

**Dairy Judging Questions
(Updated 5/2005)**

- 1) What does NMPF stand for?
 - a.) Northern Milk Producers Formulation
 - b.) Never marry poor farmers
 - c.) National Milk Producers Federation**
 - d.) National Milk Protein Foundation

- 2) What does NFO stand for?
 - a.) National Feed Organization
 - b.) National Farmers Order
 - c.) National Farmers Organization**
 - d.) National Flea Optimist

- 3) Who is the current U.S. Secretary of Agriculture?
 - a.) Ann Veneman
 - b.) Mike Johanns**
 - c.) Dan Glickman
 - d.) Buddy L. Winny

- 4) What is the BFP?
 - a.) Basic Formula Preparation
 - b.) Basic Formula Price**
 - c.) Barely Feasible Profit
 - d.) Butter Fat Price

- 5) What percentage of whole milk is fat when compared on a dry matter basis?
 - a.) About 10 percent
 - b.) About 50 percent
 - c.) About 25 percent**
 - d.) Exactly 100 percent

- 6) In a study of milk parlors conducted by researchers at the University of Florida, how did parallels perform when compared to herringbones?
 - a.) They were twice as slow
 - b.) Parallels out performed herringbones by nearly 8 percent**
 - c.) They performed the same
 - d.) Herringbones out performed parallels by nearly 8 percent

- 7) What is GATT?
 - a.) General Alien Tariff and Trade
 - b.) General Agricultural Tariffs and Trades
 - c.) General Agreement on Trades and Tariffs
 - d.) General Agreement on Tariffs and Trade**

- 8) What does NFDM stand for?
 - a.) Nonfat Dry Milk**
 - b.) No Fun Dairy Mandate
 - c.) Nonfat Dairy Milk
 - d.) National Forum of Dairy Milklers

- 9) What is the CCC?
 - a.) Caring Cats Corporation
 - b.) Commodity Credit Corporation**
 - c.) Cow Chemistry Center

- d.) Crazy Cow Corporation
- 10) What is the USDEC?
- a.) United States Dairy Export Corporation
 - b.) United States Dairy Export Center
 - c.) United States Dairy Export Company
 - d.) United States Dairy Export Council**
- 11) When using a body condition scoring system of 1 to 5, what does a score of 5 mean?
- a.) Extremely thin
 - b.) Average body condition
 - c.) Extremely fat**
 - d.) Below average body condition
- 12) What is the FAS?
- a.) Finland Agriculture Service
 - b.) Final Agriculture Service
 - c.) Foreign Agricultural Service**
 - d.) Food and Agriculture Society
- 13) What are ways to avoid milk fever in cows?
- a.) Feed low-potassium hay and/or silage to dry cows
 - b.) Adding anionic salts to the dry cow ration
 - c.) Fasting dry cows two weeks before calving
 - d.) Both a and b**
- 14) What should the pH of a close up Holstein's urine be?
- a.) Between 1.0 and 2.0
 - b.) Between 2.0 and 3.0
 - c.) Between 6.0 and 6.5**
 - d.) Between 12.0 and 13.0
- 15) When feeding close-up cows a calcium deficient diet, which gland is stimulated?
- a.) Pituitary
 - b.) Parathyroid gland**
 - c.) Hypothalamus
 - d.) Mammary gland
- 16) What is intravenous injection?
- a.) It is administered in the muscle
 - b.) It is administered under the skin
 - c.) It is the administration of medication to a cow via the blood vessels**
 - d.) It requires the tented method
- 17) What is intra muscular injection?
- a.) It is administered in the muscle**
 - b.) It is administered under the skin
 - c.) It is the administration of medication to a cow via the blood vessels
 - d.) It requires the tented method
- 18) What is subcutaneous injection?
- a.) It is administered in the muscle
 - b.) It is administered under the skin**
 - c.) It is the administration of medication to a cow via the blood vessels
 - d.) It requires the tented method

- 19) Regarding feed formulation, what does CAD stand for?
- a.) Cation-Anion Degree
 - b.) Cation-Anion Difference**
 - c.) Cation-Amonia Difference
 - d.) Carbohydrate- Amino Degradation
- 20) What is a cation?
- a.) A negatively charged ion
 - b.) A uncharged ion
 - c.) A positively charged electron
 - d.) A positively charged ion**
- 21) What is an anion?
- a.) A positively charged ion
 - b.) A uncharged ion
 - c.) A positively charged electron
 - d.) A negatively charged ion**
- 22) What is NAFTA?
- a.) North American Forage Trade Association
 - b.) North American Free Trade Agreement**
 - c.) North American Free Trade Association
 - d.) North African Free Trade Association
- 23) What is the USAHA?
- a.) U S Animal Housing Association
 - b.) U S Animal Health Award
 - c.) U S Agriculture Health Administrator
 - d.) U S Animal Health Association**
- 24) What is the USDA's AIPL?
- a.) Animal Improvement Program Library
 - b.) Animal Import Program Liability
 - c.) Animal Improvement Program Lab**
 - d.) Animal Import Process Language
- 25) How many days into a pregnancy can a fetus be sexed by ultrasound?
- a.) Before 14 days
 - b.) Between 14 and 30 days
 - c.) Between 30 and 55 days
 - d.) Between 55 and 95**
- 26) What is another term for the lowest lateral regions of the abdomen, near the groin?
- a.) Gubernaculum
 - b.) Rumen
 - c.) Abomasum
 - d.) Inguinal**
- 27) How many days after breeding can a pregnancy be detected by ultrasound?
- a.) Between 28 to 30 days**
 - b.) Before 14 days
 - c.) Between 14 and 28 days
 - d.) Between 30 and 55 days

- 28) At how many days can pregnancy be detected by palpation?
- a.) Before 14 days
 - b.) Between 14 and 40 days
 - c.) Between 40 to 50 days**
 - d.) Between 50 and 95 days
- 29) On average, how many weeks after freshening does a cow's dry matter intake peak?
- a.) 1-2 weeks
 - b.) 2-4 weeks
 - c.) 12-14 weeks**
 - d.) 40-42 weeks
- 30) What is the accepted standard length for a lactation record in dairy cattle?
- a.) 200 days
 - b.) 305 days**
 - c.) 365 days
 - d.) 100 days
- 31) What can heart girth measurements of cows be used to estimate?
- a.) Age
 - b.) Milk production
 - c.) Calving date
 - d.) Body weight**
- 32) In regards to pedigrees, what is a RHA?
- a.) Rolling Herd Average
 - b.) Registered Herd Ancestry
 - c.) Registered Holstein Ancestry**
 - d.) Registered Herd Average
- 33) Milk should be below what temperature before it is transferred to a milk truck?
- a.) 60 degrees F
 - b.) 20 degrees F
 - c.) 30 degrees F
 - d.) 40 degrees F**
- 34) When referring to milk test used at the processing plant, what is a DMC?
- a.) Direct Microscopic Smear test**
 - b.) Direct Microscopic Somatic test
 - c.) Direct Micro Susceptibility test
 - d.) Direct Measurement Control
- 35) How much water can a lactating cow consume in one day?
- a.) 5 gallons
 - b.) 15 gallons
 - c.) 35 gallons
 - d.) 25 gallons**
- 36) What percent of milk is water?
- a.) 82 percent
 - b.) 87 percent**
 - c.) 93 percent
 - d.) 50 percent
- 37) What units are used to measure energy?
- a.) Calories**

- b.) Grams
 - c.) Liters
 - d.) Tons
- 38) What ration ingredients contain the highest concentration of energy?
- a.) Carbohydrates
 - b.) Fats**
 - c.) Sugars
 - d.) Minerals
- 39) When evaluation dairy rations what do the letters NE stand for?
- a.) Net Equivalence
 - b.) Not Essential
 - c.) Not Edible
 - d.) Net Energy**
- 40) When evaluating a dairy ration, what do the letters TDN stand for?
- a.) Total Diet Needed
 - b.) Tested Digestible Nutrients
 - c.) Total Digestible Nutrients**
 - d.) The Dairy Network
- 41) What percent of dry matter in plants is made of carbohydrates?
- a.) 50 percent
 - b.) 65 percent
 - c.) 75 percent**
 - d.) 85 percent
- 42) Where are structural carbohydrates found in the plant?
- a.) In the cell wall**
 - b.) In the cell nucleus
 - c.) In the cell organelles
 - d.) In the cell membrane
- 43) What are structural carbohydrates made of?
- a.) Cellulose, fructose, and saccharin
 - b.) Lignin, sucrose, and cellulose
 - c.) Cellulose, hemicellulose, lactose
 - d.) Cellulose, hemicellulose, and lignin**
- 44) What kinds of relationship do cattle and the microorganisms in their rumen share?
- a.) Electrostatic
 - b.) Parasitic
 - c.) A-Biotic
 - d.) Symbiotic**
- 45) What structural carbohydrate component makes older plants less digestible than younger plants?
- a.) Lignin**
 - b.) Cellulose
 - c.) Fructose
 - d.) Sucrose
- 46) What does NSC stand for?
- a.) Nonstructural Carbons
 - b.) Nitrogen Standard Calculation

- c.) **Nonstructural Carbohydrates**
 - d.) Nitrogen Substitute Calories
- 47) What do nonstructural carbohydrates consist of?
- a.) Proteins
 - b.) Plant proteins, pectin, and sugar
 - c.) Plant sugars
 - d.) **Plant starch, pectin, and sugar**
- 48) What acid is formed when nonstructural carbohydrates are digested in the rumen?
- a.) Lactic acid
 - b.) Citric acid
 - c.) Propyl-hydro chloride
 - d.) **Propionic acid**
- 49) What fat-soluble vitamins do fats provide?
- a.) **Vitamins A, D, E, and K**
 - b.) Vitamins A, B, E, and K
 - c.) Vitamins A, C, E, and K
 - d.) Vitamins A, C, D, E, and K
- 50) How much more energy do fats contain per unit than carbohydrates and proteins?
- a.) 3.0
 - b.) **2.25**
 - c.) 2.0
 - d.) 3.25
- 51) Which cows have higher protein requirements?
- a.) High-producing and open cows
 - b.) Low-producing and pregnant cows
 - c.) **High-producing and pregnant cows**
 - d.) Low-producing and open cows
- 52) Where are degradable proteins broken down?
- a.) Reticulum
 - b.) Abomasum
 - c.) Omasum
 - d.) **Rumen**
- 53) Where are undegradable proteins absorbed?
- a.) Large intestine
 - b.) Rumen
 - c.) **Small Intestine**
 - d.) Liver
- 54) What is the average mature weight for a Jersey cow?
- a.) **1000 lb**
 - b.) 1400 lb
 - c.) 800 lb
 - d.) None of the above
- 55) If there are large numbers of flies around the dairy barn, what should be the first thing to be examined in an attempt to solve the fly problem?
- a.) Cow feeding procedures
 - b.) Milking procedures
 - c.) **Manure handling procedures**

- d.) Calf feeding procedures
- 56) When referring to rations, what do the letters NFC stand for?
- a.) Not for Consumption
 - b.) Non-fungus Community
 - c.) National Football Camp
 - d.) Nonforage Carbohydrates**
- 57) Where is the National Cheese Exchange Located?
- a.) Chicago, Illinois
 - b.) Green Bay, Wisconsin**
 - c.) Madison Wisconsin
 - d.) Eau Claire, Wisconsin
- 58) In a cow, where would you find an alveolus?
- a.) Intestine
 - b.) Udder**
 - c.) Brain
 - d.) Skin
- 59) When discussing lactation records, what does the term "fat corrected milk" mean?
- a.) Fat has been added to the milk to the correct level
 - b.) Fat has been extracted from the milk to the correct level
 - c.) Lactation records have been adjusted to the same milk fat percentage**
 - d.) The lactation record has an average amount of milk fat
- 60) What percent non-fiber carbohydrate should a ration contain for high producing cows?
- a.) 35 to 40 percent**
 - b.) 10 to 20 percent
 - c.) 56 to 61 percent
 - d.) 22 to 27 percent
- 61) What does GnRH stand for?
- a.) Gestation Repression Hormone
 - b.) Genotype Reflection Hormone
 - c.) Goonie Resuscitation Hoovermobile
 - d.) Gonadotropin Releasing Hormone**
- 62) What is the average duration of standing heat in cattle?
- a.) 4 hours
 - b.) 12 hours**
 - c.) 70 hours
 - d.) 8 hours
- 63) What is the approximate time of ovulation in cattle after the beginning of heat?
- a.) 60 hours
 - b.) 90 hours
 - c.) 30 hours**
 - d.) 3 hours
- 64) What hormone is responsible for maintaining pregnancy?
- a.) Progesterone**
 - b.) Lutalyse
 - c.) Prostaglandin
 - d.) Oxytocin

- 65) What is the scientific term for birth?
- a.) Domino
 - b.) Parturition**
 - c.) Calving
 - d.) Dystocia
- 66) In reference to reproduction, what does CL stand for?
- a.) Cattle Lutalysis
 - b.) Cervix Lymphocyte
 - c.) Compound Luteum
 - d.) Corpus Luteum**
- 67) To the hundredth, how many pounds of milk are in one gallon?
- a.) 8.52 pounds
 - b.) 8.72 pounds
 - c.) 8.92 pounds
 - d.) 8.62 pounds**
- 68) What pathway in young calves directs milk into the abomasum, bypassing the rumen, reticulum, and omasum?
- a.) Rumen bypass groove
 - b.) Masticulas passinomis
 - c.) Esophageal groove**
 - d.) Rumen passinomis
- 69) Milk fever is also (scientifically) known as what?
- a.) Postpartum paresis
 - b.) Mamogenesis
 - c.) Masticular Paresis
 - d.) Parturient paresis**
- 70) What is Parturient paresis caused by?
- a.) Low blood levels of ionized calcium**
 - b.) Low blood levels of ionized sodium
 - c.) Low blood levels of ionized zinc
 - d.) Low blood levels of ionized vitamin-D
- 71) According to the NRC, what percent calcium should a dry cow ration contain?
- a.) 1 percent
 - b.) 2 percent
 - c.) 10 percent
 - d.) .39 percent**
- 72) High potassium intake will decrease a cows ability to mobilize what?
- a.) Bone phosphorus
 - b.) Lymphocytes
 - c.) Bone calcium**
 - d.) Immunoglobulins
- 73) Cows that are at risk of developing ketosis can be fed what vitamin to help prevent ketosis?
- a.) Niacin**
 - b.) Zinc
 - c.) B-complex
 - d.) Vitamin-C

- 74) Hairy Heel Wart is scientifically known as what?
- a.) Digital Divide
 - b.) Digital Dermatitis**
 - c.) Intraheel laminitis
 - d.) Digital phlegmon
- 75) Foot Rot is Scientifically known as what?
- a.) Intraheel laminitis
 - b.) Digital Dermatitis
 - c.) Interdigital phlegmon**
 - d.) Phlegmon
- 76) When discussing feed mixers, what is the range of manufacturers recommended mixing times?
- a.) 1-2 minutes
 - b.) 3-6 minutes**
 - c.) 10-15 minutes
 - d.) 7-9 minutes
- 77) The letters FSIS stand for what?
- a.) Food Service and Inspection Safety
 - b.) Free State Inspection Service
 - c.) Food Sanitation and Inquiry Service
 - d.) Food Safety and Inspection Service**
- 78) What do the letters FARAD stand for?
- a.) Food Animal Resistance Activity Database
 - b.) Food Animal Residue Avoidance Data
 - c.) Food Animal Resistance Activity Data
 - d.) Food Animal Residue Avoidance Databank**
- 79) What bacterium causes cattle tuberculosis (TB)?
- a.) Mycobacterium canine
 - b.) Mycobacterium ovis
 - c.) Mycobacterium avium
 - d.) Mycobacterium bovis**
- 80) Oxytocin causes what to happen in a dairy cow?
- a.) Milk letdown
 - b.) Uterine contractions
 - c.) Both A and B**
 - d.) None of the above
- 81) How frequently should an average cow freshen?
- a.) Once every 24 months
 - b.) Once every 12 months**
 - c.) Once every 20 months
 - d.) Only once in her lifetime
- 82) What do the letters NRC stand for?
- a.) National Research Company
 - b.) National Research Council**
 - c.) National Research Chapter
 - d.) National Rehabilitation Center

- 83) When discussing nutrition, what does NPN stand for?
- a.) **Nonprotein nitrogen**
 - b.) Normal protein necessities
 - c.) Natural protein nitrogen
 - d.) No protein in nitrogen
- 84) Corn silage, stored in upright, top-unloading silos, should be chopped at what percent moisture?
- a.) 72 to 75 percent moisture
 - b.) 82 to 85 percent moisture
 - c.) 92 to 95 percent moisture
 - d.) **62 to 65 percent moisture**
- 85) Corn silage stored in sealed uprights should be ensiled at what moisture?
- a.) No less than 40 percent moisture
 - b.) No less than 50 percent moisture
 - c.) **No less than 60 percent moisture**
 - d.) No less than 30 percent moisture
- 86) What percent moisture should corn silage be chopped at when stored in horizontal silos-bunkers or bags?
- a.) 10 percent moisture
 - b.) 20 percent moisture
 - c.) 30 percent moisture
 - d.) **70 percent moisture**
- 87) What do the letters FSA stand for?
- a.) **Farm Service Agency**
 - b.) Farm Study Agency
 - c.) Farm Sales Agency
 - d.) Farm Safety Administration
- 88) What does BVD stand for?
- a.) Boring Viral Distress
 - b.) Bovine Viral Disease
 - c.) Bovine Viral Dumbness
 - d.) **Bovine Viral Diarrhea**
- 89) Neospora caninum is a major cause of what in pregnant cows?
- a.) **Abortion**
 - b.) Parturition
 - c.) Nutrition deficiency
 - d.) Chronic diarrhea
- 90) When referring to vaccinations, what do the letters MLV stand for?
- a.) Milking Line Vaccination
 - b.) **Modified Live Virus**
 - c.) Milker's Logical Vaccination
 - d.) Modified Loving Virus
- 91) Where is the Dairy Shrine located?
- a.) El Paso, Illinois
 - b.) Dayton, Ohio
 - c.) Madison, Wisconsin
 - d.) **Fort Atkinson, Wisconsin**

- 92) When the environmental temperature falls below 30°F, the normal diet of a young calf should be supplemented with _____?
- a.) Protein
 - b.) Energy**
 - c.) Vitamin A
 - d.) None of the above
- 93) When did the World Dairy Expo start sponsoring a collegiate judging contest?
- a.) 1948
 - b.) 1958
 - c.) 1968**
 - d.) 1978
- 94) For every gallon of milk produced, how many gallons of blood must pass through the udder of the dairy cow?
- a.) One
 - b.) Ten
 - c.) Fifty
 - d.) Five hundred**
- 95) Who was the first living person to be honored by the Pioneer Award from the National Dairy Shrine?
- a.) Max Merker
 - b.) Max Drake**
 - c.) Matthew Milsap
 - d.) Merle Haggard
- 96) When was the first National 4-H Dairy Cattle Judging Contest?
- a.) 1899
 - b.) 1909
 - c.) 1919**
 - d.) 1929
- 97) After a bulk tank is washed and rinsed, beading of water droplets is a sign of what?
- a.) Protein residue
 - b.) Lack of fat in the milk
 - c.) Fat residue**
 - d.) Milk residue
- 98) When looking at DHI records, what do the letters RHA stand for?
- a.) Rolling Herd Average**
 - b.) Registered Holstein Ancestry
 - c.) Registered Herd Ancestry
 - d.) Regional Holstein Associations
- 99) How is RHA calculated?
- a.) By dividing the total amount of milk produced in the past 365 days by the total number of cow years in the herd this year.
 - b.) By dividing the total amount of milk produced in the past 365 days by the total number of cow years in the herd last year.**
 - c.) By multiplying the total amount of milk produced in the past 365 days by total number cow years in the herd last year.
 - d.) By adding the total amount of milk produced in the past 365 days total number of cow years in the herd last year.

- 100) What do the letters M. E. stand for?
a.) Mainly European
b.) Mature Equivalent
c.) Mature Earthling
d.) Mature European
- 101) When examining feed rations, what do the letters NDF stand for?
a.) Normal Detergent Fiber
b.) Normal Directing Firefighter
c.) Neutral Directing Fiber
d.) Neutral Detergent Fiber
- 102) What bacterium causes Johne's disease in cattle?
a.) Mycobacterium Paratuberculosis
b.) Johne's Virus
c.) Colostridium
d.) E-Coli.
- 103) What are two methods for shortening udder hair?
a.) Clipping and straight razor shaving
b.) Clipping and singeing
c.) Singeing and waxing
d.) Electrolysis and waxing
- 104) What do the letters EU stand for?
a.) Eastern Union
b.) European Unusual
c.) European Union
d.) European Underline
- 105) PTAT stands for what?
a.) Predicted Transforming Ability-Type
b.) Progeny Transforming Ability-Type
c.) Progeny Testing At Time
d.) Predicted Transmitting Ability-Type
- 106) %DBH stands for what?
a.) Percentage of Difficulty Breeding in Heifers
b.) Percentage of Dead Beat Heifers
c.) Percentage of Dead Born Heifers
d.) Percentage of Difficult Births in Heifers
- 107) What do the letters IDFA stand for?
a.) International Dairy Food Assumption
b.) International Dairy Foods Association
c.) International Dairy Forging Association
d.) International Dairy Farmers Association
- 108) What breed is known to produce milk over a greater number of years than all other breeds?
a.) Brown Swiss
b.) Guernsey
c.) Jersey
d.) Milking Shorthorn

- 109) Which of the compartments of a cow's four-compartment stomach acts as the true stomach?
- a.) Omasum
 - b.) Rumen
 - c.) Abomasum**
 - d.) Reticulum
- 110) What percent of crude protein should a calf starter be?
- a.) 16-18**
 - b.) 10-12
 - c.) 22-24
 - d.) 6-8
- 111) Which dairy breed's milk is golden-yellow in color?
- a.) Jersey
 - b.) Milking shorthorn
 - c.) Guernsey**
 - d.) Ayrshire
- 112) Which trait is worth the most points according to the Dairy Cow Unified Score Card?
- a.) Body capacity
 - b.) Dairy character
 - c.) Frame
 - d.) Udder**
- 113) A perfect score for a cow according to the Dairy Cow Unified Score Card is:
- a.) 50
 - b.) 100**
 - c.) 500
 - d.) 10
- 114) What is a TMR?
- a.) Time Management Requirement
 - b.) Total Managed Ration
 - c.) Total Mixed Ration**
 - d.) Texas Milking Requirement
- 115) What is *not* considered when evaluating body capacity?
- a.) Barrel
 - b.) Chest
 - c.) Depth of heart**
 - d.) Spring of rib
- 116) Brucellosis is also known as:
- a.) Bangs**
 - b.) Mastitis
 - c.) Milk fever
 - d.) Ketosis
- 117) Dry cows need 0.8 percent K in their diet. What element is K?
- a.) Potassium**
 - b.) Calcium
 - c.) Phosphorus
 - d.) Lead

- 118) Alfalfa is an example of what?
a.) Legume
b.) Forage
c.) Protein source
d.) All of the above
- 119) A rolling herd average (RHA) is based on how many months?
a.) One
b.) Twelve
c.) Twenty four
d.) Lifetime of the cow
- 120) What does the term freshen mean in relation to dairy production?
a.) To become pregnant
b.) To give birth
c.) To stop producing milk
d.) None of the above
- 121) Protein is a combination of amino acids. The amino acids are unique among compounds involved in nutrition because they contain what element?
a.) Nitrogen
b.) Copper
c.) Calcium
d.) Helium
- 122) Body condition scores from 1 to 5 are used to track herd health and nutrition. Dry cows should have a body score from:
a.) 0.5-1.0
b.) 2.0-2.5
c.) 2.5-3.0
d.) 3.5-4.0
- 123) Which part of the digestive tract is responsible for reabsorbing water?
a.) Esophagus
b.) Rumen
c.) Small intestines
d.) Large intestines
- 124) The first feeding of colostrum should equal about _____ percent of the calf's body weight?
a.) 1
b.) 2
c.) 5
d.) 10
- 125) All U.S. dairy farms are inspected by state inspectors through a program coordinated by the Food and Drug Administration. Inspectors follow a publication called the PMO. What does PMO stand for?
a.) Power milk operation
b.) Post milk ordinance
c.) Posted milk ordinance
d.) Pasteurized milk ordinance
- 126) After insemination, how long do sperm live in the cow's reproductive tract?
a.) 20 minutes

- b.) 6 hours
 - c.) 24 hours**
 - d.) 2 days
- 127) What do the initials P.T.P.M. stand for?
- a.) Proteins per tank per million
 - b.) Propensity to produce milk.**
 - c.) Propensity per tank protein milk.
 - d.) Population total poor milkers.
- 128) What describes the fraction of the ration proteins, which is broken down by digestive enzymes and utilized by rumen bacteria?
- a.) Carbohydrates
 - b.) Vitamins
 - c.) Minerals
 - d.) Degradable proteins**
- 129) What are the two types of ovarian cysts?
- a.) follicular and luteal**
 - b.) follicular and horn
 - c.) ovum and luteal
 - d.) follicular and ovum
- 130) How much higher is the percent of calcium in colostrum milk than in regular milk?
- a.) Nearly double**
 - b.) Nearly triple
 - c.) There is no difference
 - d.) Four times greater
- 131) Which reproductive condition results when the fetal membranes remain within the uterus for an extended period following the act of calving?
- a.) retained uterus
 - b.) retained ovum
 - c.) retained placenta**
 - d.) retained follicle
- 132) One American farmer produces enough food to feed how many people?
- a.) 130
 - b.) 128**
 - c.) 150
 - d.) 1,028
- 133) What is the largest nutrient supply required by dairy cows?
- a.) water
 - b.) milk
 - c.) protein
 - d.) energy**
- 134) What percent of the cows feed intake is consumed during the daylight hours?
- a.) 90%
 - b.) 70%**
 - c.) 65%
 - d.) 91%
- 135) When is the best time to feed anionic salts to dairy cows?
- a.) The day before calving

- b.) Two weeks prior to calving**
c.) While the cow is calving
d.) Immediately after calving
- 136) What are the four composite indexes calculated by the Holstein Association?
a.) Udder, feet and legs, body color, & dairy character
b.) Teats, feet and legs, body form, & dairy character
c.) Udder, feet and legs, body form, & dairy quality
d.) Udder, feet and legs, body form, & dairy character
- 137) Approximately how many gallons of blood pass through the udder for each gallon of milk produced?
a.) 100-200 gallons
b.) 200-300 gallons
c.) 300-400 gallons
d.) 400-500 gallons
- 138) The standard length of the dry period in dairy cattle is _____?
a.) 305 days
b.) 283 days
c.) 60 days
d.) 100 days
- 139) What machine is used to determine if water has been added to milk?
a.) Water Monitor
b.) Acme Milk Saver
c.) Cryoscope
d.) Antioscope
- 140) What is the name of the dairy show that is held in November at Toronto, Canada?
a.) Royal Fall Fair
b.) Royal Canadian Festival
c.) North American Royal Fair
d.) Royal Winter Fair
- 141) What are the two main problems that effect reproduction?
a.) Heat detection and heat stress
b.) Heat detection and conception rates
c.) Heat detection and cold stress
d.) Heat detection and ovarian cancer
- 142) Name the three common places Coliforms are found.
a.) Mud, water, and manure
b.) Laboratory, hospitals, and offices
c.) Milk, mucus, and water
d.) Mud, water, and blood
- 143) What type of mastitis is the easiest to cure?
a.) Staph Aureus
b.) Coliforms
c.) Strep (Streptococcus agalactae)
d.) Lumpy kind
- 144) Who was the first female to produce over 50,000 pounds of milk?
a.) Texam Southwind Jobina
b.) Mowry Prince Corrine

- c.) Texam Southwind Helga
 - d.) TF Crosscut Libby
- 145) How many uterine horns are in the female reproductive tract?
- a.) two**
 - b.) three
 - c.) four
 - d.) one
- 146) When can a heifer calf born twin to a bull (free martin) be registered?
- a.) As soon as she is born
 - b.) As soon as she is weaned
 - c.) When she dies
 - d.) When it is proven that she will breed**
- 147) When does the greatest mammary tissue growth occur during a cow's life?
- a.) Before she is born
 - b.) At puberty
 - c.) During the first pregnancy**
 - d.) During the second pregnancy
- 148) Each animal inherits certain genes from both parents. What percentage of genes does a calf receive from its sire?
- a.) 25 percent
 - b.) 50 percent**
 - c.) 75 percent
 - d.) 85 percent
- 149) What is the optimal length of the dry period?
- a.) 5 to 10 days
 - b.) 20 to 30 days
 - c.) 50 to 70 days**
 - d.) 100 to 130 days
- 150) What is the hormone that causes milk letdown?
- a.) Estrogen
 - b.) Progesterone
 - c.) Prostaglandin
 - d.) Oxytocin**
- 151) Coccidia infection can occur when calves are 4 to 8 weeks old. Coccidia causes:
- a.) BVD
 - b.) Pneumonia
 - c.) IBR
 - d.) Scours**
- 152) Which major dairy breed association was the first to use computers to maintain breed registry records?
- a.) Guernsey**
 - b.) Holstein
 - c.) Jersey
 - d.) Milking Shorthorn
- 153) Reduced gestation length and retained placenta typically are the first symptoms of what vitamin inadequacy?
- a.) Vitamin K

- b.) Vitamin D
 - c.) Vitamin A**
 - d.) Vitamin B
- 154) Generally, high-producing Holsteins eat how many pounds of dry matter per day?
- a.) 10-20
 - b.) 25-30
 - c.) 45-55**
 - d.) 75-100
- 155) What is the most essential nutrient in animal feeding and health?
- a.) Silage
 - b.) Calcium
 - c.) Water**
 - d.) Salt
- 156) Why is fat added to dairy rations?
- a.) To add body condition score
 - b.) To help fight BVD
 - c.) To add a concentrated form of energy**
 - d.) To increase the volatile fatty acid level
- 157) Milking herd TMR's should be available to cows how many hours throughout the day?
- a.) 5 to 9
 - b.) 10 to 12
 - c.) 15 to 18
 - d.) 20 to 24**
- 158) The most common pathogen found in raw milk is:
- a.) Cryptosporidia
 - b.) *Escherichia coli***
 - c.) Campylobacter
 - d.) Salmonella
- 159) The average duration of standing heat in dairy cows reportedly is
- a.) Less than 1 hour
 - b.) More than 10 hours
 - c.) More than 24 hours**
 - d.) Less than 10 hours
- 160) In what year did the Holstein Association start its program of recording carriers of Undesirable Recessive Traits?
- a.) 1974
 - b.) 1969
 - c.) 1957**
 - d.) 1986
- 161) A free martin is considered a
- a.) Heifer that has not yet been serviced
 - b.) Bull born twin to a heifer
 - c.) Cow that has just had its calf weaned
 - d.) Heifer born twin to a bull**
- 162) A mutation where a calf is born with a single toe on one or more feet is called
- a.) Mule-foot**
 - b.) Single-foot

- c.) Horse-foot
 - d.) Flat-box
- 163) A mutation where calves have little or no control over the movement of legs is called
- a.) Bovine leukocyte adhesion deficiency
 - b.) Weaver syndrome
 - c.) Limber leg**
 - d.) Mule-foot
- 164) Limber leg is found in which dairy breed?
- a.) Brown Swiss
 - b.) Jersey**
 - c.) Holstein
 - d.) Guernsey
- 165) Mule-foot is found in which dairy breed?
- a.) Jersey
 - b.) Guernsey
 - c.) Holstein**
 - d.) Brown Swiss
- 166) Bovine Progressive Degenerative Myeloencephalopathy (BPDME) is better known as Weaver Syndrome@ because of
- a.) The name of the person that first detected it
 - b.) The location where it was first detected
 - c.) The weaving gait of affected cattle**
 - d.) The process used to treat symptoms
- 167) "Weaver Syndrome" is found in which dairy breed?
- a.) Brown Swiss**
 - b.) Guernsey
 - c.) Jersey
 - d.) Holstein
- 168) What is lactogenesis?
- a.) The initiation of estrus
 - b.) The initiation of the dry period
 - c.) The initiation of milk secretion**
 - d.) The initiation of mastitis
- 169) Fear can disrupt milk letdown in a cow. The hormone released that causes this disruption is:
- a.) Progesterone
 - b.) Epinephrine**
 - c.) Estrogen
 - d.) Prostaglandin
- 170) Lactation is unique to _____.
- a.) Reptiles
 - b.) Insects
 - c.) Mammals**
 - d.) Crustaceans
- 171) Endocrinology is the science dealing with _____.
- a.) Lipids

- b.) Hormones/chemical substances**
 - c.) Carbohydrates
 - d.) The lymphatic system
- 172) The hormone bST is given to dairy cows:
- a.) In the first 45 days of lactation
 - b.) 100-199 days after calving
 - c.) After 200 days of lactation**
 - d.) Right before the dry period
- 173) For best results calves should be fed colostrum within ____ hours of calving:
- a.) 1st hour
 - b.) 3 hours
 - c.) 6 hours**
 - d.) First day
- 174) _____ causes abortion in the last trimester of pregnancy.
- a.) Milk fever
 - b.) Bovine virus diarrhea
 - c.) Hardware disease
 - d.) Brucellosis**
- 175) A condition of low blood calcium which results in partial paralysis is....
- a.) Milk fever**
 - b.) Bovine virus diarrhea
 - c.) Hardware disease
 - d.) Brucellosis
- 176) When a small metal object punctures the stomach wall and leads to infection, the resulting disease is.....
- a.) Milk fever
 - b.) Mastitis
 - c.) Hardware disease**
 - d.) Black leg
- 177) This disease is transmitted through natural mating and causes abortion, low conception rates, and irregular heat cycles.
- a.) Milk fever
 - b.) Vibriosis**
 - c.) Hardware disease
 - d.) Black leg
- 178) This disease causes air bubbles under the skin and causes death.
- a.) Milk fever
 - b.) Vibriosis
 - c.) Hardware disease
 - d.) Black leg**
- 179) The condition in which the cow is giving more milk than she is consuming in feed is called:
- a.) Negative net energy balance**
 - b.) Positive net energy balance
 - c.) Being milked too much
 - d.) Ill health

- 180) As a rule of thumb when milk production _____, the fat content _____.
- a.) **Decreases, increases**
 - b.) Decreases, decreases
 - c.) Increases, increases
 - d.) Stops, increases
- 181) Feeding bulky feeds during the dry period and gradually bringing fresh cows back on grain are ways to prevent:
- a.) Milk fever
 - b.) **Displaced abomasum**
 - c.) Ketosis
 - d.) Mastitis
- 182) The two U.S. dairy breeds that originated in the Channel Islands off the coast of France are:
- a.) Jersey and Holstein
 - b.) **Guernsey and Jersey**
 - c.) Milking Shorthorn and Guernsey
 - d.) Ayrshire and Holstein
- 183) Texas is currently ranked ____ nationally in milk production.
- a.) 1st
 - b.) 6th
 - c.) **8th**
 - d.) 10th
- 184) _____ represents the largest daily input cost to produce milk.
- a.) Labor
 - b.) Water
 - c.) Animals
 - d.) **Feed**
- 185) The top-producing county in Texas (at this time) is _____.
- a.) **Erath**
 - b.) Brazos
 - c.) Comanche
 - d.) Wharton
- 186) The breed of dairy cattle that can be roan, all red, all white, or even spotted red and white is:
- a.) Holstein
 - b.) Ayrshire
 - c.) Guernsey
 - d.) **Milking Shorthorn**
- 187) The _____ Act established a college of agriculture in every state.
- a.) **Morrill Land Grant**
 - b.) Agriculture Grant
 - c.) Homestead
 - d.) Texas Land Grant
- 188) What agency regulates waste management?
- a.) Texas Health Commission
 - b.) **Texas Commission of Environmental Quality**
 - c.) Environmental Preservation Agency

- d.) Texas Animal Commission
- 189) What manure waste management puts solids in a bin and lets it degrade?
- a.) Slurry
 - b.) Composting**
 - c.) Solid
 - d.) Lagoon
- 190) What manure waste management runs manure across a press and squeezes the water out?
- a.) Lagoon
 - b.) Slurry
 - c.) Liquid
 - d.) Solids removal**
- 191) Which mineral functions in maintaining osmotic pressure, acid-base balance, and body fluid balance?
- a.) Sodium**
 - b.) Selenium
 - c.) Sulfur
 - d.) Zinc
- 192) Which mineral is found in high concentrations in soft tissues such as the pancreas, liver, and kidney?
- a.) Sulfur
 - b.) Sodium
 - c.) Zinc**
 - d.) Selenium
- 193) What is a nonfunctional mammary gland called?
- a.) Absent quarter
 - b.) Nonproductive quarter
 - c.) Blind quarter**
 - d.) Bulging quarter
- 194) When doing classification scoring, a cow given the numerical value of 85-89.9 is classified as :
- a.) Excellent
 - b.) Fair
 - c.) Very good**
 - d.) Poor
- 195) What is the most abundant mineral in the body?
- a.) Cobalt
 - b.) Copper
 - c.) Calcium**
 - d.) Iodine
- 196) What mineral is necessary for hemoglobin formation?
- a.) Zinc
 - b.) Copper**
 - c.) Selenium
 - d.) Iodine
- 197) A bovine female which has not had a calf is a(n):
- a.) Filly

- b.) Doe
 - c.) Cow
 - d.) Heifer**
- 198) How many days after parturition should you wait before breeding a cow back?
- a.) 10 days
 - b.) 120 days
 - c.) 60 days**
 - d.) 365 days
- 199) What trait is the only positive correlation to milk production?
- a.) Body capacity
 - b.) Dairy character**
 - c.) Feet and legs
 - d.) Udder
- 200) Which dairy breed has the restriction for no black markings allowed?
- a.) Jersey
 - b.) Guernsey
 - c.) Ayrshire
 - d.) Milking Shorthorn**
- 201) What numerical value does a Holstein cow get when given the classification excellent?
- a.) 70-74.9
 - b.) 80-84.9
 - c.) 90-100**
 - d.) <70
- 202) What is the classification for a Holstein cow given the numerical value 80-84.9?
- a.) Fair
 - b.) Poor
 - c.) Good
 - d.) Good plus**
- 203) What numerical value does a Holstein cow get when given the classification good?
- a.) <70
 - b.) 75-79.9**
 - c.) 85-89.9
 - d.) 90-100
- 204) What is the classification for a Holstein cow given the numerical value of less than 70?
- a.) Poor**
 - b.) Good
 - c.) Good plus
 - d.) Fair
- 205) What is the reasonable score for body condition at calving?
- a.) 4
 - b.) 3.5**
 - c.) 1.5
 - d.) 2.5
- 206) What is the reasonable score for body condition at mid-lactation?
- a.) 1.0
 - b.) 2.0
 - c.) 4.5

d.) 3.0

- 207) What percent yield of the daily milk yield does the rear quarters produce?
a.) 40%
b.) 20%
c.) 60%
d.) 80%
- 208) What is the correct scientific definition of milk?
a.) A white liquid from a cow
b.) A lacteal secretion, practically free from colostrum, obtained from the milking of one or more healthy cows
c.) A white liquid that you drink
d.) What you put in your cereal
- 209) BST is the acronym for what compound?
a.) Bovine Somatropin
b.) Bovine Special Tincture
c.) Barn Somatotropin
d.) None of the above
- 210) At what isoelectric point (point at which proteins have net 0 charge) do caseins precipitate?
a.) pH 4.6
b.) pH 5.2
c.) pH 7.5
d.) pH 8.1
- 211) How many grams of lactose are in a glass of milk?
a.) 25
b.) 17
c.) 10
d.) 21
- 212) Bulk tanks must be emptied and cleaned every _____ hours.
a.) 48
b.) 72
c.) 84
d.) 120
- 213) What is the fat content of light cream?
a.) 1-5%
b.) 5-12%
c.) 18-30%
d.) 24-32%
- 214) What is the fat content of heavy cream?
a.) 28%
b.) 30%
c.) 33%
d.) Greater than 36%
- 215) _____ & _____ are found in the same ratio in your body as they are in milk.
a.) Calcium & magnesium
b.) Citrates & phosphorous
c.) Calcium & citrates

d.) Calcium & phosphorous

- 216) _____ & _____ stabilize the protein system.
a.) Calcium & magnesium
b.) Citrates & phosphorous
c.) Calcium & phosphorous
d.) Citrates & magnesium
- 217) _____ & _____ destabilize the milk protein system.
a.) Calcium & magnesium
b.) Citrates & phosphorous
c.) Calcium & phosphorous
d.) Citrates & magnesium
- 218) What does the acronym ME stand for when referring to a lactation record?
a.) Mature Energy
b.) Metabolizable equivalent
c.) Mature equivalent
d.) None of the above
- 219) If you add sugar to a milk product, you must _____ the minimum pasteurization temperature by _____ F.
a.) Decrease, 5
b.) Increase, 5
c.) Decrease, 10
d.) Increase, 10
- 220) Cheddar cheese originated in:
a.) Boston, Massachusetts
b.) Berlin, Germany
c.) County of Somerset, England
d.) London, England
- 221) Cheddar cheese accounts for _____ % of American type cheeses made in the U.S.
a.) 65
b.) 72
c.) 78
d.) 80
- 222) The maximum moisture content of Cheddar cheese is:
a.) 12%
b.) 23%
c.) 30%
d.) 39%
- 223) The source of rennet (a substance added in cheesemaking) is:
a.) A tropical plant
b.) Sugar beets
c.) The abomasum of a milk fed calf
d.) Insects
- 224) Legally you cannot make cottage cheese from raw milk, but you can make _____ from raw milk.
a.) Yogurt
b.) Cheddar cheese

- c.) Ice cream
 - d.) Sour cream
- 225) _____ is a compound that is fermented for flavor in buttermilk and sour cream.
- a.) Lactose
 - b.) Citrate**
 - c.) Glucose
 - d.) Phosphatase
- 226) 98% of somatic cells are:
- a.) Red blood cells
 - b.) Lymph nodes
 - c.) Leukocytes, or white blood cells**
 - d.) Plasma
- 227) Cows have _____ streak canals per teat.
- a.) 1**
 - b.) 2
 - c.) 3
 - d.) 4-8
- 228) Crude fiber in the diet must be at least ____% or fat % will decrease.
- a.) 5
 - b.) 8
 - c.) 12
 - d.) 18**
- 229) An example of an extra hard cheese is:
- a.) Parmesan**
 - b.) Muenster
 - c.) Ricotta
 - d.) Brie
- 230) Colby, Monterey Jack, and Provolone are examples of:
- a.) Extra hard cheeses
 - b.) Eye cheeses
 - c.) Smear ripened cheeses
 - d.) Semi-hard cheeses**
- 231) An example of an eye cheese would be:
- a.) Gouda**
 - b.) Limburger
 - c.) Cream cheese
 - d.) Romano
- 232) Muenster is a _____ cheese:
- a.) Fresh
 - b.) Pickled
 - c.) Whey
 - d.) Smear ripened**
- 233) Cottage cheese is a _____ cheese.
- a.) Fresh**
 - b.) Pickled
 - c.) Whey
 - d.) Smear ripened

- 234) When did the first rail shipment of milk in the United States occur?
a.) 1835
b.) 1841
c.) 1845
d.) 1846
- 235) When did the number of dairy cows in the United States reach a peak?
a.) 1930
b.) 1956
c.) 1946
d.) 1995
- 236) Which body part is located more towards the front of the animal?
a.) Stifle
b.) Switch
c.) Tailhead
d.) Flank
- 237) The back of a cow is made up of the
a.) Chine and flank
b.) Loin and stifle
c.) Loin and chine
d.) Chine and stifle
- 238) Which part of an animal touches the ground if he/she is walking on a correct set of feet and legs?
a.) Knee
b.) Pastern
c.) Sole
d.) Dewclaw
- 239) The top most part of a cow's head is called the:
a.) Hook
b.) Knoll
c.) Pin
d.) Poll
- 240) A switch on a cow is:
a.) A fluff of hair on the forehead
b.) The area directly behind the withers
c.) The bottom most part of the tail
d.) Located beneath the heart girth
- 241) The hooks and pins on an animal relate most closely to the:
a.) Thigh
b.) Feet and legs
c.) Rump
d.) Udder
- 242) What is the average production lifetime of a dairy cow?
a.) 10 years
b.) 3 years
c.) 6 months
d.) 20 years

- 243) An average Holstein cow should give how many gallons per day for lactation?
a.) 20
b.) 1
c.) 6
d.) 50
- 244) A cow's gestation period is how long?
a.) 1 day
b.) 1 year
c.) 9 months
d.) 15 months
- 245) A HTST is a:
a.) Milking parlor
b.) Pasteurizing system
c.) Farm
d.) Breed of dairy cow
- 246) What combines the Predicted Transmitting Ability for protein, fat, type and udder composite index and ranks the animal on its ability to transmit a balance of these four traits
a.) Herd Type Production Index
b.) Pedigree Type Production Index
c.) Type Production Index
d.) Total Production Index
- 247) Jersey cattle are characterized by having this type of face:
a.) Wry
b.) Dished
c.) Colored with a few white spots
d.) Non-feminine
- 248) Milk sugars are not very soluble. Some people have difficulty hydrolyzing it in their bodies. What is this problem called?
a.) Lactose indigestibility
b.) Lactose intolerance/malabsorption
c.) Lactose irritability
d.) Lactose inadjustment
- 249) Fermented forage plants refers to:
a.) Flash grazing
b.) Strip grazing
c.) Hay
d.) Silage
- 250) What does the acronym IPM stand for?
a.) Integrated pest management
b.) Internal pest management
c.) International pest management
d.) None of the above