

2017 National FFA Dairy Cattle Event

Dairy Management Exercise

Select best answer for each of the following 40 questions.

1. This cheese is the most popular American-type cheese.
A) Cheddar, B) Mozzarella, C) Swiss, D) Monterey Jack, E) Cream Cheese.
2. What type of mastitis is the primary reason antibiotics are administered to dairy cows?
A) Sub-Clinical, B) Clinical, C) Acute, D) Chronic, E) None of the above.
3. For question two the common symptoms of this type of mastitis are?
A) Flakes, B) Clots, C) Hot quarters, D) Watery milk, E) All of the above.
4. What is the most effective measure to prevent new cases of mastitis infections from occurring?
A) Teat-dipping, B) Dry-cow antibiotic treatment, C) Foot trimming, D) Both A&B, E) Both B&C.
5. 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 and walks normally and all feet are placed with purpose?
A) 4 or 5, B) 3, C) 2, D) 1, E) All of the above.
6. One of your recently fresh cows is ill. She has been receiving a high grain, low roughage diet. The consistency of the small amount of manure she produces is "putty-like". Your veterinarian detects a "pinging" sound when using his stethoscope. What is the most likely diagnosis?
A) Ketosis, B) Milk Fever, C) Grass Tetany, D) Left Displaced Abomasum, E) Rumen Acidosis.
7. In order to prevent hock lesions and improve incidence of lameness, which is the best bedding material to use?
A) Sand, B) Straw, C) Wood shavings, D) Stall mats, E) Recycled manure.
8. Tarsal hygroma is which of the following common ailments in dairy cows?
A) Swollen hock, B) Dehydration, C) Acidosis, D) Lameness, E) Split toed.
9. This micro-mineral has been shown to be effective in decreasing the rate of foot rot, heel cracks, and laminitis in dairy cattle.
A) Copper, B) Iodine, C) Selenium, D) Manganese, E) Zinc.
10. What dairy breed is the leader in Cheese Merit dollars?
A) Guernsey, B) Milking Shorthorn, C) Ayrshire, D) Brown Swiss, E) Holstein.
11. Which of the following PTA traits was introduced in August 2017 for service sires representing the influence the service sire is expected to have on the number of days his mates carry their calves during their pregnancies.
A) DPR, B) GL, C) SCR, D) SB, E) PL.

12. You recently became the manager of dry cows at a local dairy farm. Not only do you care for the dry cows but also for newborn calves. One issue that you must address immediately is decreasing calf mortality within the first 48 hours. The first purchase you make for the farm is a Brix refractometer to help estimate or measure what?
A) Wither height, B) Colostrum quality, C) Cow's reaction time, D) Amount of bacteria in milk, E) Antibody levels in the blood.
13. At what point during the dry period does a cow's colostrum production cease?
A) At the beginning of the dry period, B) About a week after having the calf, C) At the start of labor, D) A week before having the calf, E) None of the above.
14. Colostrum provides antibodies to newborn calves, but it is also 4 times higher in what important nutrient than normal cow's milk?
A) Water, B) Fats, C) Carbohydrates, D) Protein, E) All of the above.
15. Absorption of antibodies from colostrum primarily takes place in which compartment of a calf's stomach?
A) Omasum, B) Small Intestine, C) Rumen, D) Reticulum, E) Abomasum.
16. In 2015, which state had the most organic dairy farms?
A) Idaho, B) Wisconsin, C) South Dakota, D) Washington, E) Michigan.
17. What trait is defined as adequate constitution with front legs straight, wide apart and squarely placed on the Dairy Cow Unified Scorecard?
A) Front End, B) Rump, C) Dairy Strength, D) Chest Floor, E) Body Capacity.
18. You are the dry cow manager on your dairy farm. You begin to notice after calving cows are experiencing a loss in body condition and are not eating enough dry matter to meet their energy needs to produce milk. After discussing these symptoms with your veterinarian, a blood test also shows the cows with a lower than normal blood glucose, high ketones and free fatty acid levels. What could be the cause of these symptoms?
A) Rumen Acidosis, B) Ketosis, C) Milk Fever, D) Johne's, E) Hardware.
19. To treat the metabolic disorder described in #18 which of the following is fed or administered to the cow?
A) Calcium, B) Propylene glycol, C) Antibiotics, D) Water, E) Nothing the disorder will fix itself.
20. What may be added to feeds as an aid in prevention of the condition described in #18?
A) Calcium, B) Phosphorus, C) Vitamin A, D) Vitamin K, E) Niacin.
21. For the condition described in question 18, in addition to fiber what other ration component is important in minimizing fresh cows' negative energy balance?
A) Starch, B) Protein, C) Water, D) Calcium, E) All of the above.
22. What percent of the average U.S. dairy cow diet could be digested by a human?
A) 0%, B) 10%, C) 20%, D) 50%, E) 100%.

23. After reviewing your recent breeding history for the past month, you contact your nutritionist because you have identified the need to improve conception rates in your herd. She suggests you add what to your rations to improve conception rates because of larger ovarian follicles capable of producing more estrogen, larger corpus luteum and a decrease in embryonic loss?
A) Fats, B) Carbohydrates, C) Vitamins, D) Minerals, E) Protein.
24. Your favorite cow has gone off feed recently. The veterinary says she has ingested pieces of metal and has given her a magnet. In which compartment of the stomach is metal, most often found and would benefit from the magnet?
A) Abomasum, B) Omasum, C) Reticulum, D) Rumen, E) Duodenum.
25. An example of a Class IV use for milk would be to make:
A) Hard cheese, B) Ice cream, C) Chocolate Milk, D) Dried milk powder, E) A class IV use does not exist.
26. A poorly maintained ventilation system on your farm can result in what percent loss of air movement?
A) 10%, B) 30 to 50%, C) 70-80%, D) 85-95%, E) There is no noticeable differences.
27. When this cell is mature, it is the largest in a dairy cow's body.
A) Skin, B) Blood, C) Oocyte or egg, D) Somatic Cell, E) White blood cells.
28. This non-profit organization founded in 1915 funded through the national dairy checkoff program continues to be, committed to providing science-based education about the nutrition and health benefits that dairy foods provide.
A) USDA, B) FDA, C) Federal Milk Market Orders, D) EPA, E) National Dairy Council.
29. You recently received a pedigree for a heifer in your herd. When looking at the pedigree you noticed some of the traits had a zero breeding value. So, when you compare her to the U.S. cow population, she is considered what for these traits?
A) Above average, B) Average, C) Below average, D) An outstanding heifer, E) None of the above.
30. It is time to load your cows to bring them to come home to calve. To be successful in moving the cows you make sure to be mindful of the area where the cows do not want any foreign objects entering. This area is commonly known as?
A) Blind spot, B) Flight zone, C) Comfort zone, D) Point of balance, E) Both A and C.
31. Which of the following is not a part of the cow's digestive tract?
A) Esophagus, B) Omasum, C) Mouth, D) Small Intestine, E) Alveoli.
32. Getting dairy cows bred on the farm is a top priority. What process is used to determine if a cow is pregnant by inserting an arm into the rectum of a cow to feel the reproductive tract?
A) Palpation, B) CMT, C) Prolapse, D) Parturition, E) Involution.
33. Which of the following is **NOT** considered a micro mineral?
A) Phosphorus, B) Potassium, C) Calcium, D) Manganese, E) All but D.

34. Which of the following diseases is caused by a species of mycobacterium?
A) Johnes, B) Brucellosis, C) Tuberculosis, D) Both A and C, E) All of them.
35. What is the “normal” rectal temperature of a dairy cow?
A) 94-95 degrees F, B) 98-99 degrees F, C) 101-102 degrees F, D) 102-103 degrees F, E) 105-106 degrees F.
36. What is the process called whereby fat globules are broken down to a small, uniform size?
A) Pasteurization, B) Clarification, C) Equalization, D) Homogenization, E) Standardization.
37. Milk over what somatic cell count cannot be legally shipped.
A) 200,000, B) 400,000, C) 500,000, D) 750,000, E) 1,000,000.
38. Which hormone is responsible for milk letdown hormone?
A) Oxytocin, B) Estrogen, C) Prolactin, D) Adrenalin, E) Progesterone.
39. Which of the following is not an annual plant used as a source of forages for dairy?
A) Corn, B) Alfalfa, C) Wheat, D) Oats, E) Ryegrass.
40. Which of the following factors should be considered when planning a waste management system?
A) Environmental, B) Social, C) Operational, D) Legal Requirements, E) All of the above.