2021 National FFA Dairy Cattle Event

### Dairy Management Exercise

**Select best answer for each of the following 40 questions.**

1. An example of a Class III use for milk would be to make \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Hard cheese
3. Ice cream
4. Chocolate Milk
5. Dried milk powder
6. Butter
7. This has been identified as the most visible well-being problem in the dairy industry today?
8. Dehorning
9. Breeding cows by A.I.
10. Lameness
11. Feeding calves with a bucket
12. All of the above.
13. Dairy Management, Inc. (DMI) is a nonprofit organization formed by the National Dairy Board and United Dairy Association. It conducts programs in integrated marketing, communications, promotion, and research for U.S. Dairy Farmers. Which of the following organization is not a part of the DMI umbrella?
14. American Dairy Association
15. American Dairy Science Association
16. National Dairy Council
17. U.S. Dairy Export Council
18. None of the above because they are all a part of the DMI umbrella.
19. If the heat detection rate is 50% and the conception rate is 30%, what is the pregnancy rate?
20. 15%
21. 20%,
22. 18%,
23. 30%
24. 45%.
25. Lameness on a dairy farm can lead to higher culling rates, reduced reproductive performance, and lower milk yield. In order to manage lameness on your farm, you implement a locomotion scoring system using a scale from 1 to 5. What score would you give to a cow who stands with flat back, but arches when walking and gait is slightly abnormal?
26. 5
27. 3
28. 2
29. 1
30. All of the above.
31. What term describes the time span between first calving and culling?
32. Productive life
33. Culling Rate
34. Lifetime Production
35. Net Merit
36. All of the above
37. Before applying manure to any crop field, manure testing (measuring nutrient content) is recommended to help which of the following?
38. Reduce fertilizer purchases
39. Prevention of overapplication of nutrients in excess of crop requirements
40. Determine P and K amounts in the manure
41. All of the above
42. None of these reasons are important reasons why manure testing is needed.
43. 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?
44. Potassium
45. Phosphorus
46. Zinc
47. Nitrogen
48. Copper
49. The local veterinary has invited you to do a herd visit with him to determine why there is an increase in mastitis. You are asked to observe the milking parlor and procedures. The employees yell and scream at the cows to get them to come in the parlor, while they are milking, and when they leave the parlor. Pre-dip is applied to the teats, cleaned and milking units attached within 1 minute. Milk let down is delayed after the milking unit is attached. You suspect the reason why the cows are not letting milk down and getting mastitis is a result of:
50. Too much oxytocin being produced
51. The excessive screaming and yelling is causing the cows to produce too much prolactin
52. The excessive noise is upsetting the cows causing epinephrine to be produced interfering with milk letdown
53. The excessive noise is causing too much estrogen to be produced and preventing milk letdown
54. All of the above
55. The world’s largest yogurt maker is?
56. Prairie Farms,
57. Nestle USA
58. Danone
59. Horizon
60. Dairy Farmers of America
61. 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?
62. Rumination Rate
63. Feed intake
64. Feed Uptake
65. Eating Rate
66. Digestion
67. Which of the following dairy breeds originated from a continental European country?
68. Ayrshire
69. Brown Swiss
70. Guernsey
71. Jersey
72. Milking Shorthorn
73. Producing milk with a SCC less than 150,000 is important because milk will have which of the following characteristics?
74. Improved flavor
75. Longer shelf life
76. Increased cheese yield
77. Reduced hauling and handling costs
78. All of the above
79. Which state introduced a 2021 bill to eliminate artificial insemination in dairy cattle (it failed)?
80. Oregon
81. Wisconsin
82. California
83. New Mexico
84. Colorado
85. What is the BioPRYN blood test used to test for?
86. Mastitis
87. Nitrate toxicity
88. Pregnancy
89. Dystocia
90. Prolactin
91. Mastitis is the most costly disease in dairy cattle. The most effective procedures to prevent new infections are which of the following?
92. Predipping and drying the teat before attaching the milking unit
93. Use strawbedding in the housing area
94. Using the same cloth towel to wipe all the cows at the same time
95. Teat dipping (pre and post) and dry cow antibiotic treatment
96. Leaving the milking until on until all the milk is completely removed from the udder
97. You are reviewing bull proofs to select the best bull to use on your dairy heifers. PTA is listed on the proof. What does the acronym PTA stand for?
98. Predicted Transmitting Ability
99. Productive Transmitting Ability
100. Production True Ability
101. Predicted Transmitting Accountability
102. It doesn’t stand for anything specific
103. The genetic base for genetic evaluations is updated every 5 years. The next base change is scheduled for which year?
104. 2021
105. 2022
106. 2023
107. 2024
108. 2025
109. According to a Hoard’s Dairyman survey of 3,000 readers in 2011 and 2021, what percent of respondents vaccinated their calves, heifers, and cows?
110. 52%
111. 67%
112. 78%
113. 85%
114. 94.6%
115. Youth for the Quality Care of Animals (YQC) is a national level multi-species quality assurance program with a focus on which three core pillars?
116. Food safety, animal ethics; character development
117. Food quality, animal well-being; character development
118. Food safety; animal ethics, honesty
119. Food safety; animal-well being, character development
120. Meat quality; animal ethics; character development
121. At a recent Holstein dairy farm visit with your FFA class, you observed the employees feeding new calves 6 hours after the calves were born. They used a brix refractometer to determine the quality of colostrum before feeding calves 1 bottle each. However, they are concerned because blood tests show the calves are not achieving adequate levels of antibodies to boost immunity. After discussing with your FFA class, you make which of the following recommendations to improve passive immunity of the calves:
122. Continue to use the Brix refractometer, feed 1 bottle of colostrum within 2 hours of being born.
123. Continue to use the Brix refractometer, feed 1 bottle of colostrum within 12 hours of being born.
124. Continue to use the Brix refractometer, feed 10% of the calves body weight colostrum within 2 hours of being born.
125. Continue to use the Brix refractometer, feed 2 bottles of colostrum within 24 hours of being born.
126. Continue to use the Brix refractometer, feed 10% of calf body weight of colostrum within 18 hours of being born.
127. Which of the following is not a primary class of immunoglobulins found in colostrum?
128. IgG
129. IgB
130. IgA
131. IgE
132. IgM
133. The jugular vein is the ideal location for what type of injection?
134. Intramuscular injection
135. Intrauterine injection
136. Intravenous injection
137. Intraperitoneal injection
138. Intramammary infusion
139. A mature dairy cow has how many teeth?
140. 32 teeth on both her upper and lower mouth
141. 10 teeth on her upper mouth and 22 on her lower mouth
142. 16 teeth on bother her upper and lower mouth
143. No teeth on her upper mouth and 32 on her lower mouth
144. 32 on her upper mouth and no teeth on her lower mouth
145. As an A.I. sales representative a dairy producer asks you to help select bulls to improve his future heifers get pregnant. You recommend which of the following bulls to help achieve this goal:
146. Theo DPR 1.4
147. Jonathan DPR 5.0
148. Newton PL 4.4
149. Toby REL 96
150. Kingston DPR -0.9
151. Which of the following are leading causes of death in young calves on dairy farms?
152. Scours and pneumonia
153. Pink eye and scours
154. Scours and black leg
155. Infected naval and pneumonia
156. Overeating and pneumonia
157. The PDCA Cow Unified Scorecard allots how many points to frame and which trait is the highest priority in this category?
158. 15 points and Rump
159. 20 points and Back/loin
160. 25 points and Front End
161. 15 points and Stature
162. 20 points and Front End
163. Which of the following does not cause a decrease in milk fat test?
164. Estrus
165. Extremely Hot Weather
166. High Fiber content in the ration
167. Finely chopped feeds
168. Illness
169. During a dairy farm visit with your FFA advisor, the dairy farmer asks you what might be wrong with his cows. He provides the following information for you from cows experiencing problems, BSC 4.0; cows are over 8 months pregnant or in the dry period; average SCC is 350,000, and after calving over half had milk fever. Based on these symptoms and signs, you suspect which disease to be causing the problem?
170. Hardware disease
171. Ketosis
172. Displaced abomasum
173. Fat Cow Syndrome
174. Heat Stress
175. Which of the following was the number 1 milk producing cooperative in the U.S. based on milk volume in 2019
176. Land O’Lakes, Inc.
177. Edge Dairy Farmer Cooperative
178. California Dairies, Inc.
179. Northwest Dairy Association
180. Dairy Farmers of America
181. What is the number 1 reason for culling dairy cows in U.S. dairy herds?
182. Low milk production
183. Reproductive failure
184. Mastitis
185. Lameness
186. Ketosis
187. You are invited to visit a 700 cow dairy in your county to learn more about how they group their cows. They currently are grouping the cows by body condition score. They ask you what other ways could they potentially group their cows. You provide the following recommendations as options for consideration.
188. Production level
189. Stage of lactation
190. Lactation number
191. Health
192. All of the above
193. In the medicine room on the dairy where you work is a shelf of products labeled as anthelmintic products. These are used for what purpose?
194. Dewormers
195. Teat Dips
196. Fertilizer
197. Sanitizers
198. All of the above
199. Which compartment of the ruminant stomach is located closest to the heart?
200. Reticulum,
201. Omasum,
202. Rumen,
203. Abomasum,
204. Small intestine.
205. What is the basic unit of inheritance?
206. Gene,
207. Allele,
208. Chromosome,
209. Locus,
210. Genome.
211. Raising dairy replacement heifers accounts for what percent of total farm expenses on many dairy operations?
212. 5-10%
213. 15-20%
214. 35-40%
215. 55-60%
216. over 75%
217. Gestation length in dairy cattle can vary due to which of the following factors?
218. Age of the cow
219. Breed of the cow
220. Season of the year
221. Number of the calves carried
222. All of the above
223. Budgets, balance sheets and cash flow projections are valuable and essential management tools but they do not tell the manager if the business is profitable. What is the only tool of farm business analysis that measures profitability?
224. Bank Statement
225. Equity Statement
226. Income Statement
227. Schedule F
228. Excel spreadsheet
229. To determine the height of the udder floor on a dairy cow, what reference point is used?
230. Pastern
231. Vulva
232. Hock
233. Hooks
234. None of the above
235. What element must be absent in order for effective fermentation to occur in a silage pile?
236. Carbon
237. Oxygen
238. Nitrogen
239. Phosphorus
240. Potassium

Prepared by K.L. Heckaman, Purdue Extension – Kosciusko County, Warsaw, IN