

**HOLSTEIN FOUNDATION
AYRSHIRE QUIZ BOWL
2015 PRACTICE QUESTIONS**

1. What is the first compartment of a cow's stomach called?
Rumen (HF Workbooks February 2014)
2. How do cows effectively lose body heat during hot weather?
Sweating or panting (Hoard's Dairyman 2010)
3. What is the part of the back that lies between the withers and the middle of the back called?
Chine (Other 2014)
4. Increased consumption of soft drinks has caused a large gap in the recommended daily amount of what mineral needed by teenagers?
Calcium (Hoard's Dairyman 2010)
5. Feeding proper rations during the summer is important for both cow comfort and maintaining milk production. Which nutrient is most important during the summer months?
Water (HF Workbooks February 2014)
6. True or False: Covering animal mortalities in manure is considered composting.
False (Hoard's Dairyman 2010)
7. What is the first milk from a cow that has freshened called?
Colostrum (Hoard's Dairyman 2010)
8. Mange is contagious and tends to occur in dairy cattle housed in close proximity, especially during what season?
Fall or winter (Dairy Herd Management 2010)
9. How many stalls are there in a double-8 herringbone parlor?
16 (Dairy Herd Management 2010)

10. Distillers's grain is added to a cow's ration as a source of what?
Protein (Hoard's Dairyman 2010)
11. What generally happens to a cow's body weight during the first 90 days of her lactation?
Decreases (Hoard's Dairyman 2010)
12. Historically, during what season is the demand for milk highest?
Fall (Hoard's Dairyman 2010)
13. Soybean meal generally is added to dairy rations to supply what major nutrient?
Protein (Hoard's Dairyman 2010)
14. What is the average duration a cow in heat will stand to be mounted?
4 to 6 seconds (Hoard's Dairyman 2010)
15. In what country did the Ayrshire breed originate?
Scotland (Ayrshire April 2012)
16. What is lactose known as?
Milk sugar (Other 2014)
17. At what age does Ayrshire Junior membership expire?
21 years old (Ayrshire 2014)
18. Chromosomes are found in what part of the cell?
Nucleus (Hoard's Dairyman 2010)
19. When singeing udder hair, slowly pass the flame how many inches below the udder?
6 to 8 inches (Hoard's Dairyman 2010)
20. What is the average weight of a mature Ayrshire cow?
1,200 pounds (Ayrshire January 2011)

21. What enzyme is deficient in people who are lactose intolerant?
Lactase (Hoard's Dairyman 2010)
22. How much does it cost to transfer an Ayrshire from Canada to the U.S. on the REWARDS program?
\$15.00 (Ayrshire May 2014)
23. What do the initials USDA stand for?
United States Department of Agriculture (Hoard's Dairyman 2010)
24. Which dairy breed has the highest butterfat percentage on average?
Jersey (Hoard's Dairyman 2010)
25. What are animals born without horn buttons or horns called?
Polled (Hoard's Dairyman 2010)
26. The proportion of superiority or inferiority in performance of a parent which is transmitted directly to its offspring is indicated by what term?
Heritability (HD 2014)
27. Approximately how many gallons of blood pass through the udder for each gallon of milk produced?
400 to 500 gallons (Hoard's Dairyman 2010)
28. What part of the alfalfa plant has the highest percent digestibility?
Leaves (Hoard's Dairyman 2010)
29. Name the greatest danger attributed to tower silos.
Silo gas or nitrogen dioxide (Hoard's Dairyman 2010)
30. What is predipping?
Disinfecting and cleaning the teats prior to milking (Hoard's Dairyman 2010)

31. In regards to animal welfare organizations, what do the initials PETA stand for?
People for the Ethical Treatment of Animals (Hoard's Dairyman 2010)
32. In the reproductive tract of a cow, how many uterine horns are there?
Two horns (Hoard's Dairyman 2010)
33. Where are intranasal vaccines administered?
Nostril (Hoard's Dairyman October 2013, p. 638)
34. Starch fermented in the rumen to volatile fatty acids is a major source of what for cows?
Energy (Hoard's Dairyman 2010)
35. Improper handling of moldy feedstuffs can lead to what syndrome?
Toxic organic dust syndrome (Hoard's Dairyman 2010)
36. What color is nitrogen tetroxide?
Yellow (Hoard's Dairyman 2010)
37. What does the Delvo test detect?
Antibiotic residues in milk (Hoard's Dairyman 2010)
38. Regularly consuming what dairy product has a strong link to producing higher levels of gamma interferon, a compound highly important to the body's immune defense?
Yogurt (Hoard's Dairyman 2010)
39. What is the genetic material found in all living organisms called?
DNA (genes, chromosomes) (Hoard's Dairyman 2010)
40. If an animal was classified at two dash zero three (2-03), how old in months was the animal?
27 months (HAUSA Web Site February 2014)

41. What Ayrshire farm was featured in this year's *Hoard's Dairyman* Judging Contest?

Kellcrest Farm (Hoard's Dairyman March 2014, p. 247)

42. What is the term for the milking system part which is an automatic valve that allows air to enter or exit the shell alternately? It can be referred to as the heartbeat of the milking system.

Pulsator (Hoard's Dairyman 2010)

43. How many pounds of water does a cow need to consume to produce one pound of milk?

4 - 6 pounds (water weighs 8.34 pounds per gallon) (Dairy Herd Management 2010)

44. What state was the first to have a mandatory animal identification program?

Michigan (Holstein Pulse 2014)

45. Name the 2013-2014 National Ayrshire Queen.

Ashlie Hardy (Ayrshire July 2014)

46. What is dystocia?

Difficult or obstructed calving (Hoard's Dairyman 2010)

47. Name the 2013 Ayrshire Distinguished Service Award winner?

Fenton Family (Ayrshire July 2013)

48. Most farmers try to harvest first-cut alfalfa when it is in what stage?

Late-bud stage (Hoard's Dairyman 2010)

49. One criteria used to measure the quality of feedstuffs is percent TDN. What do the initials TDN stand for?

Total Digestible Nutrients (Hoard's Dairyman 2010)

50. What is the most common type of ovarian cyst?

Follicular (Hoard's Dairyman 2010)

51. Which hormone is produced by the pancreas and promotes mammary cell growth and cell division?
Insulin (Hoard's Dairyman 2010)
52. What is the name of the waxy substance in the teat duct which helps provide a physical barrier to bacteria?
Keratin (Hoard's Dairyman 2010)
53. What hormone can reduce milk letdown?
Adrenalin or epinephrine (Hoard's Dairyman 2010)
54. What name is given to the surrogate mother in embryo transfer work?
Recipient (HF Workbooks February 2014)
55. What term describes the return of the uterus to normal function after calving?
Involution (Hoard's Dairyman 2010)
56. What organization has as its primary objective to maintain a historical record of outstanding breeding herds and to promote the advancement of the dairy industry?
National Dairy Shrine (HD 2010)
57. Body energy and nutrient reserves can be replenished with most ease during which stage of lactation?
Late lactation (Hoard's Dairyman 2010)
58. How many years does it take for a dairy to fully transition to certified organic?
3 years (Hoard's Dairyman 2010)
59. A second or later lactation cow produces half of her total lactation production in approximately how many days, after calving?
120 days (+/-10) (Hoard's Dairyman 2010)
60. What accounts for the greatest percent of milk production costs on most dairy farms?
Feed (Hoard's Dairyman 2010)

61. SCC is used to identify cows with mastitis. What do the initials SCC stand for?
Somatic cell count (Hoard's Dairyman 2010)
62. Why should a teat dip be used after milking?
To reduce or prevent udder infections (Hoard's Dairyman 2010)
63. According to the Dairy Cow Unified Score Card, what is the maximum amount of points for udder cleft?
5 points (Hoard's Dairyman 2010)
64. At what approximate age does a calf have a fully developed rumen?
3 - 4 months (Hoard's Dairyman 2010)
65. According to PDCA what is the maximum allowable limit for topline hair in the showing?
One inch (Hoard's Dairyman 2010)
66. The SPC test is used to measure the number of mesophilic organisms in milk to determine whether or not state regulatory standards are met. What do the initials SPC stand for?
Standard Plate Count (Hoard's Dairyman 2010)
67. Each straw of semen should be thawed for a minimum of how many seconds?
30 seconds (Dairy Herd Management 2010)
68. Coffee is rich in antioxidants and, when consumed with milk, it is an excellent source of what?
Calcium (Hoard's Dairyman 2010)
69. What udder condition appears as swelling due to an excessive accumulation of fluids between the cells of the mammary gland tissue just under the skin?
Edema (Dairy Herd Management 2010)
70. The first DHI cow testing association was established in what state?
Michigan (Hoard's Dairyman 2010)

71. Where specifically does the Mid-Atlantic National Ayrshire show take place?
Harrisburg, PA (Ayrshire March 2014, p. 5)
72. If properly fed to dairy cattle, urea supplies a readily available source of what element?
Nitrogen (Hoard's Dairyman 2010)
73. Name the 2013 Eastern States National Grand Champion.
VIEUX VILLAGE C CALIE (Ayrshire November 2013, p. 12)
74. How many teeth does a cow have on the front of the upper jaw?
None (dental pad) (Other 2014)
75. What term is used to describe forages that are seeded every year, and whose growth is completed in one crop year?
Annuals (Hoard's Dairyman 2010)
76. Your veterinarian tells you your heifer is barren. What does this mean?
Heifer is infertile, sterile (incapable of producing offspring) (Hoard's Dairyman 2010)
77. What specific forage crop has the greatest buffer capacity during the ensiling process?
Alfalfa or clovers (Hoard's Dairyman 2010)
78. Which vitamin deficiency may result in respiratory diseases, night blindness, scours, rough hair coat and reproductive failure?
Vitamin A (Hoard's Dairyman 2010)
79. 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 2010)
80. What does CMT stand for in regards to milk?
California Mastitis Test (Hoard's Dairyman 2010)

81. What is the most costly disease affecting the dairy industry?
Mastitis (Dairy Herd Management 2010)
82. What is the major ligament of the udder which divides it into left and right halves?
Median suspensory ligament (Hoard's Dairyman 2010)
83. Which vitamin can be synthesized in the body tissue of a newborn calf and therefore, is not required in the diet?
Vitamin C (Hoard's Dairyman 2010)
84. Milk is produced by groups of what special secretory cells?
Alveoli (Dairy Herd Management 2010)
85. What does the word gestation mean?
Time mother carries young (calf) (Hoard's Dairyman 2010)
86. What is subclinical mastitis?
Infection of udder that is not visible (Hoard's Dairyman 2010)
87. Which stomach compartment secretes a gastric juice that contains hydrochloric acid?
Abomasum (HF Workbooks February 2014)
88. In regards to milk quality, what do the initials PI stand for?
Preliminary incubation (Hoard's Dairyman 2010)
89. What percent of disease incidences occur during a cow's transition period?
75% (Hoard's Dairyman February 2014, p. 132)
90. What is metritis?
Uterine infection or inflammation (Hoard's Dairyman 2010)

91. When calves are born, they have high levels of carbon dioxide and low levels of what life-sustaining element in their blood?

Oxygen (Hoard's Dairyman January 2014, p. 9)

92. What term measures the number of pregnancies that occur during a specific time interval or breeding season?

Conception rate (Hoard's Dairyman 2010)

93. What do the initials bST stand for?

Bovine somatotropin (Hoard's Dairyman 2010)

94. If you buy 1,000 pounds of feed that is 35 percent dry matter, how many pounds of water are you purchasing?

650 pounds (Hoard's Dairyman 2010)

95. Why is colostrum important to newborn calves?

Helps build the calf's immune system (Hoard's Dairyman 2010)

96. Which state was the first to make tampering with show cows a crime?

Ohio (Hoard's Dairyman 2010)

97. In 1938, the first A.I. cooperative was started in the U.S. What state was this cooperative in?

New Jersey (Hoard's Dairyman 2010)

98. On dairy farms, what piece of equipment is the biggest cause of soil compaction in fields?

Liquid manure spreader (Hoard's Dairyman September 2013, p. 648)

99. On what day must a heifer be born to be the oldest possible animal in the winter heifer calf and winter yearling classes?

December 1st (HAUSA Web Site February 2014)

100. Louis Pasteur is significant in the dairy industry for making what contribution?

Pasteurization (Hoard's Dairyman 2010)