

Holstein Foundation 2025 Dairy Bowl Practice Questions

1. What course at the University of Wisconsin is the oldest agricultural training program offered?

Farm and Industry Short Course

2. What are the three most common grooving patterns for creating and improving a floor surface?

Parallel, diagonal, and diamond

3. The three main greenhouse gases produced by the U.S. dairy industry are methane, carbon dioxide and what else?

Nitrous oxide

4. What is defined as the trust the public puts in dairy producers to make decisions within society's social values?

Social license

5. What is the term used to describe the test that measures the amount of dirt in milk?

Sediment test

6. What process occurs after insemination to modify the sperm plasma membrane and is necessary for fertilization?

Capacitation

7. Roughly, how long should a wrap stay on a hairy heel wart?

24 hours

8. What kind of bedding supports the least amount of bacteria?

Sand

9. Composting reduces the volume of manure by what percent?

50%

10. What is the normal lactic acid level percent of dry matter?

4 to 7%

11. What is the term given to using manure handling data to enhance decisions for profitability?

Precision agriculture

12. Subclinical rumen acidosis occurs when a cow's rumen pH drops below what?

5.8 pH

13. Which acid is the primary precursor for milk fat synthesis in the mammary gland?

Acetate or acetic acid

14. In regard to internal parasites, what is the name of the worm that is the most economically detrimental?

Brown stomach worm

15. Protecting the starch-containing endosperm in corn kernels is the seed coat, which is highly resistant to microbial attachment and infiltration. What is another name for this seed coat?

Pericarp

16. What term describes the position on cattle and horses that has been known in the past as a predictor for animal behavior and temperament?

Hair whorl or cowlick

17. What is defined as specialized products made in a specific region and in a specific manner to protect that product's unique nature?

Geographical indications

18. Name the condition in which the uterus fills with white blood cells attempting to clear disease organisms.

Pyometra

19. What are the two enemies of the pathologist performing a necropsy?

Time and temperature

20. A positive step taken last year was the introduction of the SAVE Act, which amended the Agriculture Trade Act of 1978 to include and define a list of common names for ag commodities, food products, and terms used in marketing and packaging of products. What does SAVE stand for?

Safeguarding American Value-Added Exports

21. What term describes a localized inflammation affecting the uterine lining without systemic signs?

Endometritis

22. Name the 2023 World Dairy Expo Supreme Champion cow.

ERBACRES SNAPPLE SHAKIRA-ET

23. The SCR measurement is based on what rather than a 70-day day non-return rate?

Conception rate

24. What is the name of the science based, internationally accepted approach to food safety with a proactive approach whereby hazards in a process are identified and measures to control these hazards are developed and is identified by the initials HACCP?

Hazard Analysis Critical Control Point

25. Current industry recommendations suggest that a tactile teat stimulation of 10 to 20 seconds and an interval of how many seconds between stimulation and milking unit attachment are sufficient to achieve efficient milk letdown and removal?

60 to 90 seconds

26. According to a Farm Energy News article, what is often the most expensive piece of equipment on a farm or in a home, especially during colder months?

Electric water heater

27. How much material in a landfill is food?

One-quarter

28. In regard to milk and cheese pricing, what do the initials NASS stand for?

National Agriculture Statistics Service

29. Four out of five DA's are found on which side of the belly wall?

Left side

30. Foot wart research cites three major risk factors: bacteria, management and what else?

Environment

31. What herd ranks first for Holstein BAA milking over 250 cows?

J. Steven Arbaugh

32. What is the medical term for belching?

Eructation

33. White muscle disease normally results from a deficiency of what vitamin?

Vitamin E

34. A newborn calf should be able to sit up how long after birth?

5 minutes

35. Of the 9.4 million dairy cows in the U.S., about what percent will have a calf that goes into the feedlot in 2024 as part of beef-on-dairy breeding over the past few years?

33% (+/-5%)

36. The measure of cows leaving the herd is called what?

Cull rate

37. Hay becomes a fire hazard when the moisture content is higher than what percent in small, stacked bales?

20%

38. What is the name of the non-profit organization that supports all women in dairy by enhancing lives and creating opportunities through shared connections, inspiration, and education?

Dairy Girl Network

39. What is the biggest obstacle to more widespread adoption of biodigesters?

High cost

40. Late-season yellowing of the lower leaves in corn plants is often a normal sign of what type of deficiency?

Nitrogen

41. The interval from the onset of standing estrus to ovulation is approximately how long?

28 hours

42. What state is home to the most organic dairy farms?

New York

43. What is the greatest concern with overstocked heifer pens?

Elevated competition that leads to variability in body weight

44. Organic nitrogen must be converted to ammonium, or what type of nitrogen before it can be used by plants?

Nitrate

45. Most embryonic losses occur how many days after conception?

28 to 42 days

46. What award is the highest recognition a youth cattle exhibitor can receive at World Dairy Expo and is given to a young exhibitor who displays exemplary fitting and showmanship skills?

Merle Howard Award

47. Acid degree values are a measure of what?

Rancidity

48. We should expect to see what percent of cows chewing their cud when resting?

60 to 70%

49. What are the two most common external parasites?

Lice and mange

50. Newborn calves are cold stressed at what temperature?
50 degrees F
51. What term describes protein that can be used by the rumen microbes to produce protein digestible in the small intestine?
Degradable protein
52. Every tractor should have ROPS installed as a safety measure. What does ROPS stand for?
Rollover protection structure
53. All milk containers and packages have an ID code. The numbers of the code typically represent what two things?
State and plant in which the product was processed
54. How many weeks are usually required for corn silage to ferment?
8 to 10 weeks
55. Research shows that heifers lie down what percent of the time?
50 to 60%
56. What former NBA superstar and current media member learned how to milk a cow by hand on a TNT segment featuring Big Sandy Creek Dairy?
Charles Barkley
57. Only when oxygen is depleted can silage enter this phase, where bacteria convert sugars into valuable acids that drop the pH and limit yeast growth?
Fermentation phase
58. In which state will the 2026 National Holstein Convention take place?
Florida
59. To maximize regrowth efficiency, how much of the plant should be left after dairy animals graze pasture and move to a new one?
50%
60. What is the sex chromosome combination for a heifer?
XX

61. Scours, diarrhea, and digestive problems account for over 50% of unweaned heifer deaths. What type of problems rank second accounting for 22% of unweaned heifer deaths?

Respiratory problems

62. What is another name for snaplage?

Earlage

63. People need to consume how many servings of milk, cheese, or yogurt a day to help build strong bones and prevent osteoporosis?

3 servings

64. Sexed semen should be thawed at what temperature for at least 45 seconds?

95 to 98 degrees F

65. What hormone mobilizes calcium from the bone?

Parathyroid hormone

66. In a compost-bedded pack barn, a farm should aim to keep the pack moisture below what level?

60%

67. Milk remains edible for how many days after the expiration date if refrigerated properly?

7 to 10 days

68. Rearing replacement heifers accounts for approximately what percent of the total cost of dairy operations?

20%

69. What is the name of the serotype, that is host-adapted to bovine? It is one of the most common serotypes of salmonella isolated from dairies across the U.S. and its prevalence is increasing.

Salmonella Dublin (S. Dublin)

70. What size needle should be used to give a GnRH injection?

18 or 20 gauge

71. What are DairyComp 305 and PCDart?

Dairy Management software programs

72. When it comes to milking equipment, which of the four primary wash cycles does 85% of the cleaning?

Prerinse

73. What month was the deadline for the 2024 Farm Bill extended to?

September

74. Milk in plastic jugs from grocery stores can have oxidized flavors. What causes this off-flavor?

Sunlight or fluorescent light

75. What is the optimum pH level of the rumen when it has an adequate fiber mat and when there are healthy populations of rumen microbes?

6.0 to 6.3 pH

76. The PLANT Act of 2023-2024 helps ensure that farmers and companies are eligible for USDA programs. What does PLANT stand for?

Peas, Legumes, and Nuts Today

77. For Holsteins, a SLICK1 allele mutation results in a short, fine hair coat that has been shown to keep body temperature lower in lactating cows in hot, humid conditions. It is believed that this hair coat allows animals to do what more?

Sweat

78. The National Dairy FARM program states that calves should have access to water beginning at how many days old?

3 days

79. Milk produced by U.S. dairy cows set a record for average butterfat content last year at what level?

4.11%

80. What is the name of the Holstein Association USA production records program that allows herds milking with robotic milking systems, who are not participating in traditional DHIA programs, to keep their production information flowing into the HAUSA database?

Tristar AMR

81. Research has found that bandages infused with what help with wound healing?

Milk protein or casein

82. What percent of the U.S. beef supply presently comes from dairy animals?

20%

83. A newborn calf should be able to suckle how long after birth?

2 hours

84. What is the general recommendation for milk replacer crude protein percent?

20 to 28%

85. What is the name of the document, recommended by FDA, that spells out the standards under which Grade A milk is produced?

Pasteurized Milk Ordinance (PMO)

86. Name the insect that causes the most economic damage to alfalfa in the Midwest.

Potato leafhopper

87. Official 840 ear tags are tamper-proof and available in both visual and RFID options. What is required to be able to order 840 tags?

Premises identification number

88. Ten flies per cow can cause what percent loss in feed efficiency?

10%

89. How much does it cost to become a National Junior Holstein member?

\$30

90. Over 89% of lameness cases are caused by what, including but not limited to white line defects, foot rot, laminitis, and sole ulcers?

Claw disorders

91. There is no cure for what reproductive disease that disrupts placenta development leading to an abortion? Calfhood vaccination is the recommended way to manage the disease.

Brucellosis (Bang's)

92. Each year, the top 25 individuals at the National Intercollegiate Judging Contest are eligible to compete for what scholarship?

Kildee scholarship

93. At less than one inch in length, where is the accepted site for semen deposition in artificial insemination?

Uterine body

94. What causes the worst form of soil compaction, especially in wet fields?

Wheel traffic

95. What is the most common reproductive program for resynchronization?

Ovsynch

96. Injecting what into fluid milk and cottage cheese inhibits bacterial growth and extends shelf life?

Carbon dioxide

97. What is the name of the minor fatty acid compound that improves lean muscle growth while providing anti-carcinogenic effects and is readily available in milk and dairy products and is identified with the initials CLA?

Conjugated linoleic acid

98. NFC provides roughly half or more of the total carbohydrates in a dairy cow's ration. What do the initials NFC represent?

Non-Fiber Carbohydrates

99. Most pregnancy losses occur before what day of gestation?

Day 42

100. The general recommendation for corn silage harvested with a conventional harvester is 3/8 inch TLC. What do the initials TLC represent?

Theoretical length of cut

101. Heifers bred at what age have the highest conception rates?

15 to 16 months old

102. What new initiative led by dairy farmers through Professional Dairy Producers empowers dairy producers to understand and improve environmental footprint?

Your Farm – Your Footprint

103. When fed at recommended levels, what percent of crude protein nitrogen consumed by dairy cows is converted into milk?

25 to 35%