
Nine
74. Cows are most likely to express estrus when housed on what type of surface?  
Earthen/dirt
75. What term describes the refined appearance of a female, in contrast to masculinity  
referring to the rugged appearance of a male?  
Femininity

76. What do we call a retention of fetal membranes more than 24 hours after calving?

Retained placenta

77. When drinking, cows like to stick their muzzles how many inches in the water?

1 to 2 inches

78. What is the most common bacterial disease on dairy farms?

Mastitis

79. Subclinical hypocalcemia usually occurs how many hours after calving as the cow's lactation begins?

24 to 72 hours

80. What do we call a heifer born co-twin to a bull?

Freemartin

81. What term describes the time span between first calving and culling?

Productive life)

82. On average it takes 100 pounds of milk to make how many pounds of cheese?

10 pounds

83. What is the name for one of the smallest components in a cow's diet? They are essential nutrients for animal health and productivity and can be overlooked until a significant problem arises.

Trace minerals

84. What animal feeding system uses grass areas, reels, electric fences, water, and rest periods for paddocks?

Rotational grazing

85. Studies have shown that there are what percent fewer bacteria on used gloves than bare hands while milking cows?

75% fewer bacteria

86. When making culling decisions on a dairy, four things should be considered: animal welfare, economics, public perception and what else?

Food safety

87. A cow loses what percent of her body weight at calving due to the weight of the calf, placenta and fluids?

10 to 12%

88. What percentage of the total energy in corn silage is found in the grain kernel?

65%

89. The best way to measure how much an animal is resting is by using what index?

Stall use index

90. What carbohydrate in corn silage has improved digestibility by 10 to 15% if allowed to ensile for 3 to 5 months before feeding?

Starch

91. What are the top two things' soybeans can add to a ration?

Protein and energy

92. NDF digestibility is affected by the speed of maturity and the stage of what at harvest?

Maturity

93. What cooperative has unveiled an organic, ultrafiltered milk line named Ultra? It contains fifty percent more protein and fifty percent less sugar than regular milk?

Organic Valley

94. Some sorghum-sudan hybrids are PPS. What does PPS stand for?

Photoperiod Sensitive

95. What is net metering?

Energy bank

96. Cows stand up once their core body temperature reaches what degree?

102 degrees F

97. What is the name for the unit of measurement when injecting vaccine in dairy cattle?

CC's or milliliters

98. In what process is the nucleus of a cell removed from an unfertilized oocyte and replaced by a nucleus from another cell?

Cloning

99. What is defined as how well an animal copes with the conditions in which it lives?

Animal welfare

100. What is the name for an area of grassland between cropland or feedlots and waterways which takes up nutrients and prevents them from running off into waterways?

Buffer strip

101. House Democrats have introduced a sweeping immigration overhaul package called the U.S. Citizenship Act. The centerpiece is an eight-year path to citizenship for who?

Undocumented immigrants living in the U.S.

102. Butyrate is the most important source of energy for the growth of what structures in the rumen?

Papillae

103. What is the ideal teat length for Holsteins?

2.25 inches

104. How are anthelmintic products used on the dairy?

Dewormers

105. What is the brand name of the most common synthetic prostaglandin used for heat synchronization or inducing pregnant cattle?

Lutalyse

106. In the milking system, what is the function of the plate cooler?

Cooling the fresh milk prior to entering the bulk tank

107. From the time that the water bag or amniotic sac breaks, the feet should appear within how many minutes?

15 minutes

108. What trace mineral is found in very low levels in all forages and is necessary for a number of body functions and disease resistance as well as being an essential constituent of blood?

Copper

109. What is the name of the Holstein USA program that allows producers with robotic milking systems to record milk weights and component data into the Holstein herdbook database?

TriStar AMR

110. What is the most limiting amino acid in diets of lactating cows?

Methionine

111. Bunching is a stress response that is usually caused by four things: flies biting, light avoidance, heat stress and what else?

Lack of fresh air

112. What bull has more genes present in the Holstein breed than any other sire?

Round Oak Rag Apple Elevation