

**HOLSTEIN FOUNDATION
AYRSHIRE QUIZ BOWL
2025 PRACTICE QUESTIONS**

1. In dairy judging, what is the term for the number value given to the difficulty in placing a pair that is used to score the placing?

Cut(s)

2. When removing manure from a storage pit, what typically must be done to minimize solids accumulation and create a uniform fertilizer for field application?

Agitate manure

3. What substance in Guernsey milk gives it a golden yellow color?

Beta carotene

4. Cows spend what percent of their day drowsing or in a quiet wakefulness?

33%

5. Historically, during what season is the demand for milk highest?

Fall

6. When feeding cottonseed, what is the recommended maximum pounds per day for cows?

6 - 8 pounds

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

Last

8. What is often the first warning sign of a cow becoming sick?

Fever

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

24 stalls

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

Foot closest to the judge slightly forward

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

Decreases

12. Information about which side of the family is shown on the bottom half of the pedigree?

Maternal side

13. 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

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

Leaves

15. Where is the streak canal located on a cow?

Her teat

16. Which basic nutrient group provides the cow's major source of energy?

Carbohydrates

17. What is the average weight of a mature Ayrshire cow?

1,200 pounds

18. Name the president of the Ayrshire Breeders' Association.

Rhonda Patrick-Winkler

19. How many chromosomes does a cattle embryo have?

60 chromosomes

20. How many teeth does a cow have on the front of the upper jaw?
None (dental pad)
21. In a feeding program, what do the initials TMR stand for?
Total Mixed Ration
22. How many permanent teeth does a mature dairy cow have?
32 teeth
23. How do cows effectively lose body heat during hot weather?
Sweating or panting
24. What is the costliest disease affecting the dairy industry?
Mastitis
25. What term is used to describe forages that are seeded every year, and whose growth is completed in one crop year?
Annuals
26. Chromosomes are found in what part of the cell?
Nucleus
27. What is the part of the back that lies between the withers and the middle of the back called?
Chine
28. 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
29. What is dystocia?
Difficult or obstructed calving

30. What is subclinical mastitis?

Infection of udder that is not visible

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

Purebred Dairy Cattle Association

32. A heifer is born twin to a bull. When can she become registered?

When it can be proven she is a breeder or fertile

33. Which disease stopped the importation of cattle from Europe in 1905?

Hoof and mouth disease

34. In udder health management, what is withdrawal time?

Time required after administration of a drug to a dairy cow needed to assure that drug residues in the marketable milk is below a determined maximum residue limit

35. What does the word gestation mean?

Time mother carries young (calf)

36. What happens to the nitrate levels of corn after it has been ensiled?

Lowers

37. What is metritis?

Uterine infection or inflammation

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

Both decline

39. On a dairy farm, what does the term herringbone refer to?

Milking parlor

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

Total Digestible Nutrients

41. What feedstuff is a by-product of ethanol production?

Distillers' grains

42. In dry weather, why is alfalfa able to delay drought damage?

Deep root system

43. At birth, only one part of a calf's stomach is functionally active. Which part is that?

Abomasum

44. What substance in corn is likely to increase to toxic levels during a drought?

Nitrate

45. What name is given to the surrogate mother in embryo transfer work?

Recipient

46. In which stomach compartment of a calf is the enzyme rennin produced?

Abomasum

47. What is the major protein in milk called?

Casein

48. 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

49. Staphylococcus aureus is the most prevalent cause of what type of infection?

Mastitis

50. What vitamin can be injected or fed to cows to reduce the susceptibility to ringworm?

Vitamin A

51. Rumen bacteria digest carbohydrates to produce volatile fatty acids which are absorbed into the blood and used for what?

Energy

52. In which specific organ do follicular and luteal cysts occur?

Ovaries

53. How are copper sulfate and formalin frequently used in a herd health program?

Foot bath

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

DNA

55. What is the name of the waxy substance in the teat duct which helps provide a physical barrier to bacteria?

Keratin

56. Udder edema is generally most severe in what parity group?

First-lactation heifers

57. MOET makes use of embryo transfer and related technologies to achieve more rapid genetic improvement of dairy cattle. What does MOET stand for?

Multiple Ovulation and Embryo Transfer

58. Why do cows eat less during hot weather?

To maintain normal body temperature (metabolism of feed causes heat production, depressed appetite because of excess body heat)

59. The oldest cow ever to live was 49 years old. In what country was she from?

Ireland

60. In reproduction, what time frame does days open refer to?

Number of days from calving to conception

61. What is predipping?

Disinfecting and cleaning the teats prior to milking

62. Research has shown that supplementing dry cow rations with anionic salts may be an effective method of preventing milk fever. What type of electrical charge does an anion have?

Negative charge

63. What do we call animals that do not have any pigment in their skin, hair, or eyes, usually with blue or pink eyes and white hair?

Albino

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

New Jersey

65. When ear tagging a calf, in which section of the ear should the tag be placed?

Middle section between the two cartilage ribs

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

Animal stress (herd stress)

67. The proportion of superiority or inferiority in performance of a parent which is transmitted directly to its offspring is indicated by what term?

Heritability

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

Follicle

69. What muscle keeps the teat end closed and helps prevent bacteria from entering the udder?

Sphincter muscle

70. What is the first part of the small intestine called?

Duodenum

71. What enzyme is deficient in people who are lactose intolerant?

Lactase

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

Nonprotein Nitrogen

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

Infundibulum

74. What term describes when a heifer has a negative experience the first time, she enters a headlock? This type of memory cannot be erased.

Fear memory

75. Cheesemakers sometimes add nonfat dry milk or skim 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

76. When singeing udder hair, slowly pass the flame how many inches below the udder?

6 to 8 inches

77. "Cattle Bonkers" is a condition in dairy cattle caused by eating what dietary feed?

Ammoniated forages

78. In order to minimize silage seepage, forages should be harvested at what percent moisture?

50 to 65%

79. What term is defined as the loss of feed from the point of harvest or delivery, to what is consumed by the cows?

Feed shrink or shrink

80. What milk handling process breaks up fat globules to keep them suspended in the milk?

Homogenization

81. What type of feed additives are sodium bicarbonate and magnesium oxide?

Buffers

82. What are the two primary nutrients supplied by whole soybeans?

Protein and fat

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

Vaccination

84. When a cystic follicle is properly treated, it will ovulate to form what structure?

Corpus Luteum

85. What does CMT stand for regarding milk?

California Mastitis Test

86. Name the greatest danger attributed to tower silos.

Silo gas or nitrogen dioxide

87. Mange is contagious and tends to occur in dairy cattle housed in close proximity, especially during what season?

Fall or winter

88. Your veterinarian says that a cow is in the first trimester. What does that mean?

First 3 months of pregnancy

89. What is the name for the highest daily production attained by a cow during her lactation?

Peak milk production

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

Artificial Insemination

91. What is the first compartment of the stomach called?

Rumen

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

Colostrum

93. What term describes the fraction of ration proteins which is broken down by digestive enzymes and utilized by rumen bacteria?

Degradable

94. What is it called when a cow is in heat?

Estrus

95. Body energy and nutrient reserves can be replenished with most ease during which stage of lactation?

Late lactation

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

Hormones

97. In a feeding program, what do the initials DMI stand for?

Dry Matter Intake

98. SCC is used to identify cows with mastitis. What do the initials SCC stand for?

Somatic cell count

99. What is the average gestation period, in days, for an Ayrshire cow?

279 days (+/-5 days)

100. In the reproductive tract of a cow, how many uterine horns are there?

Two

101. 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

102. We can reduce ammonia emissions by reducing the feeding of what nutrient?

Protein

103. What dairy product is being hailed as the flat-belly food?

Yogurt

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

55 to 60%

105. What is the single largest product from the beef carcass?

Ground beef

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

Forages

107. Technology now allows veterinarians to detect whether a cow is pregnant at 25 days into gestation using what mechanical test?

Ultrasound

108. What human health condition is characterized by inadequately digesting the sugar found in dairy products?

Lactose intolerance