

**HOLSTEIN FOUNDATION
AYRSHIRE QUIZ BOWL
2013 PRACTICE QUESTIONS**

1. What generally happens to a cow's body weight during the first 90 days of her lactation?

Decreases (Hoard's Dairyman 2011)

2. What Ayrshire Society hosted the 2012 World Ayrshire Conference?

South Africa (Ayrshire 2012)

3. What season of the year are the incidences of retained placentas and metritis the highest?

Summer (Hoard's Dairyman 2011)

4. What part of a cow's stomach is most similar to a human's stomach?

Abomasum (Hoard's Dairyman 2012)

5. How many stalls are there in a double-12 herringbone parlor?

24 (Dairy Herd Management 2011)

6. A maximum of how many leased animals may be shown by a Junior exhibitor at a National Ayrshire show?

4 leased animals (Ayrshire 2011)

7. Various factors influence how much feed cows will consume. During hot weather, what generally happens to cows' dry matter intake?

Decreases (Hoard's Dairyman 2012)

8. The sex of a calf is determined by which parent?

Father (Hoard's Dairyman 2011)

9. In dairy cattle reproduction, what do the letters A.I. stand for?

Artificial Insemination (Hoard's Dairyman 2012)

10. Which organization developed the Dairy Cow Unified Score Card for judging dairy cattle?

Purebred Dairy Cattle Association (Hoard's Dairyman 2011)

11. When posing a cow in a show, how should the rear legs be set?

Foot closest to the judge slightly forward (Hoard's Dairyman 2012)

12. During hot weather, what happens to cow's feed intake and milk production (no change, increase or decrease for each)?

Both decline (Hoard's Dairyman 2011)

13. According to the Dairy Cow Unified Scorecard, how many points are allotted for Feet and Legs?

20 points (Other 2012)

14. What is the main expense of raising calves?

Labor (Hoard's Dairyman 2011)

15. Which part of a calf's stomach is the largest?

Abomasum (Hoard's Dairyman 2012)

16. In regards to milk, what do the initials NMC stand for?

National Mastitis Council (Hoard's Dairyman 2011)

17. A cow should spend how many hours a day lying in the stall resting and "making milk"?

10 to 14 hours (Hoard's Dairyman 2012)

18. 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 2011)

19. 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 2011)

20. Grass tetany is a disease linked to the shortage of what element normally found in soil and plants?

Magnesium (Hoard's Dairyman 2011)

21. Who is considered the "Father of Modern Dairying"?

William Dempster (W.D.) Hoard (Hoard's Dairyman February 2011)

22. Properly managing silages stored in bunkers is critical to maintaining high feed quality. With the exception of very warm and humid weather, how many inches of silage should be removed daily to maintain high feed quality?

6 to 12 inches (Hoard's Dairyman 2011)

23. What part of the alfalfa plant has the highest percent digestibility?

Leaves (Hoard's Dairyman 2011)

24. On the average, within 3 days, how long is the cows estrus cycle?

21 days (18 -24 acceptable) (Hoard's Dairyman 2011)

25. What is the first milk from a cow that has freshened called?

Colostrum (Hoard's Dairyman 2012)

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

December 1 (Web Site February 2012)

27. What is a newborn bovine called?

Calf (Hoard's Dairyman 2012)

28. 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? It is very common around calving.

Edema (Dairy Herd Management 2012)

29. How many permanent teeth does a mature dairy cow have?

32 teeth (Other 2012)

30. What term describes the return of the uterus to normal function after calving?

Involution (Hoard's Dairyman 2011)

31. On an average, there are two teat injuries in every how many lactations?

100 lactations (Hoard's Dairyman 2011)

32. True or False: Once a cow is infected with Neospora she remains infected for life.

True (Hoard's Dairyman 2012)

33. In a feeding program, what do the initials NDF stand for?

Neutral Detergent Fiber (Hoard's Dairyman 2011)

34. What does ELISA stand for?

Enzyme-linked immunosorbent assay (Hoard's Dairyman 2011)

35. In regards to crops, what does SCS stand for?

Soil Conservation Service (Hoard's Dairyman 2011)

36. In the ovary, the oocyte or egg cells and the nurse cells surrounding it are called what?

Follicle (Hoard's Dairyman 2011)

37. When is the best time to treat subclinical mastitis?

During the dry period (Hoard's Dairyman 2011)

38. What time of day is the best time to watch for heats?

6 p.m. to midnight (Dairy Herd Management 2011)

39. When discussing production records, what do the initials FCM stand for?

Fat corrected milk (Hoard's Dairyman 2011)

40. The Ayrshire Trophy is presented annually at the national convention to the cow with what?

Highest 305 day ME record (Ayrshire July 2012)

41. What percent of feed refusal is recommended to maximize feed intake in lactating cows?

5 to 10% (Hoard's Dairyman 2011)

42. Name the 2012 World Dairy Expo Industry Person of the Year.

Sheila McGuirk (World Dairy Expo April 2012, p. 227)

43. Which gland in the cow is responsible for mobilizing calcium from the bones?

Parathyroid gland (Hoard's Dairyman 2011)

44. When planting corn what is an ideal speed for the tractor and planter?

4.5 to 5.5 mph (Hoard's Dairyman 2011)

45. A crop stress, such as frost, causes what to be released at a rapid rate and intake of high levels can be lethal to cattle?

Prussic acid (Hoard's Dairyman 2011)

46. What vitamins are made by the bacteria in the rumen of animals? Even though the feeds are low in these vitamins, cows make their own.

B complex vitamins (Hoard's Dairyman 2011)

47. Farmers should wait how many days after frost to harvest or feed sorghum-sudan grasses to cattle, because frost increases the potential for prussic acid to form?

7 to 10 days (Hoard's Dairyman 2011)

48. If properly fed to dairy cattle, urea supplies a readily available source of what element?

Nitrogen (Hoard's Dairyman 2011)

49. Kernel processors that roll corn silage improve the availability of what?

Starch (Hoard's Dairyman 2011)

50. Adding dissolved carbon dioxide to fresh milk can extend shelf-life by how many months?

3 months (Hoard's Dairyman 2011)

51. What term is given to the presence of horseshoe shaped rings around the teat?

Teat-end lesions (Dairy Herd Management 2012)

52. The genetic recovery program has been updated so that the letter designations (OA, PR & GR) have been replaced with what?

Percentage purebred label (Ayrshire 2012)

53. What is the hormone that causes ovulation?

LH (Luteinizing Hormone) (Other 2012)

54. Which stomach compartment is known as the paunch?

Rumen (HF Workbooks February 2011)

55. In a feeding program, what do the initials TMR stand for?

Total Mixed Ration (Hoard's Dairyman 2012)

56. What bull tops the April 2012 International Ayrshire Sires Marketed in the U.S. list?

Jelyca Oblique (Ayrshire May 2012)

57. During the herd milking schedule, when should mastitis infected cows be milked?

Last (Hoard's Dairyman 2011)

58. What type of injection may include a modified live virus?

Vaccination (Hoard's Dairyman 2011)

59. In looking at a pedigree, information about the sire is shown on the top or bottom half of the pedigree?

Top (HF Workbooks February 2011)

60. True or False: All Ayrshire Breeders' Association Lifetime Members receive annual ballots.

False - only accounts with last two years of activity (Ayrshire July 2011)

61. Why should a teat dip be used after milking?

To reduce or prevent udder infections (Hoard's Dairyman 2011)

62. Depending on the operation, feed costs are usually what percent of annual cow costs?

40 to 60% (Dairy Herd Management 2011)

63. Which type of feedstuff produces the most heat during digestion?

Forages (Hoard's Dairyman 2011)

64. Using official tattoos is one of the preferred methods of identification for Ayrshire. Which ear contains the tattoo?

Left (Ayrshire 2011)

65. What accounts for the greatest percent of milk production costs on most dairy farms?

Feed (Hoard's Dairyman 2011)

66. Where was the first National Dairy Show held?

Chicago (Hoard's Dairyman 2010)

67. What are the hereditary units that determine a portion of the animal's appearance, performance, behavior and other characteristics?

Genes (HF Workbooks February 2012)

68. Which hormone is produced by the pancreas and promotes mammary cell growth and cell division?

Insulin (Hoard's Dairyman 2011)

69. What is the genetic material found in all living organisms called?

DNA (genes, chromosomes) (Hoard's Dairyman 2011)

70. How long after filling a silo are the gases most dangerous?

12-72 hours after (Hoard's Dairyman 2011)

71. What soil pH range is best to grow good alfalfa?

6.8 to 7.0 pH (Hoard's Dairyman 2011)

72. What does a cryoscope measure to determine if water has been added to milk?

Freezing point of milk (Hoard's Dairyman 2011)

73. What specific forage crop has the greatest buffer capacity during the ensiling process?

Alfalfa or clovers (Hoard's Dairyman 2011)

74. How many pairs of chromosomes do humans have?

23 pairs (HF Workbooks February 2012)

75. In general terms, what are the chemical messengers which control a cow's estrus cycle?

Hormones (Hoard's Dairyman 2012)

76. Where will the 2012 National FFA Convention be held?

Indianapolis, IN (Hoard's Dairyman 2011)

77. How much does it cost to transfer an Ayrshire less than 60 days from the date of sale?

\$15.00 (Ayrshire 2011)

78. What do volatile fatty acids supply the cow?

Energy (Hoard's Dairyman 2011)

79. What percent of cheese is consumed on pizza?

26 to 30% (Hoard's Dairyman 2011)

80. What common pest serves as the primary vector of pink eye?

Flies, Face flies, or *Musca Autumnalis* (Hoard's Dairyman 2011)

81. A low blood level of what mineral causes milk fever?

Calcium (Hoard's Dairyman 2011)

82. What is subclinical mastitis?

Infection of udder that is not visible (Hoard's Dairyman 2012)

83. DNA testing is a means of verifying parentage. What type of sample is needed for the lab to best identify DNA markers?

Hair sample from switch (Ayrshire 2012)

84. What does the word gestation mean?

Time mother carries young (calf) (Hoard's Dairyman 2011)

85. The Center for Science has listed what as the riskiest foods regulated by the U.S. Food & Drug Administration?

Leafy Greens (Other 2011)

86. How can people get infected with tuberculosis?

Drinking unpasteurized milk from infected cows or contaminated water (Hoard's Dairyman 2011)

87. Which type of ovarian cyst is most prevalent?

Luteal cyst (Hoard's Dairyman 2011)

88. A cow is treated with fertility drugs to try and cause more eggs to ovulate than normal. What is this process called?

Superovulation (Hoard's Dairyman 2011)

89. What two soil nutrients are major concerns in drainage water pollution?

Nitrogen and phosphorus (Hoard's Dairyman 2011)

90. At what stage of bloom should red clover be cut to yield its highest feeding value?

Half bloom (Hoard's Dairyman 2011)

91. Only good colostrum should be fed to newborn calves. Colostrum can be refrigerated up to how many days?

5 days (Hoard's Dairyman 2011)

92. Multiple Choice: Which contains three times as much protein than the other: corn gluten meal or corn gluten feed?

Corn gluten meal (66% compared to 25%) (Hoard's Dairyman 2011)

93. What are anestrous cows?

Cows that are not cycling (Hoard's Dairyman 2011)

94. What term is used to define an internal or environmental stimulus that initiates an adaptive change in an animal?

Animal stress (herd stress) (Dairy Herd Management 2011)

96. What is dystocia?

Difficult or obstructed calving (Hoard's Dairyman 2011)

97. 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 2011)

98. Total mixed rations typically contain what percent concentrates?

40 to 60% (Hoard's Dairyman 2011)

99. Which volatile fatty acid is the primary end-product of forage fermentation?

Acetate (Dairy Herd Management 2011)

100. What percent degradable intake protein should be provided in the entire ration?

60 to 65% (Hoard's Dairyman 2011)

101. Dairy facilities are generally wet, and that can complicate electrical wiring. What do the initials UF stand for in regards to wiring?

Underground Feeder Cable (Dairy Herd Management 2011)

102. A prerinse solution of heated water at what Fahrenheit temperature will effectively remove the bulk of milk residues from milk contact surfaces?

110 degrees F (Hoard's Dairyman 2011)

103. Molds that contaminate drought-stressed corn can produce a toxic compound that appears in milk if fed to cows at high enough levels. What is this toxic compound called?

Aflatoxin (Hoard's Dairyman 2011)

104. What is uterinedropsy?

A fluid build-up in the uterus (Hoard's Dairyman 2011)

105. In the reproductive tract, what is the name of the funnel-shaped opening of the oviduct?

Infundibulum (Hoard's Dairyman 2011)

107. How do milking machines remove milk from cows?

Creates vacuum at teat end that overcomes teat end muscles and "sucks" milk from cow's teats (Hoard's Dairyman 2011)

109. In a feeding program, what do the initials NPN stand for?

Nonprotein Nitrogen (Hoard's Dairyman 2011)