

## 2017 Kentucky FFA Dairy Cattle Evaluation CDE

1. Which two dairy breeds originated on isles in the English Channel?
  - a. Guernsey and Holstein
  - b. Holstein and Brown Swiss
  - c. Guernsey and Jersey
  - d. Milking Shorthorn and Brown Swiss
2. In what city is the World Dairy Expo held each year?
  - a. Louisville, Kentucky
  - b. Madison, Wisconsin
  - c. Sydney, Australia
  - d. Sacramento, California
3. What hormone is needed to maintain pregnancy?
  - a. Progesterone
  - b. Oxytocin
  - c. Luteinizing hormone
  - d. Prostaglandin
4. Dairy sire semen which has been gender preselected or “sexed” for the sperm cells with the X chromosome will result in what percentage female calves?
  - a. 52 %
  - b. 75%
  - c. 80%
  - d. 90%
5. On January 1, 2017, this rule took effect to ensure the judicious use of medically important antimicrobials in food-producing animals. What is this rule called?
  - a. Microbial Feed Incentive
  - b. Veterinary Client Relationship
  - c. Feed Incentive Program
  - d. Veterinary Feed Directive
6. A 90 pound Holstein calf should receive this amount of colostrum in the first four hours of life?
  - a. 3 quarts
  - b. 4 quarts
  - c. 6 quarts
  - d. 4 pints
7. What term is used to describe when cattle are moved from pasture to pasture to have more forage?
  - a. Rotational Moving
  - b. Rotational Grazing
  - c. Revolving Fencing
  - d. Rotary Grazing

8. Most cows will naturally form a mass after dry-off that blocks the teat canal and stops bacteria from entering the teat. What is this mass commonly called?
  - a. Keratin Plug
  - b. Orbeseal
  - c. Milk Seal
  - d. Teat Cannula
9. Which stomach compartment secretes a gastric juice that contains hydrochloric acid?
  - a. Rumen
  - b. Omasum
  - c. Reticulum
  - d. Abomasum
10. Your calf was born March 3, 2016. What class will she show in at the 2017 Kentucky State Fair?
  - a. Junior Calf Class
  - b. Junior Yearling Class
  - c. Senior Yearling Class
  - d. Junior 2 Year old Class
11. What does a cryoscope measure in milk?
  - a. Freezing Point of Milk
  - b. Boiling Point of Milk
  - c. Somatic Cell Count
  - d. Thawing Point of Milk
12. What type of shot is given under the skin for cattle?
  - a. Intravenous
  - b. Intramuscular
  - c. Subcutaneous
  - d. Submerged
13. How are copper sulfate and formalin frequently used in a herd health program?
  - a. In a Vaccination Protocol
  - b. In a Footbath
  - c. In an Injection
  - d. Given Orally
14. Subclinical rumen acidosis occurs when the pH of the cow's rumen drops below this?
  - a. 2.5 pH
  - b. 3.0 pH
  - c. 4.0 pH
  - d. 5.8 pH
15. Excessive rates of pneumonia in dairy herds are not typically due to cold weather or drafts, but often due to what?
  - a. Inadequate colostrum
  - b. Inadequate ventilation
  - c. Inadequate heat lamps
  - d. Too much bedding

16. In a dairy judging contest you place the class of Ayrshire Winter Yearlings 2-4-3-1. The official placing is 4-3-2-1 with cuts of 2-4-8. What is your score?
- 36
  - 38
  - 40
  - 44
17. Why is soybean meal commonly added to calf starters?
- To increase Energy
  - To increase Protein
  - To reduce fines
  - To make it sweeter
18. What enzyme is produced in the abomasum that is important for digestion and breaking down protein?
- Pepsin
  - Lactase
  - Dehydrogenase
  - Casein
19. What is the recommended minimum square feet per calf stall?
- 8 square feet
  - 12 square feet
  - 20 square feet
  - 24 square feet
20. What is the name for failure to expel fetal membranes after parturition?
- Retained Plasma
  - Retained Placenta
  - Palpation
  - Prolapsed
21. What hormone is responsible for milk letdown?
- Prostaglandin
  - Progesterone
  - Oxytocin
  - Adrenaline
22. How many pairs of ribs does a mature cow have?
- 13 pairs
  - 12 pairs
  - 10 pairs
  - 26 pairs
23. What is the muscular movement that pushes feed down the esophagus called?
- Rumination
  - Eructation
  - Peristalsis
  - Involution

24. What is the process called where one would insert their arm into the rectum of a cow to determine pregnancy status by feeling the reproductive tract?
- Peristalsis
  - Insemination
  - Pasteurization
  - Palpation
25. What country leads the way in per capita cheese consumption?
- United States
  - France
  - Germany
  - Mexico
26. At the feedbunk and in the holding area, fans should run continuously once the temperature humidity index exceeds what degree?
- 68 ° F
  - 72 ° F
  - 88 ° F
  - 92 ° F
27. Who developed the butterfat test that was the basis for DHIA testing?
- Louis Pasteur
  - Michele Ruby
  - S. M. Babcock
  - W. D. Hoard
28. How many gallons of water does a lactating cow consume per day?
- 20 to 50 gallons
  - 55 to 80 gallons
  - Over 100 gallons
  - 5 to 10 gallons
29. Batch pasteurizers consist of a tank with an element that heats milk to 145 degrees F and maintains the temperature for how many minutes?
- 10 minutes
  - 30 minutes
  - 40 minutes
  - 60 minutes
30. The practice of breeding dairy heifers based off of what criteria is considered the universal standard?
- Body Weight or Size
  - Age Only
  - Calculated Ratio
  - Number of Teeth
31. What is the term for an extra teat?
- Superlative Teat
  - Sarcopenia Teat
  - Supernumerary Teat
  - Cytometry Teat

32. Dividing the total dollars a dairy has in assets by the number of cows allows you to determine which economic indicator?
- Total Net Loss Per Cow
  - Rolling Herd Average
  - Total Income
  - Total Investment Per Cow
33. What would the dairyman most likely feed in an attempt to correct or prevent the buildup of acid in the cow's stomach?
- Sodium bicarbonate
  - Urea
  - Protein
  - Anionic Salts
34. How many days does the cow have an active corpus luteum during the estrous cycle?
- 8 to 10 days
  - 12 to 15 days
  - 20 to 24 days
  - 30 to 60 days
35. Johne's infections occur in which specific area of the small intestine?
- Ileum
  - Duodenum
  - Cecum
  - Rectum
36. A rolling herd average is based on how many months?
- 10 months
  - 12 months
  - 24 months
  - 36 months
37. How many ounces is one serving of milk?
- 4 ounces
  - 6 ounces
  - 8 ounces
  - 12 ounces
38. Name the hereditary units that are passed on to offspring via sperm and egg which influence the expression of specific traits, like hair and eye color?
- Genes
  - Markers
  - Phenotype
  - Genomics
39. How many pounds of grain per day should a calf consume before weaning?
- 0.5 to 0.75 pounds per day
  - 5 pounds per day
  - 1 pound per day
  - 1.2 to 1.8 pounds per day

40. Before entering an upright silo, it is important to visually assess the silo for the presence of this color silo gas.
- Green
  - Blue
  - Pink
  - Yellow or Gray/Black
41. What percentage of your total mixed ration should have a particle sizes of at least one inch?
- 5 %
  - 15 %
  - 20 %
  - 50 %
42. Vitamin A, D, E, and K are example of what kind of vitamin?
- Buffers
  - Amino Acids
  - Water Soluble
  - Fat Soluble
43. What is the term for the milking system part which is an automatic valve that allows air to enter or exit the shell alternately?
- Agitator
  - Pulsator
  - Teat Cup
  - Regulator
44. Why should a teat dip be used after milking?
- To reduce or prevent udder infections
  - To reduce the incidence of antibiotics
  - To keep the teats from becoming chapped
  - To standardize the milking procedures on all farms
45. What is the use of technologies to measure physiological, behavioral and production indicators on individual animals to make production decisions?
- Precise Dairy Farming
  - Technology Dairying
  - Precision Dairy Farming
  - Productive Dairy Farming
46. 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?
- Magnesium
  - Sulfur
  - Cobalt
  - Cooper

47. How many pounds of dry matter must a Holstein cow eat a day to meet its maintenance requirements?
- 5 pounds
  - 10 pounds
  - 20 pounds
  - 100 pounds
48. Where in the body do secretions from the pancreas, liver and intestine enter?
- Small Intestine
  - Cecum
  - Large Intestine
  - Reticulum
49. What metabolic disorder occurs when dry matter intake and body condition loss can't meet the energy demand for milk production and the cow will have low blood glucose, high ketone and free fatty acid levels?
- Milk Fever
  - Mastitis
  - Ketosis
  - Hypomagnesaemia
50. Many foreign countries will not accept GMO agriculture products such as corn and soybeans. What do the initials GMO represent?
- Growth Modification Organization
  - Global Magnified Organism
  - Geometric Modification Organism
  - Genetically Modified Organism