

2018 Senior Dairy
Bowl Contest
Rounds 1-10

Round 1 Senior Questions

INDIVIDUAL

1a. What locomotion score would a cow receive that stands and walks with an arched back and short stride with slightly sinking of the dewclaws?

3

2a. Studies have shown significant reductions of sole ulcers, heel erosion, heel warts, claw lesions, and sand cracks when what B-complex vitamin is supplemented?

Biotin

3a. Which region of the United States has the largest average herd size?

West

4a. Which vitamin is essential for normal calcium/phosphorus metabolism?

Vitamin D

1b. Name the new milk promotion campaign sponsored by MilkPEP that was recently changed from “got milk” to what?

Milk Processor Education Program

2b. What is the name of the fetal component of the placental attachment?

Cotyledons

3b. What is the major rumen VFA used for fat synthesis by the udder?

Acetate

4b. One horn fly can leave how many bites on an animal?

20 to 30 bites

1c. In herd health, what disease do the initials BLV stand for?

Bovine Leukosis Virus

2c. What is the material inside a cell excluding the nucleus called?

Cytoplasm

3c. Sunlight, wide swaths, and cutting height are factors that affect what in forages?

Drying Time

4c. True or False: Whey can be found in Cadbury Eggs and Oreos.

True

TOSS UP

1. Subclinical hypocalcemia usually occurs how many hours after calving?

24 to 72 hours

2. Nearly half of Canada's dairy farms are located in which province?

Quebec

3. First-lactation heifers should produce what percentage of a mature cow's peak milk?

80-85 percent

4. What is the structure that holds the uterus and ovaries in their proper position?

Broad ligament

5. What is the measure of the percent of phenotypic differences between animals for a single trait that can be transmitted to offspring?

Heritability

6. Regarding a genetic variation in DNA, what does the acronym SNP (pronounced "snip") stand for?

Single nucleotide polymorphism

7. What type of automated milking facility allows for cows to access feeding and resting areas with no restriction?

Free Flow traffic

8. Below what rumen pH does subclinical acidosis occur?

5.8

9. What is the process by which white blood cells engulf micro-organisms?

Phagocytosis

10. A first-lactation heifer's post calving body weight should be around what percent of a cow's mature body weight?

80-85 percent

11. What term is used to describe a period of increased growth rate that follows a growth restriction imposed earlier in the heifer's life?

Compensatory growth

12. What structure connects muscle to bone?

Tendon

13. In reference to Holstein pedigrees, what do the initials GMD stand for?

Gold Medal Dam

14. What is the branch of biology that deals with the process, activities, and phenomena of life and living organisms?

Physiology

15. Pododermatitis is more commonly known as what?

Foot Rot

16. How many calories is in one cup of fat free milk?

80 calories

Round 2 Senior Questions

INDIVIDUAL

1a. According to research conducted by Iowa State University, the most notable difference in costs between high-profit and low-profit organic herds was what dairy expense?

Labor

2a. What disease is characterized by severe gastrointestinal inflammations and poor blood perfusion as the cow bleeds into her GI tract?

Hemorrhagic Bowel Syndrome

3a. What is the name of the product that Tractor Supply added this past year to their stores nationwide from a Connecticut farm that utilizes composted manure?

Cowpots

4a. Dextrose, steroids, and propylene glycol are common treatments for what metabolic disorder?

Ketosis

1b. What type of ovarian cyst is associated with anestrus?

Luteal

2b. On a feed ration report you see that the zinc concentration is 40 ppm. What does ppm mean?

Parts per Million

3b. In what city and state is the National Dairy Shrine located?

Fort Atkinson, Wisconsin

4b. The loss of water from the soil surface as well as water used by the plant during transpiration is known as what?

Evapotranspiration

1c. Define Voluntary Waiting Period.

The time period after calving when you choose not to breed a cow.

2c. Which breed of dairy cattle is affected by the condition known as Spiderleg?

Brown Swiss

3c. Which month has been designated as Cheese Month?

October

4c. Which breed of dairy cattle has the least amount of calving difficulty?

Jersey

TOSS UP

1. Trichomonas causes infertility, abortions, and pyometria in dairy cows. How is Trichomonas spread?

Semen

2. Other than hypocalcemia, what is the more scientific name for milk fever?

Parturient Paresis

3. Which volatile fatty acid is associated with stimulation of rumen development in the young calf?

Butyrate

4. Holstein Association members using the haplotype information on the family tree allows users to view up to how many generations of lineage for an animal?

Five generations

5. The NOP regulates the standards for any farm, wild crop harvesting, or handling operation that wants to sell an agricultural product as organically produced. What does NOP stand for?

National Organic Program

6. In what year was the *Journal of Dairy Science* first published?

1917

7. What term refers to the measurement of energy corrected milk divided by dry matter intake?

Feed Efficiency

8. What state ranks lowest for total milk production?

Alaska

9. To alleviate heat stress, it is recommended that fans are turned on in freestall barns starting at what temperature?

65 Degrees F

10. Who is the current president and CEO of the National Milk Producers Federation?

Jim Mulhern

11. How many classes are featured each year in the Hoards Dairyman Judging Contest?

Five

12. Digestible energy, minus the energy lost in urine and gas, is defined as what?

Metabolizable Energy

13. Genex CRI is a familiar bull stud service. What do the initials CRI represent?

Cooperative Resources International

14. What term refers to the formation of a callous on the teat end as a result of slowing blood flow in cold weather?

Hyperkeratosis

15. On a Holstein pedigree, what do the initials TPI stand for?

Total Production Index

16. In what year was the Capper-Volstead act passed by Congress, which empowered farmers and agricultural producers to market, price, and sell their products through cooperative means?

1922

Round 3 Senior Questions

INDIVIDUALS

1a. In reference to feed analysis, what do the initials NPN stand for?

Non-protein Nitrogen

2a. What percent of Americans suffer from food insecurity?

14 to 16%

3a. According to Australia scientists, what dairy product may be the answer for eliminating peanut allergies in affected children?

Yogurt

4a. What class of milk does yogurt belong to?

Class II

1b. When the Food and Drug Administration released its antibiotic milk residue study the total rate of violation was 0.7%. What did all of the drug residues in violation have in common?

Not approved for use in lactating dairy cattle

2b. In regards to stall design what is a cow's imprint length?

The space a cow occupies when she is lying down – space from knee to tail

3b. A rolling herd average is calculated based on how many months?

12 months

4b. According to the Dairy Calf & Heifer Association a 90-pound calf should receive how many quarts of colostrum in the first one hour of life?

4 quarts

1c. What position does Ellie Ainslie hold on the Junior Executive Committee?

Showmanship and Judging

2c. Who is Executive Manager for New York Holstein Association?

Kelly Reynolds

3c. Who is the education chairperson of the Junior Executive Committee?

Taylor Currie

4c. What position does Rachel Rouland hold on the Junior Executive Committee?

Promotion

TOSS UP

1. In relation to dairy legislation, what does the acronym PMO stand for?

Pasteurized Milk Ordinance

2. What term describes the lack of estrus or estrous cycle in a non-pregnant cow?

Anestrus

3. Heel warts, or digital dermatitis, is an infectious hoof disease caused by what bacteria?

Spirochete

4. What toxin does wilted cherry tree leaves and frosted sedan grasses have in common?

Cyanide

5. What is the name of the contractile tissue that forces milk out of the alveoli upon action of oxytocin?

Myoepithelial

6. The more scientific term for scours is what?

Enteritis

7. If refrigerated properly, pasteurized, and homogenized milk remains fresh for how many days after the expiration date?

7 to 10 days

8. CLA is an 18-carbon fatty acid present in milk, particularly from cows grazing pasture, which has been found to have cancer prevention effects. What does CLA stand for?

Conjugated Linoleic Acid

9. What breed was named Supreme Champion of the 2017 Hoard's Cow Judging Contest?

Holstein

10. Cows see limited colors and do not like clashing colors, this is because cows are said to have what type of vision?

Dichromatic vision

11. The lining of the rumen is covered with finger-like projections that serve to increase the surface area for absorption of nutrients. What is the name of these finger-like projections?

Papillae

12. Gypsum has gained popularity over the past few years in row crop operations. Gypsum is a mineral source of sulfur and what other element?

Calcium

13. In cows, salmonella infections are most common in those that have calved within how many days?

10 Days

14. Name the president of Holstein Association USA.

Boyd Schaufelberger

15. Researchers have found that injecting cattle with what Vitamin A precursor can reduce the chance of those cows having retained placentas?

Beta-Carotene

16. Which gland of the cow is responsible for mobilizing calcium from the bones?
Parathyroid Gland
-

Round 4 Senior Questions

INDIVIDUAL

- 1a. What is the name of the International Bull Evaluation Service based in Uppsala, Sweden?

Interbull

- 2a. In what portion of the cow's digestive tract are fats absorbed?

Small Intestine

- 3a. The most common walk-through treatment for foot rot is what?

A 5% solution of copper sulfate

- 4a. What is the most effective management tool to control flies on a dairy farm?

Sanitation

- 1b. The dairy industry has reduced milk's carbon footprint by what percentage since World War II?

63%

- 2b. What do you call the price for milk of average composition and is a weighted average for the market. It accounts for all payments received for milk including performance bonuses and premiums.

Mailbox milk price

- 3b. What test is used to determine if raw milk has been added to pasteurized milk?

Phosphatase test

- 4b. HACCP is a system of quality control that identifies where mistakes often occur. What does HACCP stand for?

Hazard Analysis of Critical Control Points

- 1c. What are the names of the two phases of udder development in dairy heifers?

Isometric and allometric

2c. The recommended daylight length for lactating dairy cows are 16 hours of daylight and 8 hours darkness. What is the recommended daylight length for dry cows?

8 hours of light, 16 hours of darkness

3c. Bt corn hybrids were genetically engineered through a process called transgenics to provide a resistance to what pest?

European corn borer

4c. How many straws of semen can be thawed using one pint of water without compromising semen quality?

4 to 5 straws

TOSS UP

1. The ability of a cow to cure itself of an udder infection without the aid of antibiotics or other drugs is referred to as what?

Spontaneous Recovery

2. What substance in drought stressed forages may cause some cows to abort?

Nitrates

3. According to USDA's Dairy 2014 report, what feeding tool was the most common mode to deliver colostrum?

Bottle

4. What forage source is the most susceptible to prussic acid poisoning when fed to dairy cows?

Sorghum

5. What recycled bedding option comes specifically from drywall from manufacturer defects and construction waste?

Gypsum

6. Producers should begin breeding dairy heifers at what percent mature body weight?

55 to 60 percent

7. What toxin is a common problem usually associated with feeding large amounts of cottonseed?

Gossypol

8. What do we call it when farmers are given data that allows for a better understanding about how their operation uses electricity by providing them with information on types of fuels used, costs, and offers them more opportunities to create efficiency and find savings?

Energy Audit

9. What is the common name for Nitrogen Dioxide found in recently filled silos?

Brown Gas

10. When referring to lactation and milking management, the acronym BTMC stands for what?

Bulk Tank Milk Culture

11. Acid degree value detects what regarding milk quality?

Rancidity

12. In what state are the headquarters of the Milk and Dairy Beef Quality Assurance Center located?

Iowa

13. Which B-Vitamin is often recommended as a feed additive to minimize the occurrence of fatty liver and Ketosis in fresh cows?

Niacin

14. Nonstructural carbohydrates are highly digestible carbohydrate fractions of feed. The three main nonstructural carbohydrates are starch, sugar, and what else?

Pectin

15. Canada's animal welfare program is called what?

Pro-action

16. What does the acronym AFACT stand for?

American Farmers for the Advancement and Conservation of Technology

Round 5 Senior Questions

INDIVIDUALS

1a. What is the name of the gelatin-like structure surrounding the embryo that is composed of proteins?

Zona Pellucida

2a. Who is the current Secretary of Agriculture?

Sonny Perdue

3a. What is the primary acid formed during the fermentation of milk for making of cheese?

Lactic acid

4a. Visible mold on silage is a good indication that what is present?

Mycotoxins

1b. In what year was the North American Intercollegiate Dairy Challenge established?

2002

2b. What is another name for a class of chemicals used to kill internal parasites?

Anthelmintics

3b. Dairy cattle are most comfortable when the environmental temperature is within a certain range. What is this temperature range called?

Thermal- neutral zone

4b. What does the letters NYCAMH stand for?

New York Center for Agricultural Medicine and Health

1c. Which enzyme, produced in the abomasum of baby calves, causes milk to curdle?

Rennin

2c. True or False: The digestibility of a plant fiber decreases in cold weather.

False

3c. Straw is primarily used in dry cow rations in order to regulate what?

Energy intake

4c. What is the enzyme that reacts with fats in milk, releasing fatty acids that cause a rancid off flavor in milk?

Lipase

TOSS UP

1. What cow earned her place as the best cow to ever walk across the colored shavings by capturing an unprecedented fourth Supreme Champion Title for R.P. Heffering in 1987?

Brookview Tony Charity

2. What term refers to forage harvested on the field and fed directly to livestock?

Green Chop

3. Who is the owner and breeder of the New York People's Choice Cow for 2017?

Liddleholm (Liddle)

4. In a herd milked 3x, no cows should have lag time, from the time the cow is stimulated to milker attachment, of less than how many seconds?

90 seconds

5. Who was the Supreme Grand Champion at the New York State Fair in 2017?

Cedar Cut Burdette Clove Colata

6. What is the recommended temperature to thaw semen?

95 – 98 degrees F

7. When maintaining a successful pregnancy which amino acid is of particular interest in the early fetus stage because of its role in lipid metabolism and gene expression?

Methionine

8. Immunoglobulins, or antibodies, cannot pass through what organ to reach the unborn calf?

Placenta

9. What is the most expensive threat to U.S. crop farmers? The larvae grow on the roots of cornstalks, stunting plant growth and costing over \$1 billion per year.

Corn rootworm

10. Which disease occurring in dairy cattle causes undulant fever in humans?

Brucellosis

11. What hormone secreted by the uterus inhibits FSH release?

Inhibin

12. The top screen of the Penn State Particle Separator retains particles larger than what size?

19 millimeters

13. What country has prohibited the slaughter of non-productive cows?

India

14. Wash water used to clean bulk tanks should be above this temperature in order to limit the growth of bacteria identified by preliminary incubation tests?

155-170 degrees F and drain above 120 degrees F

15. What cultural group in the United States accounted for \$6 billion in dairy sales in 2016?

Hispanic

16. Name the past milk production record holder for a single lactation that recently died in a fire in the spring of 2017.

Burwall Buckeye Gigi

Round 6 Senior Questions

INDIVIDUAL

1a. What category of vitamins are synthesized in the Rumen of a cow?

B Vitamins

2a. What is the term given to the measure of a farm's available assets which can be readily converted to cash?

Liquidity

3a. Which region of the world imports the most cheese from the United States?

Asia

4a. OSHA is now requiring that they be notified within how many hours of work related fatalities and hospitalizations?

8 hours

1b. What test is conducted by injecting a small amount of an antibody into the caudal fold of the tail?

Tuberculosis

2b. What is the only part of the milking system that touches the cow?

Teat cup liner (inflation)

3b. What western New York individual was in the Penn State Team that won the 4 year collegiate Dairy Judging Contest at the World Dairy Expo?

Abigail Jantzy

4b. According to National Animal Health Monitoring System Data, what do most farmers cite as the most common criteria for weaning a calf?

Age

1c. According to the Dietary Guidelines for Americans 2015-2020, what percentage of the population is not getting the recommended three servings of dairy daily?

90 percent

2c. What campaign recently announced a five-year partnership with the United States Olympic Committee to sponsor the U.S. teams in Rio in 2016, PyeongChang in 2018 and Tokyo in 2020?

Milk Life Campaign

3c. What is the process of removing solid impurities from milk prior to pasteurization?

Clarification

4c. Which state produced the most alfalfa in the U.S. in 2016 at 7.4 million tons on 1.9 million acres?

Wisconsin

TOSS UP

1. What country is known as the soybean giant and produces the largest volume of milk in South America?

Brazil

2. Dairy farmers nationwide continue to adopt animal welfare standards and practices, and more will soon be required under new policy that is approved by what organization?

National Milk Producers Federation

3. During a difficult calving, a veterinarian may decide to dissect the already dead fetus in utero if there is no chance of passing the calf thru the birth canal. What is the term for this procedure?

Fetotomy

4. What type of units are vitamins measured in?

International Units

5. What is the name given to feedstuff found in the small intestine?

Chyme

6. Regarding herd health, what does the acronym ELISA stand for?

Enzyme Linked Immunosorbent Assay

7. Which volatile fatty acid produced in the rumen does the liver use to make glucose?

Propionate (Propionic Acid)

8. What compound in saliva buffers the rumen?

Bicarbonate

9. What is the scientific term for forcing a cow to consume a nutrient in quantities larger than normal?

Hyperalimentation

10. In the first few months of gestation, if a cow gets infected with BVD, the resulting calf will become a PI animal. In reference to BVD, what do the initials PI stand for?

Persistently Infected

11. What is often added to skim and 1% milk to “whiten” the milk?

Titanium dioxide

12. Fats are the most concentrated energy source in dairy cattle ration and contain how much more energy than starch?

2.25 times

13. The first commercial cheese factory in New York was established in which year?

1851

14. What state made tampering with show cattle illegal?

Ohio

15. What is the oldest known cheese?

Gorgonzola

16. What does the acronym FARAD stand for?

Food Animal Residue Avoidance and Depletion

Round 7 Senior Questions

INDIVIDUAL

1a. NIR and wet chemistry are two types of what relating to nutrition?

Forage tests

2a. Economic analysis shows that calving intervals extended beyond how many months result in reduced animal revenue per cow?

13 months

3a. What season is most likely to promote conditions favorable to bacteria growth in cows' bedding?

Summer

4a. What are the names of the two phases of udder development in dairy heifers?

Isometric and allometric

1b. The dairy industry has reduced milk's carbon footprint by what percentage since World War II?

63%

2b. What do you call the price for milk of average composition and is a weighted average for the market. It accounts for all payments received for milk including performance bonuses and premiums.

Mailbox milk price

3b. It is recommended that calves should wear jackets when the temperature drops below what temperature?

40 degrees F

4b. A deficiency of Hemoglobin, iron, or red blood cells that prevents adequate transport of oxygen by blood to tissues is known as what?

Anemia

1c. The blister-like structure on the ovary that contains the egg before ovulation is called what?

Follicle

2c. Any employer in the U.S. with more than how many full-time equivalent employees must offer affordable health insurance to employees and their dependents?

50

3c. Naturally ventilated barns are typically situated in what direction for optimum cooling?

East/West

4c. In 2011, which country became the first billion-dollar dairy export market for the US?

Mexico

TOSS UP

1. Dairy consumption growth in the United States is only 0.8 percent, but foreign consumption is growing much more quickly. Which foreign country has grown its dairy consumption the most by 6.1 percent?

China

17. In what country was the first automatic milking system installed?

The Netherlands

18. In a Boston University School of Medicine study, the consumption of what dairy product was correlated with a reduced risk of high blood pressure?

Yogurt

19. Which yogurt manufacturer pledged to no longer accept milk from cows fed grains from genetically modified organisms (GMOs) with a goal of full implementation by 2018?

Dannon

20. What is the scientific term for forcing a cow to consume a nutrient in quantities larger than normal?

Hyperalimentation

21. What part of the corn kernel is broken apart during kernel processing for corn silage?

Pericarp

22. According to National Animal Health Monitoring System Data, what do most farmers cite as the most common criteria for weaning a calf?

Age

23. The cow's kidneys and liver convert excess ammonia in the body to what product that is later excreted in urine?

Urea

24. Shipping fever is a respiratory disease that cattle often develop after being transported by truck and rail, what is the technical term for shipping fever?

Pneumonic pasteurellosis

25. Name the index used for grass and legume forages calculated from the neutral detergent fiber (NDF) and acid detergent fiber (ADF) content of feed.

Relative Feed Value

26. In regards to genetics, what do the letters SNP stand for?

Single Nucleotide Polymorphism

27. What is the desired soil pH for growing alfalfa?

6.8-7.2

28. What country is known as the soybean giant and produces the largest volume of milk in South America?

Brazil

29. In what country does bovine Tuberculosis, or TB, remain a major threat to animal and human health, and presents an obstacle to international trade?

Ethiopia

30. How many regions are there in the Federal Milk Marketing Order structure?

10

31. Who is the current NYS Commissioner of Agriculture?

Richard Ball

Round 8 Senior Questions

INDIVIDUAL

1a. Feeding changes should be made gradually to allow the growth of what structure in the digestive system?

Rumen Papillae

2a. Which company is the largest dairy producer in the United States?

Nestle

3a. On a DHIA record, what does the term 'days to first service' refer to?

The number of days from calving until the first breeding date

4a. Mycoplasma differs from other bacteria because it lacks what cellular structure?

Cell Wall

1b. In what country did the term freemartin originate?

England

2b. What fast-food chain is the most visited restaurant in the United States?

McDonalds

3b. What are the two primary sources of exposure to environmental pathogens that cause mastitis in cows?

Moisture and manure

4b. What is the horn-producing tissue of the claw of the cow?

Corium

1c. What is paneer?

Pressed ricotta

2c. Which organ is critical for nutrient regulation and glucose production?

Liver

3c. The teat cistern has a capacity of how many milliliters?

15-40 mL

4c. How much of the cow's teat should be covered when pre-dipping?

The entire teat

TOSS UP

1. What term refers to a cow's daily fluctuation in body temperature?

Diurnal pattern

2. During a difficult calving, a veterinarian may decide to dissect the already dead fetus in utero if there is no chance of passing the calf thru the birth canal. What is the term for this procedure?

Fetotomy

3. Whether from natural mating or from artificial insemination, approximately how long do sperm live in the cow's reproductive tract?

24 hours

4. What type of units are vitamins measured in?

International Units

5. What type of milk was identified in a Korean study as containing 24 percent more tryptophan and 10 times as much melatonin as regular milk?

Milk produced at night

6. What is the common name for the disease clostridial myositis that infects muscle tissue causing it to appear very dark in color during postmortem evaluation?

Blackleg

7. What state's air resources board has pushed new, more intense regulations on its dairy industry to reduce dairy's methane footprint by an additional 40 percent?

California

8. Calcium glutamate is an intravenous injection for immediate and temporary treatment of which dairy cattle disease?

Milk Fever

9. According to COOL, cheese carrying the name Feta can only come from Greece. What do the letters COOL stand for?

Country of Origin Labeling

10. What trace mineral is needed for thyroid hormone synthesis and if it is deficient causes goiters?

Iodine

11. What does the genetic code BY indicate?

Tested as Carrier of Brachyspina

12. The milk ring test is used to identify which disease?

Brucellosis

13. What is the third most common cause of death in young calves?

Septicemia

14. One serving of yogurt is how many ounces?

Six

15. What animal is the current record holder in lifetime milk production?

Gillette E Smurf

16. On average, one robotic milker can handle how many cows?

60 to 70

Round 9 Senior Questions

INDIVIDUAL

1a. In the area of herd management, what do the letters CIDR represent?

Controlled Internal Drug Release

2a. Regarding herd health, what does the acronym ELISA stand for?

Enzyme Linked Immunosorbent Assay

3a. Which organization is represented by the letters CDCB?

Council on Dairy Cattle Breeding

4a. In relation to dairy legislation, what does the acronym PMO represent?

Pasteurized Milk Ordinance

1b. What is the instrument used to puncture the rumen in cases of bloat?

A trocar

2b. In the female reproductive tract, it can take sperm up to 6 hours to develop the ability to fertilize the ovum. What is the technical term for this change?

Capacitation

3b. How many variations of the betacasein protein do cows produce in their milk?

2

4b. Who recently retired this past year with over 70 years of service to Holstein breeders, being known as the “Dean of Pedigrees”

Horace Backus

1c. Who developed the butterfat test that was the basis for DHIA testing?

S.M. Babcock

2c. Which vitamin is used to prevent an off-flavor in milk?

Vitamin E

3c. What is the name of the official written documentation of a veterinarian's interaction with a given dairy farm?

Veterinarian client patient relationship

4c. How many pounds of whole milk are required to make a pound of butter?

21.2 lbs

TOSS UP

1. What term is used to describe a period of increased growth rate that follows a growth restriction imposed earlier in the heifer's life?

Compensatory growth

2. What segment of agriculture claimed 20 of the top 100 spots on the list of largest agricultural cooperatives?

Dairy

3. What is the base level coverage available to dairy farmers that are signed up for MPP-Dairy?

\$4.00

4. What is the process of determining where genes are located on individual chromosomes?

Gene Mapping

5. What ketone body is most commonly used to diagnose subclinical ketosis?

Blood beta-hydroxybutyric acid (BHBA)

6. The use of ultrasonography to view the ovary while removing oocytes through the vagina using a needle is a process known as what?

Transvaginal Aspiration

7. An inflammation of the uterine lining is also known as what?

Endometritis

8. What hormone is released prior to calving that enables the cervix to soften and stretch in preparation for expelling the calf?

Relaxin

9. Lactobacillus bacteria are beneficial bacteria which are commonly consumed by humans in what common food?

Yogurt

10. What is the name of the nation's largest cooperative of organic farmers?

Organic Valley Cooperative

11. If a cow is getting adequate effective fiber in the diet, she should chew her cud how many times before re-swallowing it?

40 to 65 times

12. What external parasite is associated with grubs or warbles in cattle?

Heel fly

13. The bacteria Moraxella bovis causes what disease in dairy cattle?

Pink eye

14. To be named a Herd of Excellence through Holstein Association USA, the herd must be what percent above breed average ME for milk, fat, and protein?

25 percent

15. The process by which materials are added to enhance the size or weight of the seed is known as what?

Pelleting

16. What are cultured dairy products?

Dairy foods that have been fermented with lactic acid bacteria

Round 10 Senior Questions

INDIVIDUAL

- 1a. What are the two most important ration components in minimizing fresh cows' negative energy balance?

Fiber and Starch

- 2a. In crop management, what does the acronym TLC stand for?

Theoretical Length of Cut

3a. In a male animal where is mature sperm stored?

Epididymis

4a. What component causes the yellow color in milk from certain breeds of dairy cattle?

Beta Carotene

1b. Who is the current president of the National DHIA?

Kent Buttars

2b. What is the most prevalent cause of infectious lameness in dairy cattle worldwide?

Digital Dermatitis

3b. Stand density and what other factor of corn stand are the largest influencers of corn yield?

Uniformity

4b. During summer months farms need to have enough fan capacity to achieve air speed of how many miles per hour to cool the cows?

10 to 12 mph

1c. What does the acronym NADC stand for?

National Animal Disease Center

2c. Name the master gland which controls the estrous cycle?

Pituitary

3c. Which gland produces the milk-let-down hormone?

Hypothalamus

4c. In relation to dairy cattle reproduction, what does the acronym CIDR stand for?

Controlled Internal Drug Release

TOSS UP

1. What is the process that involves treating a cow with the hormone FSH to increase the number of ova produced?

Superovulation

2. What hormone does the calf trigger in response to stress to initiate parturition?

Cortisol

3. Mad Cow Disease is a fatal brain disease of cattle that affects the brain and spinal fluid. What is the scientific name for Mad Cow Disease?

Bovine Spongiform Encephalopathy

4. Which type of mastitis causing bacterial infection typically responds to antibiotic therapy?

Gram-positive

5. What is the term used to describe the product of the interaction of genotype and environment?

Phenotype

6. What percent of American women suffer from osteoporosis?

15%

7. Holsteins make up what percentage of the U.S. dairy herd according to the USDA's Dairy 2014 report?

86%

8. What is the national survey that is taken every five years in order to get a complete count of U.S. farms and the people who operate them?

U.S. Census of Agriculture

9. In what year was the first robotic milker installed in Wisconsin?

2000

10. What is the technical name for Bang's disease?

Brucellosis

11. What is the wave-like contractile motion that propels food and digesta through the digestive tract?

Peristalsis

12. Copper sulfate is recommended for the treatment of what health issue in cattle?

Hoof rot or Heel warts

13. The FDA requires producers to keep extra-label drug use treatment records on all animals for how long?

2 years

14. In regards to nutrition, what do the letters NEFA represent?

Non-Esterified Fatty Acid

15. What is the name of the vicious disease that causes muscle weakness followed by paralysis and can be caused by contamination from a dead animal?

Botulism

16. 4. According to the organic standards, a dairy cow must have access to pasture for a minimum of how many days per year to qualify for organic production?

120 Days
