2011 N.Y State 4-H Novice Dairy Quiz Bowl Invitational

Novice Packet 1, Phase A

1) What is a freemartin?
   Sterile heifer born twin to a bull calf

2) Which stomach compartment is known as the fermentation vat?
   Rumen

3) What does the term lactation mean? (VA sect 4 p 13)
   The period of time when a cow is in milk

4) What is the name of the first milk produced by a cow after she gives birth?
   Colostrum
Novice Packet 1, Phase B

1) What are the four compartments of a dairy cow’s stomach? (VA sect 3 p 7)
   - Rumen
   - Reticulum
   - Omasum
   - Abomasum

2) Give three signs that a cow is in heat.
   - Restlessness, Bellowing, Following and smelling another cow,
   - Mounting other cows, Standing to be mounted, Discharge of clear mucous from the vulva, Vulva becomes red and swollen (VA Sect 5 p 19)

3) Name 3 ways to treat your animal with a dewormer?
   - Boluses or pills, paste, drenches, injectable (4-H Skills for Life, Dairy 2, pg. 15)

4) Name three dairy products made from milk?
   - Butter, Cheese, Yogurt, Ice Cream, low fat milk, favored milks
Novice Packet 1, Phase C

1) Mastitis is an infection of what?
   The udder

2) Which breed discriminates against white hair?
   Brown Swiss

3) When you see a calf coughing or sneezing, what system is probably affected?
   Respiratory system (Cowabunga Dairy 1)

4) Where do heel flies lay their eggs?
   On the lower legs of the cow

5) What is a young female cow that has not yet had a calf called?
   Heifer

6) What compartment of the cow’s stomach is called the true stomach?
   Abomasum

7) What is the general term that refers to all cattle?
   Bovine

8) How are lice spread from one animal to another?
   Direct contact with other animals that have them

9) What is the technical term for calving?
   Parturition

10) In what part of the digestive system do fiber digesting microbes live?
    The Rumen
11) What is the term used that refers to the height of a calf or cow at the withers and hips?
   Stature Skills for life- Dairy 1, pg 35

12) What is the enzyme that breaks down milk sugar called?
   Lactase

13) What is the term that refers to taking a calf off of milk as the main source of nutrition?
   Weaning (VA sect 7 p25)

14) What does ration refer to in regards to dairy cows?
   The daily consumption of food or feed.

15) What does it mean to cull a cow?
   To remove an animal from the herd.

16) What do you call a stall in a barn where the cow is free to come and go?
   A free stall

17) What does pasteurization do?
   It heats milk to a temperature that kills microorganisms that may transfer disease or cause milk to spoil.

18) Who invented the Pasteurization process?
   Louis Pasteur

19) Milk is what percent water?
   87 percent (HD 05)

20) What is a balling gun used for?
   To administer a pill
Novice Packet 2, Phase A

1) How long is the average estrous cycle in the dairy cow?
   21 Days (17-21 days)

2) What disease is caused by low blood calcium and often happens soon after a cow gives birth?
   Milk fever (Virginia Dairy Bowl Guide)

3) What is the normal delivery position when a calf is born?
   Front feet first and then the head

4) Explain what a cud is?
   Feed that the cow has regurgitated and is being chewed again.
Novice Packet 2, Phase B

1) Name 3 products made from Class I milk

   Whole milk, Low-fat milk, Skim milk, flavored milk drinks,
   Buttermilk, Milk shake mixes, Ice milk mixes

2) Name 3 pieces of information about an animal you would find on a registration paper.
   Name
   Sire
   Dam
   Date of Birth
   Owner
   Breeder
   Grand Dam
   Grand Sire
   Sex
   Registration number

3) Name 3 parts of a dairy cow which are associated with the mammary system.
   Teats
   Rear udder
   Fore udder
   Rear udder attachment
   Fore udder attachment
   Milk wells
   Milk veins

4) Name two types of permanent identification.
   Photos
   Sketches
   Tattoos
   Brands
   Microchips (Dairy skills for life)
Novice Packet 2, Phase C

1) Skim milk contains what percentage of fat?
   0% (National Dairy council)

2.) A sale where animals are sold to the highest bidder is called?
   An Auction (Skills for life- Dairy)

3. Flukes, coccidian and tapeworms are all what type of parasite?
   Internal Parasites

4.) What does it mean if a calf is born polled?
   Born without horns

5.) Why wouldn’t you use the same shovel for handling feed and manure?
   To prevent contaminating the feed

6) Churning is a process that turns cream in to what?
   Butter

7.) What is a freemartin?
   A sterile heifer born twin to a bull

8) What mineral is found in the largest quantity in milk?
   Calcium (National Dairy Association)

9) What does AI stand for?
   Artificial Insemination (Dairy Skills for life)

10) What is the cow, calf or heifers personal space called?
    Flight Zone
11) What breed of dairy cattle originated in Switzerland?
   Brown Swiss (VDQBM)

12.) A gallon of milk weighs how many pounds?
   8.6

13.) Class I milk refers to milk that will be sold as?
   Fluid Milk

14) What term describes mating two purebred animals of different breeds?
   Crossbreeding

15) Which type of milk has 2% fat content?
   Reduced fat milk

16) A storage structure that allows feeds to ferment is called what?
   A silo

17) What does Grade mean when referring to a dairy cow?
   A dairy cow not registered with a breed

18.) What is the length of time a cow is pregnant called?
   Gestation (Dairy skills for life)

19) How many quarters are there in a cow’s udder?
   4 (Dairy skills for life)

20) What is a bulk tank used for?
   Holding milk
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Novice Packet 3, Phase A

1) Which of the 4 stomach compartments of a ruminant is nicknamed the paunch?
   Rumen

2) What is an herbivore?
   An animal that only eats vegetables

3) Where on your calf might you find scurs?
   On her head after dehorning

4) Grains usually come from which portion of the plants?
   Seed
Novice Packet 3, Phase B

1) Name 3 heat detector aids used to help identify cows that are difficult to catch in heat?
   Chalk markers, tail paint, Kamar detectors, pedometers, rump mounted Patches, solution monitors.

2) Name 4 external parts of a dairy cow's head.
   Poll, eyes, muzzle, ears, jaw, forehead, nostril

3) Name 3 Italian cheeses.
   Mozzarella, Provolone, Romano, Parmesan, Ricotta

4) List 3 different types of non-permanent cow identifications.
   Neck straps, ear tags, ankle straps, crayons, external electronic devices, brisket tags.
Novice Packet 3, Phase C

1) What does it mean if an animal is polled?
   Naturally hornless, born without growing horns

2) What does lactating mean?
   Giving milk (Dairy skills for life)

3) What is the solid portion of cheese called?
   Curds (UMN, pp.29)

4) What does an animal do with excess energy from its diet?
   It stores it as fat

5) Semen and embryos can be frozen and stored. What is used to do the freezing?
   Liquid Nitrogen

6) What would you use a balling gun for?
   To give your cow a pill or bolus

7) What are the building blocks of proteins?
   Amino acids

8) Where in the body is the major store of calcium?
   Bones

9) What organ of the cow carries the fetus or calf during pregnancy?
   Uterus (Dairy skills for life)

10) What are extra teats called?
    Supernumerary teats
11) What is the material that must be cleaned out of a newborn calf's nose and mouth called?

   Mucous

12) When fortified, a glass of milk provides about 25% of the Daily Value for this vitamin?

   Vitamin D

13) On which side of a pregnant cow does the calf lie?

   The right

14) How do you place a magnet in a cow’s reticulum?

   Orally or through the mouth

15) What does it mean if a feed is palatable?

   The animals like it and will eat it

16) What is a lagoon used for on a dairy operation?

   For manure storage

17) When talking about milk quality, what do the letter’s SCC stand for?

   Somatic Cell Count

18) What is the general term used to describe a calf with very runny manure?

   Scours

19) What is the technical term for a twisted stomach?

   Displaced abomasum

20) When talking about dairy nutrition and feeding our cows, what do the letters TMR stand for?

   Total Mixed Ration
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Novice Packet 4, Phase A

1) What usually happens to a cow’s milk production as somatic cell count increases?
   Production decreases

2) Cows exposed to sunlight will readily make which vitamin on their own?
   Vitamin D

3) What is a fresh cow?
   A cow that has just recently given birth

4) What is the name used to describe two animals of the same parents?
   Siblings
Novice Packet 4, Phase B

1) Salt is composed of which 2 elemental minerals?
   Sodium and chloride

2) Name 3 different plants that are legumes
   Peas, beans, alfalfa, soybeans, red clover, white clover, vetch, peas, bird’s foot trefoil, lespedeza, peanuts (Dairy skills for life)

3) What season is hardest on a cow’s milk production and why?
   Season is Summer
   Why- the heat

4) What are the two (2) types of parasites that can affect an animal?
   External and internal
Novice Packet 4, Phase C

1) A record of the ancestry of an animal is also known by this term?
   Pedigree (Dairy skills for life)

2) What is the name of the process in which the cow relaxes and releases the milk in the udder so it can be milked out?
   Milk letdown (dairy skills for life)

3) Explain what the term Raw milk means?
   Milk that has not been pasteurized or processed

4) What part of the body does mastitis causing bacteria enter the cow?
   The teat canal

5) What season does pink eye most often occur?
   Summer (UMSG)

6) When breeding a heifer, what is the most important factor used in deciding when to breed her?
   Size

7) What is a doctor of animals called?
   A veterinarian

8) What is the tube that connects the mouth to the stomach called?
   Esophagus (Dairy skills for life)

9) How often should your bulk tank be washed and sanitized?
   Every time it is emptied

10) If you are lactose intolerant, what kind of food can’t you eat?
    Dairy products
11) Cows excrete how many pounds of manure for every pound of milk they produce?
   2 pounds

12) What vitamin deficiency causes the disease “Rickets?”
   Vitamin D

13) What hormone is at peak levels at the onset of standing heat?
   Estrogen

14) What system includes curtains and fans in a dairy facility?
   Ventilation

15) If a medicine is to be given to an animal subcutaneously what does this mean?
   Injected under the skin

16) What does the orange triangle sign on the back of a wagon mean?
   Slow Moving Vehicle

17) When talking about farm machinery what does PTO stand for?
   Power Take Off

18) What is a cow’s natural buffer?
   Saliva

19) A condition where excessive fluid collects in the udder is called what?
   Udder Edema

20) The procedure that turns a bull into a steer is called what?
   Castration
Novice Packet 5, Phase A

1) What connects the fetus to the navel and carries nutrients between the mother’s body and the fetus?
   - Umbilical cord (Cowabunga Dairy 1)

2) Homogenization breaks up what in milk?
   - Fat globules

3) On what part of the cow would you find the dewclaws?
   - Foot

4) Lice are most troublesome during what season of the year?
   - Winter
Novice Packet 5, Phase B

1) What is the amount of time that must pass after administering a medication before food products from the animal can be safely used for humans?

    Withdrawal time

2) Name the 6 major breeds of dairy cattle.

    Holstein
    Jersey
    Guernsey
    Brown Swill
    Milking Shorthorn
    Ayrshire

3) What does NYCHAP stand for?

    New York State Cattle Health Assurance Program

4) What does a 3x on a cow’s production record mean?

    She was milked 3 times per 24 hours
Novice Packet 5, Phase C

1) What is the term used to describe the length of pregnancy?
   Gestation

2) What cheese has a light color and is known for having circular holes or air pockets throughout it?
   Swiss cheese

3) What breed of dairy cattle weighs about 1000 pounds at maturity and has a black muzzle and tongue?
   Jersey

4) When cheese is made, what feed by-product is recovered?
   Whey

5) What does NIFA stand for?
   National institute for food and agriculture

6) What is dehydration?
   Lack of water

7) What country did the jersey originate from?
   Isle of Jersey

8) When doing embryo transfer the cow that the embryos come from is called what?
   Donor

9) What is an infection of the udder commonly called?
   Mastitis

10) When is National Dairy month?
    June
11) How many pounds of milk does it take to make one pound of cheese?
   10 pounds

12) What part of the corn plant is corn meal from?
   Corn kernels

13) Why are floors grooved in a free stall?
   To prevent slipping

14) Where would you find the median suspensory ligament on a dairy cow?
   Udder

15) Which mineral in milk may help prevent the incidence of osteoporosis?
   Calcium

16) What is a common calf disease whose symptoms are dehydration and runny manure?
   Scours

17) What is the name of the condition called when the rumen is distended with the gases of fermentation?
   Bloat

18) What is another name for the reticulum?
   Honeycomb

19) Why should you use separate towels to wash the udder?
   To avoid the spread of mastitis between cows

20) What is meant by the term dual purpose breed?
   A animal that can be used for both meat or milk production