Name: _____ FFA Chapter: _____

Instructions: This exam consists of 60 multiple-choice questions. Each question is worth two points. Choose the single best answer to each question and mark your answer on the back of your Scantron form in the "Written Exam" sections. Time limit is 40 minutes.

Milk Production		6.	The most common reason that farmers adopt
1.	What device stirs milk in the bulk tank to help with cooling and to provide a uniform product		grazing is cost reduction. The main costs cited for reduction are feed and (A) Insurance
	mixture for sampling?		(B) Labor
	(A) Agitator		(C) Taxes
	(B) Air injector		(D) Veterinary
	(C) Pulsator		(E) None of the above
	(D) Trocar (E) None of the above	7.	What term describes management practices that
2	How many gallons of water does an average dairy		protect the herd from the entry of new diseases and minimize the spread and/or adverse effects of diseases in the herd?
2.	cow consume each day?		
	(A) 5 to 10		(A) Biosecurity
	(B) 15 to 20		(B) Quarantine
	(C) 30 to 50		(C) Vaccinations
	(D) 60 to 70		(D) Zoonoses
	(E) 80 to 90		(E) None of the above
3.	What is the key requirement for adequate, effective cleaning of milking systems?	8.	are chemical agents given to animals that kill or stop growth of bacteria.
	(A) Concentration of cleaning agents		(A) Antibiotics
	(B) Contact time		(B) Antibodies
	(C) Water temperature		(C) Probiotics
	(D) All of the above		(D) Vaccines
	(E) None of the above		(E) All of the above
4.	Which of the following is a requirement of organic milk production?	9.	Providing shade, air movement, and access to water are methods used to alleviate what problem
	(A) No hormones to promote growth		with dairy cattle?
	(B) No antibiotics		(A) Drought
	(C) No mammalian or poultry by-products in feed		(B) Heat stress
	(D) 100 percent organic feed		(C) Milk fever
	(E) All of the above		(D) Pneumonia
5.	Where is milk stone found on a dairy farm?		(E) Stray voltage
	(A) Calf pens		
	(B) Concrete surfaces		
	(C) Feed trough		
	(D) Milk handling equipment		

(E) Water trough

10. Which of the following is not a recommended milking procedure?	15. Bulk tanks used to cool and store milk on farms are usually made of what?
(A) Attach the milking unit within one minute of the	(A) Copper
start of stimulation.	(B) Iron
(B) Check foremilk and udder for mastitis.	(C) Plastic
(C) Provide a clean, low stress environment for cows.	(D) Stainless steel
(D) Provide grain during milking to stimulate milk letdown.	(E) Styrofoam
(E) Shut off vacuum before removing the milking unit.	16. What is the legal limit for somatic cell counts in raw milk in the United States?
11. Peak milk production usually occurs peak	(A) 100,000 cells/ml
feed intake.	(B) 250,000 cells/ml
(A) At the same time as	(C) 400,000 cells/ml
(B) 2 to 3 weeks before	(D) 750,000 cells/ml
(C) 2 to 3 weeks after	(E) 1,000,000 cells/ml
(D) 2 to 3 months before	17. How often should a bulk tank be washed and
(E) 2 to 3 months after	sanitized?
12. Which of the following solutions is not used as a	(A) After each milking
pre-dip?	(B) Every time it is emptied
(A) Bronopol	(C) Once a day
(B) Chlorine	(D) Once a week
(C) Formaldehyde	(E) When the milk temperature drops below 40°F
(D) Hydrogen peroxide	18. Heifers account for what percent of total farm
(E) lodine	expenses on the average dairy farm?
13. When grouping the milking herd, which of the following factors may be considered?	(A) 2-3%
(A) Body condition	(B) 5-10%
(B) Lactation number	(C) 15-20%
(C) Production level	(D) 25-30%
(D) Reproductive status	(E) 55-60%
(E) All of the above	19. What is milk called that is secreted during the
14. What state ranks first for number of organic dairy	first two to three days after calving?
cows?	(A) Colostrum
(A) California	(B) Foremilk
(B) Minnesota	(C) Raw milk
(C) New York	(D) Residual milk
(D) Oregon	(E) Waste milk
(E) Vermont	
(I

20.	Cows calving in which three months have the highest 305-day milk production?	25.	What is the number one reason for culling in U.S. dairy herds?
	(A) January, February, March		(A) Feet and leg problems
	(B) April, May, June		(B) Mastitis
	(C) June, July, August		(C) Poor disposition
	(D) September, October, November		(D) Reproductive failure
	(E) November, December, January		(E) Udder problems
21.	Proteins derived from ruminant sources may not be used in ruminant rations because of concerns	26.	Which of the following is an example of precision dairy farming?
	about what disease?		(A) Daily milk yield monitoring
	(A) Blackleg		(B) Pedometers
	(B) Foot and mouth disease		(C) Accelerometers
	(C) Ketosis		(D) All of the above
	(D) Listeriosis		(E) None of the above
	(E) Mad cow disease	27.	What is the recommended temperature of water
22.	What state ranked first for milk production per cow in 2014?		for washing the bulk tank, lines, and other equipment?
	(A) California		(A) 100°F
	(B) Idaho		(B) 145°F
	(C) New Mexico		(C) 160°F
	(D) New York		(D) 180°F
	(E) Wisconsin		(E) 212°F
23.	Cows milked three times a day will normally	28.	How may farmers store excess colostrum?
	produce percent more milk than cows milked twice a day.		(A) Add a preservative acid
	(A) 1 to 2		(B) Ferment it
	(B) 3 to 5		(C) Freeze it
	(C) 8 to 15		(D) Refrigerate it
	(D) 20 to 25		(E) All of the above
	(E) 30 to 33	29.	Which of the following is not a type of milking
24	What is the most costly disease in dairy cattle?		parlor?
2 7.	(A) Ketosis		(A) Counterslope
	(B) Mad cow disease		(B) Herringbone
	(C) Mastitis		(C) Parabone
	(D) Milk fever		(D) Parallel
	(E) Pneumonia		(E) Rotary

30. When is the most effective time to treat mastitis	35. What is often added to fat free milk to whiten
infections?	milk?
(A) At calving	(A) Calcium
(B) At drying off	(B) Limestone
(C) At first clinical symptoms	(C) Phosphorus
(D) At peak milk production	(D) Titanium dioxide
(E) When the somatic cell count peaks	(E) Vitamin A
Milk Marketing	36. What vitamin is added to milk at the time of processing to prevent rickets?
	(A) Vitamin A
31. What milk process assures that milk and dairy	(B) Vitamin B ₃
products will be uniform in protein and fat content?	(C) Vitamin C
	(D) Vitamin D
(A) Clarification	(E) Vitamin E
(B) Fortification	37. What off-flavor occurs when there are large
(C) Separation	numbers of bacteria present in milk?
(D) Standardization	(A) Acid
(E) None of the above	(B) Fermented
32. Casein is the primary found in milk.	(C) Rancid
(A) Carbohydrate	(D) Salty
(B) Fat	(E) Sour
(C) Macromineral	38. How much does a gallon of milk weigh?
(D) Protein	(A) 2.25 pounds
(E) Vitamin	(B) 8.6 pounds
33. How many pounds of milk does it take to make	(C) 10 pounds
one pound of authentic Greek yogurt?	(D) 12 pounds
(A) 1	(E) 21.2 pounds
(B) 2	39. What U.S. fast food chain uses the most milk?
(C) 3	(A) Dairy Queen
(D) 4	(B) Hardees
(E) 5	(C) McDonald's
34. Hard manufactured cheese belongs to which milk	(D) Sonic
class?	(E) Subway
(A) I	40. Which is a component of dried whey?
	(A) Lactose
	(B) Minerals
	(C) Protein
(E) V	(D) All of the above
	(E) None of the above

41. A cryoscope is used to detect the freezing point of milk to determine if has been added.	46. Federal standards require ice cream to contain a minimum of what percent fat?
(A) A chemical	(A) 5
(B) An antibiotic	(B) 10
(C) Bacteria	(C) 12
(D) Protein	(D) 16
(E) Water	(E) 18
42. How many calories are found in a cup of lowfat milk?	47. What U.S. official is responsible for regulating Federal Milk Marketing Orders?
(A) 60	(A) Chair of the U.S. House Committee on Agriculture
(B) 80	(B) Chair of the U.S. Senate Committee on
(C) 100	Agriculture, Nutrition, and Forestry
(D) 120	(C) Head of the Food and Drug Administration
(E) 150	(D) Secretary of Commerce
43 is the milk sugar that gives milk its sweet	(E) U.S. Secretary of Agriculture
flavor.	48. What was Dr. Harvey Thatcher's contribution to the dairy industry?
(A) Fructose	(A) He created a vaccine for Johne's disease.
(B) Galactose	(B) He created the 'Got Milk?' campaign.
(C) Glucose	(C) He imported the first Jersey cattle into the United
(D) Lactose	States.
(E) Sucrose 44. What document sets the standards for Grade A	(D) He invented the milk bottle.
milk?	(E) He was the first editor of Hoard's Dairyman magazine.
(A) FDA Milk Guidelines (B) Grade A Milk Standards	49. What is the top dairy company in the world based on dairy sales?
(C) National Conference on Interstate Milk Shipments	(A) Danone
(D) Pasteurized Milk Ordinance	(B) Dean Foods
(E) None of the above	(C) Kraft
45. Pigmented milk cartons are used to prevent what off-flavor in milk?	(D) Nestlé of Switzerland
(A) Bitter	(E) Wal-Mart
(A) Biller (B) Fruity	50. The top 50 milk producing cooperatives
(C) Oxidized	accounted for what percent of the milk produced in the United States in 2014?
(D) Rancid	(A) 50
(E) Sour	(B) 60
(_,	(C) 70
	(D) 80
	(E) 90

51. Cow's milk consists of what percent wa	
(A) 78	(CWT) is operated within the structure of what organization?
(B) 82	(A) American Dairy Association
(C) 87	(B) American Dairy Science Association
(D) 92	(C) Dairy Management, Inc.
(E) 95	(D) National Milk Producers Federation
52. What cooperative ranked first in the U.S on member milk volume in 2014?	(E) United States Department of Agriculture
(A) California Dairies, Inc.	57. Participating dairy farmers fund the Cooperatives
(B) Dairy Farmers of America	Working Together (CWT) program. How many cents per hundredweight of milk sold are
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Association	(B) 4
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53. What test is used to determine if raw m mixed with pasteurized milk?	(D) 10
(A) Acid degree value	(E) 15
(B) Leukocyte count	58. The batch method of pasteurization heats milk to what temperature for a minimum of 30 minutes?
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55. National Ice Cream Month is observed	during (D) Morrill Act
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(A) April	60. How many Federal Milk Marketing Orders
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FFA Chapter: _____

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(D) Standardization	(A) Acid
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(D) 4	(A) Dairy Queen
(E) 5	(B) Hardees
34. Hard manufactured cheese belongs to which milk	(C) McDonald's
class?	(D) Sonic
(A) I	(E) Subway
(B) II	40. Which is a component of dried whey?
(C) III	(A) Lactose
(D) IV	(B) Minerals
(E) V	(C) Protein
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(D) Rancid	(A) 50 (B) 60
(E) Sour	(B) 60 (C) 70
	(C) 70 (D) 80
	(D) 80 (E) 90
	(E) 90

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(A) 78	organization?
(B) 82	(A) American Dairy Association
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United States?	(E) 181°F
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