

1. **The sudden death of heavily muscled hogs is referred to as:**
 - *A Porcine Stress Syndrome**
 - B Mycoplasma Pneumonia
 - C Porcine Circivirus
 - D Porcine Cardiac Complex

2. **A swine nutritional health problem caused by lack of iron in the diet.**
 - A Rickets
 - B Parakeratosis
 - *C Anemia**
 - D Hypoglycemia

3. **Which vitamin do animals tend to produce enough of so that it does not need to be included as a specific nutrient in their rations?**
 - A Vitamin D
 - *B Vitamin C**
 - C Vitamin A
 - D Vitamin E

4. **The removal of the testicles from a male animal is:**
 - A dehorning
 - *B castration**
 - C vaccination
 - D insemination

5. **Which species of livestock reaches puberty based on the season and not age?**
 - A Sheep
 - *B Goats**
 - C Cattle
 - D Swine

6. **The process of placing sperm in the female reproductive tract by some other means than natural mating is known as:**
 - A pregnancy testing
 - B embryo transfer
 - C estrus synchronization
 - *D artificial insemination**

7. **The first breed of beef cattle imported to the United States in the late 1700's was the:**
 - A Brahman
 - B Hereford
 - C Angus
 - *D Shorthorn**

8. **_____ is a measure of the degree of difference between the offspring of a specific bull and the offspring of the average bull of the breed in the trait being measured.**
 - *A EPD**
 - B OSB
 - C MPV
 - D SPF

9. The expected yield of a hog with a USDA quality grade of No. 1 is:
A 52 to 54.4%
B 57.4 to 60.3%
***C 60.4% or greater**
D 54.4 to 57.3%
10. Sheep are a major enterprise in the _____ area of the United States.
A southern
***B western**
C northern
D eastern
11. What is an infertile female calf born as a twin to a fertile male calf called?
***A Freemartin**
B Sex-limited
C Markhors
D Clone
12. Fat present in muscle tissue is known as:
A condition
B tallow
***C marbling**
D finish
13. Heifers most commonly reach puberty at the average age of:
A 18 months
B 12 months
***C 7 months**
D 4 months
14. An animal that has extremely straight hind legs is best described as being:
A sound
B cow-hocked
***C post-legged**
D sickle-hocked
15. Which fat-soluble vitamin is associated with bone development and calcium absorption?
A Vitamin A
B Vitamin E
C Vitamin K
***D Vitamin D**
16. Which amino acid listed is first limiting in swine rations?
***A lysine**
B glycine
C cystine
D proline

17. What do Hampshires, Polands, and Berkshires have in common?
A origin
B popularity
C ear shape
***D color**
18. How well an animal likes or accepts a feed is referred to as the:
A digestibility
B composition
***C palatability**
D balance
19. Anthrax is a disease caused by bacteria that may remain in the soil for _____ years or longer.
A 10
***B 40**
C 20
D 30
20. Which polled breed of cattle originated from horned cattle due to a genetic mutation?
A Red Poll
***B Polled Hereford**
C Red Angus
D Galloway
21. Diseases caused by a virus or bacteria are classed as:
A physiological
B morphological
C nutritional
***D pathogenic**
22. The rate or percentage of animals becoming pregnant.
A parturition
B breeding soundness
***C conception rate**
D hybrid vigor
23. The biggest problem of raising sheep is the loss caused by:
***A internal parasites**
B Blue tongue
C Overeating disease
D external parasites
24. A visual evaluation of the amount of muscle on a hog is best seen by looking at the _____ view of the hog.
A top
***B rear**
C front
D side

25. Which of the following vitamins is in the category of water-soluble?
A Vitamin D
***B Vitamin B**
C Vitamin E
D Vitamin A
26. According to USDA, the greatest expense in the production of livestock is:
A contract and hired labor
B livestock purchased
***C feed purchased**
D fuel and electricity
27. One common characteristic between Yorkshire, Landrace, and Chester Whites is:
A terminal qualities
***B color**
C maternal qualities
D ear shape
28. The class of sheep that are evaluated more on the quality of their fleece than other sheep are known as:
A Long-wool breeds
B Medium-wool breeds
***C Fine-wool breeds**
D Mutton breeds
29. Which trait has the highest heritability estimate in cattle?
***A post weaning rate of gain**
B number of young weaned
C weaning weight
D fertility
30. Which of the following breeds of swine is best on performance of litter size?
A Poland
B Berkshire
***C Landrace**
D Duroc
31. Which of the following breeds of cattle is NOT primarily white to gray in color?
A White Park
B Charolais
***C Limousin**
D Chianina
32. Bacterial disease that affects both sheep and goats when the animal has a wound. Symptoms include stiffness, rigid jaw, and inability to eat.
A Blue Tongue
***B Tetanus**
C Enterotoxemia
D Vibriosis

33. Swine dysentery is also known as:
*A **Bloody scours**
B White scours
C Clostridial diarrhea
D Vibronic scours
34. Archeology has found evidence that sheep have been domesticated for _____ years.
A 2000
B 1000
*C **6000**
D 250
35. Which disease affects the turbinate bones in swine?
A Leptospirosis
*B **Atropic Rhinitis**
C Actinobacillus Pleuropneumoniae
D Eperythrozoonosis
36. The period of time which an animal is pregnant is called:
A Estrus
B Ovulation
C Parturition
*D **Gestation**
37. Feed additives used to prevent disease and promote growth are:
A anthelmintics
*B **antibiotics**
C antioxidants
D hormones
38. An animal's central nervous system includes the brain and:
*A **spinal cord**
B autonomic nerves
C somatic nerves
D effector organ
39. The most common sheep identification system is:
A freeze branding
B ear notching
*C **ear tags**
D tattooing
40. The major objection of boar meat is the odor of the meat called boar taint. One compound causing boar taint is:
A Testosterone
B Progesterone
*C **Skatole**
D Sulfamethazine

41. What is a common disqualification in rules for registering animals in a breed association?
A weight
B size
***C color markings**
D eyes
42. Cattle can generally lose from 1 to 5 percent of their weight when transported. The
A sale weight
B shipping weight
***C shrinkage**
D fillback
43. Archaeological evidence from the Middle East indicates domestication of the pig occurred as early as _____ years ago.
A 1000
B 500
C 5000
***D 9000**
44. A _____ animal is one that is of a particular breed.
A outcrossed
***B purebred**
C crossbred
D linebred
45. The mating of animals of different family lines within the same breed is:
A crossbreeding
B inbreeding
***C outcrossing**
D linebreeding
46. Which part of the ruminant stomach is recognized as the true stomach?
***A Abomasum**
B Reticulum
C Rumen
D Omasum
47. The breed of cattle that was developed on the King Ranch in Texas and consists of 3/8 Brahman and 5/8 Shorthorn is called:
A Beefmaster
B Shorthorn
C Brangus
***D Santa Gertrudis**
48. The first American breed of beef cattle was the:
A Santa Gertrudis
B Angus
C Polled Hereford
***D Texas Longhorn**

49. **Fistulated cattle are use primarily for _____ studies and research.**
A health
B embryo
C breeding
***D nutrition**
50. **A method of animal identification that uses very low temperature to change pigment color of the skin is:**
A notching
***B freeze brand**
C hot brand
D tattoo
51. **Proteins produced by an animal's immune system in response to invasion by bacteria, viruses, or parasites are:**
A serums
***B antibodies**
C vaccines
D toxoids
52. **A market where cattle are sold by public bidding, with the animals going to the highest bidder is known as a(n):**
A internet market
***B auction market**
C electronic market
D contract market
53. **Brisket disease affects the _____ in cattle?**
***A heart**
B lungs
C stomach
D brain
54. **Which feed uses fermentation in order to increase palatability?**
A hay
***B silage**
C concentrates
D by-products
55. **Yearlings are feeder calves between one and two years old weighing about _____ pounds.**
A 100-250
***B 550-700**
C 400-550
D 250-400
56. **Fine Wool breeds of sheep include all of the following EXCEPT:**
A Delaine Merino
B Debouillet
***C Corriedale**
D Rambouillet

57. **Administering an medicinal agent to livestock that requires placement directly into a vein is called:**
*A **intravenous**
B subcutaneous
C intrarumen
D intramuscular
58. **Subcutaneous injections are given:**
*A **under the skin**
B in the muscle
C orally
D in the ear
59. **About _____ percent of total income from all livestock marketing in the United States comes from the beef industry?**
*A **38**
B 24
C 52
D 11
60. **Newborn animals receive immunity to diseases by drinking:**
*A **colostrum**
B sterile water
C fibrinogen
D vaccines
61. **What breed of cattle used in the United States came from Australia?**
A Salers
B Blonde d'Aquitaine
C Brangus
*D **Murray Grey**
62. **Which information is NOT typically required for the registration of individual hogs?**
A Ear notches
B Date farrowed
C Name of sire
*D **Number of teats**
63. **The reflex and response that an animal has at birth is:**
*A **instinct**
B conditioning
C intelligence
D reasoning
64. **Scrapie is a disease of both sheep and goats that affects the:**
A lungs
B skin
*C **brain**
D digestive tract

65. **EPD stands for:**
A express package delivery
***B expected progeny difference**
C extra production difference
D expected product differential
66. **Administering a medical agent to livestock that requires placement into the skin is a(n) _____ injection.**
***A intradermal**
B intramuscular
C intravenous
D intramammary
67. **A breed of cattle that originated in Scotland that has a smooth hair coat, black in color, polled, and is one of the most popular breeds in the United States today:**
A Gelbvieh
B Polled Hereford
***C Angus**
D Devon
68. **The average daily gain for growing cattle on full feed.**
***A 3 lb/day**
B 10 lb/day
C 5 lb/day
D 1 lb/day
69. **A chronic degenerative disease that affects the central nervous system of cattle (also called "Mad Cow Disease")**
A Infectious Bovine Rhinotracheitis
B Keratoconjunctivitis
C Bovine Respiratory Syncytial Virus
***D Bovine Spongiform Encephalopathy**
70. **External fat on a lamb carcass is measured between which two ribs?**
***A 12 & 13**
B 1 & 2
C 9 & 10
D 3 & 4
71. **What is the only breed of sheep raised for fur in the United States?**
A Dorset
B Merino
***C Karakul**
D Cheviot
72. **Which trait for swine has the lowest heritability estimate?**
***A Litter size**
B Percent ham
C Carcass Length
D Loin muscle area

73. The physical appearance of an animal is known as:
*A **phenotype**
B pedigree
C genotype
D performance
74. Which protein concentrate is limited to use by ruminants?
A meat scraps
B molasses
C soybean meal
*D **urea**
75. The Pork Promotion, Research and Consumer Information Act of 1985 established an assessment of _____ per \$100 value of pork sold in the United States
A 75 cents
B 60 cents
*C **40 cents**
D \$1.00
76. Which of the following breeds of cattle was originally red in color?
A Galloway
B Brangus
*C **Gelbvieh**
D Brown Swiss
77. One common characteristic between Hampshire, Yorkshire, and Berkshire swine is:
A color
*B **erect ears**
C maternal qualities
D terminal qualities
78. Estrus in cattle usually occurs every:
A 30 days
B 12 days
C 60 days
*D **21 days**
79. A permanent change in the genotype of an offspring from that of its parents.
*A **mutation**
B mitosis
C dominance
D heterosis
80. The most common classification of sheep is by:
A Origin
B Birth numbers
*C **Type of wool**
D Carcass type

81. Which breed of beef cattle imported from France was originally used as draft animals?
*A **Maine-Anjou**
B Chianina
C Brangus
D Hereford
82. The breed of swine which is white in color with erect ears and used extensively in commercial operations for the maternal characteristics is the:
A Landrace
B Berkshire
*C **Yorkshire**
D Chester White
83. The tube that carries air to an animal's lungs.
A esophagus
B turbinate
*C **trachea**
D epidermal
84. Cotswold sheep are classified as:
A Fine Wool
B Crossbred Wool
C Medium Wool
*D **Long Wool**
85. The leg and loin of a lamb are the primary wholesale meat cuts that come from the:
*A **hindsaddle**
B rack
C foresaddle
D chuck
86. Which species of livestock has a diploid number of 27 (pairs of chromosomes)?
*A **Sheep**
B Goats
C Cattle
D Swine
87. Fats and oils provide _____ times more energy than do carbohydrates,
A 10
B 5.5
*C **2.25**
D 100
88. Which breed of swine does not have a predominant red color?
A Duroc
*B **Poland China**
C Tamworth
D Hereford

89. Which breed of cattle is most popular in Europe?
A Limousin
B Shorthorn
***C Simmental**
D Maine-Anjou
90. The growth and development of animals prior to birth.
A embryo
B gestation
***C prenatal**
D placental
91. Which Medium Wool breed was developed in the United States?
***A Montadale**
B Southdown
C Hampshire
D Dorset
92. The age at which an animal reaches sexual maturity is:
A adolescence
B parturition
C heterosis
***D puberty**
93. The most serious health problem of sheep and goats is:
***A Internal parasites**
B Bacterial diseases
C External parasites
D Nutritional deficiencies
94. Which breed of swine developed in the United States originated in the state of New York / New Jersey?
A Hampshire
B Landrace
C Pietrain
***D Duroc**
95. Which exotic breed of cattle originated from Italy?
A Limousin
B Devon
C Simmental
***D Chianina**
96. The male bovine of any age that has not been castrated.
A Boar
***B Bull**
C Ram
D Buck

97. Which of the following minerals is a trace mineral?
A potassium
B calcium
C sodium
***D selenium**
98. Which state produces the most beef cattle?
***A Texas**
B California
C Kentucky
D Nebraska
99. A cattle producer that produces breeding stock including bulls and females for cow-calf operations is commonly called a:
***A seedstock/purebred breeder**
B feedyard manager
C stocker operator
D commercial cattleman
100. In 1985, a one dollar per head checkoff for every head of beef sold in the United
***A Beef Promotion and Research Act**
B Livestock Marketing Tax
C Beef Quality Assurance Act
D Packers and Stockyard Act
101. Solid floors in hog houses are usually made of _____.
A wood
***B concrete**
C earthen
D pea gravel
102. Many of the odor problems from confinement operations are related to the release of _____ from manure.
A sulfur
B methane
***C ammonia**
D carbon dioxide
103. Nutrients, which an animal can synthesize for growth and maintenance, are in a category called:
***A non-essential nutrients**
B minerals
C essential nutrients
D protein
104. The normal body temperature of cattle is:
A 104.6 oF
B 100.1 oF
***C 101.5 oF**
D 98.6 oF

105. The swine trait having the highest heritability estimate is:
A backfat thickness
***B carcass length**
C birthweight
D growth rate
106. Disease caused by an organism that mainly affects the lungs.
A leptospirosis
B brucellosis
C erysipelas
***D tuberculosis**
107. _____ is the practice of feeding a ration for ten days to two weeks before breeding.
A Culling
B Waiting
C Rationing
***D Flushing**
108. Feed that is provided to young animals as an extra ration and is fed in an area that is inaccessible to the mothers is called a:
***A creep feed**
B maintenance feed
C lactation ration
D finishing ration
109. The _____ breed of swine can be traced to the early 1700's?
A Poland China
B Duroc
C Hampshire
***D Berkshire**
110. A single stomach animal can synthesize _____ of the 22 required amino acids.
A 2
B 0
C 22
***D 12**
111. What is the most important nutrient in a swine ration?
A soybean meal
B corn
***C water**
D roughage
112. The first of the Continental breeds to be imported in the United States:
A Simmental
B Salers
***C Charolais**
D Limousin

113. The removal of all or part of the tail from sheep is referred to as:
A notching
B castration
C dehorning
***D docking**
114. Which of the following countries has the greatest number of hogs?
A USA
B Germany
***C China**
D Denmark
115. Calves younger than 3 months of age sold for slaughter are:
A kids
B cabritos
C baby beef
***D veal**
116. An impairment that affects the performance of the vital life functions.
***A disease**
B protozoa
C parasite
D metabolism
117. Milk fever is a nutritional disease affecting both sheep and goats during lactation due to a lack of _____ in the blood.
A iron
B selenium
C iodine
***D calcium**
118. The breed of sheep noted for producing a 200 to 250 percent lamb crop:
A Delaine Merino
B Southdown
C Leicester
***D Finnsheep**
119. When evaluating swine performance data, litter weights are adjusted to a standard of how many days?
***A 21 days**
B 15 days
C 28 days
D 12 days
120. When using ultrasound to evaluate breeding swine, the two measurements taken are backfat thickness and:
A marbling
***B loin-eye area**
C lean percent
D internal fat

121. Breeds of cattle that are used for both milk and meat production are considered to be:
- A terminal breeds
 - B continental breeds
 - *C dual-purpose breeds**
 - D maternal breeds
122. The majority of medium wool breeds of sheep originated in:
- A Scotland
 - B Australia
 - *C England**
 - D United States
123. The average feed conversion ratio for beef cattle on full feed is:
- A 3:1-4:1
 - *B 6:1-7:1**
 - C 2:1-3:1
 - D 10:1-12:1
124. Baby pigs require temperatures of _____ degrees F.
- A 50-60
 - B 70-80
 - C 60-70
 - *D 80-90**
125. Which trait in sheep has the lowest heritability estimate?
- *A feed efficiency**
 - B rib eye area
 - C mature weight
 - D yearling weight
126. Which of the following is water-soluble vitamin?
- A potassium
 - *B pantothenic acid**
 - C vitamin A
 - D selenium
127. Cattle infected with this disease often abort during the last half of pregnancy.
- *A Brucellosis**
 - B Enteritis
 - C Actinobacillosis
 - D Paratuberculosis
128. Which of the following traits is considered undesirable when judging market lambs?
- A harder handling
 - *B early maturing**
 - C greater size
 - D heavier muscled

129. Lamb prices vary throughout the year and reach a high during which time?
A December to February
B September to November
***C March to May**
D June to August
130. The record of the ancestors of a particular animal is recorded in its:
A genetic map
B performance record
C phenotype
***D pedigree**
131. Goat meat is marketed under the name:
A Veal
B Venison
***C Chevon**
D Mutton
132. Which breed of goat produces mohair?
***A Angora**
B Boer
C Toggenburg
D Nubian
133. Lambs are commonly weaned at about _____ months of age.
A four
B two
***C three**
D six
134. What is an animal resulting from the mating of two different breeds?
***A crossbred**
B feral
C inbred
D purebred
135. The gestation time for cattle is:
A 148 days
B 350 days
***C 283 days**
D 114 days
136. Which breed of sheep was developed at North Carolina State University?
A Southdown
B Hampshire
***C Polled Dorset**
D Suffolk

137. Feedstuffs such as hay and silage are classified as:
A proteins
B minerals
***C roughages**
D concentrates
138. The total protein contained in a feed is _____ protein.
A non-digestible
***B crude**
C plant
D digestible
139. Name the breed of cattle which the United States Congress appropriated money in 1927 because they were almost extinct.
***A Texas Longhorn**
B Beefmaster
C Hereford
D Angus
140. A medication sprayed directly into the animal's nostrils is called a _____ injection.
A subcutaneous
B intravenous
***C intranasal**
D intramuscular
141. Two factors that have a major influence on profitability in swine production are:
***A Number of pigs weaned per sow; feed efficiency**
B Breed; feed efficiency
C Breed; adaptability to environment
D Number of pigs weaned per sow; adaptability to environment
142. Which livestock product has the highest consumption rate in the United States?
A Lamb
***B Beef**
C Pork
D Goat
143. Which animals cannot synthesize all of the required amino acids?
A cattle
B herbivores
C sheep
***D swine**
144. The most important wholesale cut of lamb is:
A rib
***B leg**
C foreshank
D shoulder

145. Which trait in beef cattle has the highest heritability estimate?
A Yearling weight
***B Rib eye area**
C Weaning weight
D Carcass weight
146. Medications used to produce immunity in livestock that are derived from plasma and fibrinogen removed from blood are:
***A serums**
B bacterins
C antibiotics
D vaccines
147. Swine are typically identified for registration by the use of:
A Ear Tags
B Freeze Brand
***C Ear Notches**
D Tattoos
148. Approximately what percent of the market hogs sold in the United States are priced on the basis of carcass merit?
***A 70%**
B 90%
C 50%
D 30%
149. Which breed of cattle descended from Spanish Andalusian cattle brought over by Columbus on his second voyage?
A Santa Gertrudis
***B Texas Longhorn**
C Hereford
D Scotch Highland
150. Which state has greatest beef production?
A Iowa
B Oklahoma
C California
***D Nebraska**
151. Modern domestic cattle evolved from what single early ancestor?
***A Aurochs**
B *Bos indicus*
C Buffalo
D *Bos taurus*
152. The average dressing percentage of a steer grading choice is:
A 0.51
***B 0.62**
C 0.7
D 0.43

153. What area of livestock production is the major issue of animal rights organizations?
*A confinement
B reproduction
C health
D nutrition
154. Which of the following is NOT required on a feed tag?
*A price per CWT
B guaranteed analysis
C active drug ingredient
D ingredients
155. The largest compartment of the ruminant stomach for a mature grazing cow is called the:
A reticulum
B omasum
C abomasums
*D rumen
156. In swine, a male that has been castrated before reaching sexual maturity is called a:
A wether
B stag
C boar
*D barrow
157. Which state produces the most hogs?
*A Iowa
B Illinois
C Texas
D Oklahoma
158. Which breed of swine is considered the oldest?
A Yorkshire
B Chester White
C Hampshire
*D Berkshire
159. Helminths are of major economic importance to the livestock industry in regard to the management of:
A disease
B external parasites
*C internal parasites
D viruses
160. What is a free-roaming "wild" animal that was once domesticated called?
*A feral
B stag
C boar
D buck

161. A maintenance ration for beef cattle is primarily:
A Concentrates
B Carbohydrates
C Proteins
***D Roughages**
162. The Pietrain breed of swine originated in _____.
A Germany
B Denmark
***C Belgium**
D China
163. Beef cattle or sheep born without horns are commonly referred to as:
***A polled**
B hornless
C scurred
D bald
164. Tetanus is a _____ disease.
A nutritional
***B bacterial**
C viral
D fungal
165. What breed of sheep that has a distinctive white face originated in Scotland?
A Drysdale
B Corriedale
***C Cheviot**
D Suffolk
166. Cholera is a _____ disease.
A fungal
B bacterial
***C viral**
D nutritional
167. An essential or non-essential element or compound in a food or feed is a(n):
A organic
***B nutrient**
C mineral
D protein
168. The process of taking food nutrients through the intestinal wall is:
A regurgitation
B mastication
***C absorption**
D assimilation

169. Morphological defects in livestock are caused by:
- A pathogens
 - *B accidents**
 - C bacteria
 - D viruses
170. The most prevalent breed of sheep in the world is the:
- A Suffolk
 - B Hampshire
 - *C Merino**
 - D Columbia
171. Which country accounts for the highest percent of the world cattle population?
- *A India**
 - B USA
 - C Russia
 - D Australia
172. What trait of a hog refers to its ability to raise large litters of pigs?
- A terminal quality
 - *B maternal quality**
 - C conversion ratio
 - D yield
173. A system that is used for trading contracts for future delivery of cattle is known as:
- A auction market
 - *B futures market**
 - C order buying
 - D internet auction
174. Which species of livestock is most efficient into converting feed into energy and protein?
- A cattle
 - B sheep
 - C goats
 - *D swine**
175. The ability to initiate, sustain, and support reproduction.
- A gestation
 - B lactation
 - *C fertility**
 - D inbreeding
176. Which of the following minerals is categorized as a macro mineral?
- A Zinc
 - B Iodine
 - C Manganese
 - *D Calcium**

177. The most important factor when formulating a ration for livestock is:
- A size of the animal
 - *B total digestive nutrients**
 - C feed cost
 - D availability of feed
178. Feed additives used to control worms and other internal parasites are:
- *A Anthelmintics**
 - B Probiotics
 - C Coccidiostats
 - D Antimicrobials
179. Which Medium Wool breed of sheep has a white face?
- A Shropshire
 - B Suffolk
 - *C Dorset**
 - D Hampshire
180. Cattle are in a class of animals which consume only plant products known as:
- A carnivores
 - B omnivores
 - C non-ruminants
 - *D herbivores**
181. Which of the following breeds of cattle did not originate in Italy?
- A Chianina
 - *B Maine Anjou**
 - C Piedmontese
 - D Romagnola
182. The genetic makeup of an animal is called its:
- A phenotype
 - B dominance
 - *C genotype**
 - D recessiveness
183. Which common breed of swine was imported to the United States from Denmark?
- A Hereford
 - *B Landrace**
 - C Yorkshire
 - D Duroc
184. The normal body temperature of sheep and swine is:
- A Below 97 o F
 - B 100 o F
 - *C Above 102 o F**
 - D 98.6 oF

185. Pinkeye is a disease in cattle that is carried by _____.
- A worms
 - *B insects**
 - C mites
 - D rodents
186. The natural waviness of wool fiber is called:
- *A Crimp**
 - B Kemp
 - C Staple length
 - D Braid
187. The age of the beef animal and the amount of marbling in the carcass affect the
- A yield grade
 - *B quality grade**
 - C dressing percentage
 - D hot carcass weight
188. Organic compounds, which are the building blocks in the formation of proteins, are:
- A glycogens
 - B chromosomes
 - C fat-soluble vitamins
 - *D amino acids**
189. The expected yield of a hog with an USDA quality grade of No. 2 is:
- *A 57.4 to 60.3%**
 - B 54.5 to 57.3%
 - C 49.9 to 52.2%
 - D 52.3 to 54.4%
190. Which production trait in swine is not increased when crossing with a purebred sow?
- A Feed/gain ratio
 - B Days to 250 pounds
 - *C Conception rate**
 - D Litter size weaned
191. The use of liquid nitrogen for storage of semen and embryos.
- *A cryopreservation**
 - B hydroponics
 - C cloning
 - D genetic manipulation
192. Cattle that are generally between six months and one year old and are sold to people
- A veal calves
 - B packer cattle
 - *C feeder cattle**
 - D slaughter cattle

193. A condition caused by a lack of sugar in the diet:
A Parakeratosis
B SMEDI
C Pseudorabies
***D Hypoglycemia**
194. Amino acids are the building blocks of:
A sugars
B vitamins
C fats
***D protein**
195. Range production accounts for _____ percent of the total sheep production in the United States.
A 50
***B 70**
C 30
D 10
196. Vitamins that are not stored in the body and need to be consumed everyday are:
A Vitamins A,D,E, & K
B fat-soluble vitamins
C Selenium & Manganese
***D water soluble vitamins**
197. The use of living organisms or their products (livestock production) is also known as:
A animal rights
B animal welfare
C genetic engineering
***D biotechnology**
198. Pigs must be ear notched for _____, which is necessary for good record keeping.
***A identification**
B grouping
C sexing
D vaccination
199. The most popular breed of registered medium wool sheep in the United States is the:
***A Hampshire**
B Southdown
C Rambouillet
D Shropshire
200. The average length of gestation for goats is:
A 114 days
***B 150 days**
C 283 days
D 336 days

201. Joints in the skeleton of animals that allow free movement and have a fluid-filled cavity are called:
- A fibrous joints
 - *B diarthroses joints**
 - C amphiarthroses joints
 - D cartilaginous joints
202. Wheat bran and animal fat are feed concentrates that are classified as:
- A grains
 - B animal proteins
 - *C processing by-products**
 - D plant proteins
203. A nutritional problem in cattle characterized by swelling of the tissue that attaches the hoof to the foot and lameness of the animal.
- A colic
 - *B founder**
 - C anemia
 - D bloat
204. When animals band together in a herd or flock, the behavior is known as:
- A investigative
 - B allelomimetic
 - C agonistic
 - *D gregarious**
205. Which is the fast growing, meat-type goat with a brown head and white body and originally from South Africa?
- *A Boer**
 - B Angora
 - C Saanen
 - D Nubian
206. During cold weather, cattle feed should be increased by what percent for each degree of cold stress?
- A 0.05
 - B 0.1
 - *C 0.01**
 - D 0.03
207. Which hormone is responsible for the masculine appearance in animals?
- *A Testosterone**
 - B Progesterone
 - C Masterone
 - D Estrogen
208. Sheep and cattle both have multiple-compartment stomachs referred to as a(n):
- *A ruminant**
 - B colon
 - C intestine
 - D omasum

209. Which of the following wholesale cuts of beef has the highest value?
A brisket
B chuck
C shank
***D rib**
210. Most swine purebred associations require several items of information for the registration of individual hogs. Which information is NOT required?
A Number of pigs farrowed
B Ear notches
***C Weaning Weight**
D Date farrowed
211. Angus and Hereford cattle originated from the species:
***A Bos taurus**
B Bos indicus
C Bull durham
D Tarentaise
212. Which cattle problem is associated with nutritional health?
A Pinkeye
***B Bloat**
C Ringworm
D Warts
213. _____ is a disease that affects the tissue of the foot in sheep.
A Impaction
B Scrapie
***C Foot Rot**
D Tetanus
214. The weight of a hot beef carcass compared to the live weight of the animal is referred to as:
A quality
***B yield**
C balance
D carcass merit
215. Which agency regulates the use of feed additives in the United States?
A Food and Drug Administration (FDA)
B Animal Health and Production Divison (AHPD)
***C United States Department of Agriculture(USDA)**
D Federal Register (FR)
216. The average age of puberty in sheep is:
***A 6 months**
B 18 months
C 12 months
D 3 months

217. Feed efficiency can be increased by _____ grain because less is wasted.
- A powdering
 - B wetting
 - *C pelleting**
 - D grinding
218. _____ are growths on the skin of cattle caused by a virus.
- A Trichomoniasis
 - B Ringworms
 - C Edemas
 - *D Warts**
219. Which breed of white colored swine originated in Pennsylvania?
- A Large Whites
 - *B Chester White**
 - C Yorkshire
 - D American Landrace
220. The amount of fat cover on a market steer is referred to as:
- A carcass merit
 - B marbling
 - *C finish**
 - D fleshing
221. Beef cattle categorized as American breeds have what breed as a genetic base?
- A Hereford
 - B Shorthorn
 - C Angus
 - *D Brahman**
222. A complex protein produced by living cells that causes changes in other substances in the body without being changed itself and without becoming a part of the product is a(n):
- A lipid
 - *B enzyme**
 - C vitamin
 - D steroid
223. Beef Quality Assurance protocol suggests the proper intramuscular injection site for cattle is the:
- *A Neck**
 - B Hind quarter
 - C Shoulder
 - D Rump
224. What breed of hair sheep originated in Texas?
- A Rambouillet
 - B Rabo Largo
 - *C Barbado**
 - D Suffolk

225. Which breed of medium wool sheep has the characteristics of white ears, face, nose, and legs?
A Hampshire
B Southdown
C Shropshire
***D Dorset**
226. Which of the following countries produces the most sheep?
A England
B USA
***C Australia**
D Scotland
227. The secretion and production of milk in sheep, cattle and swine is known as:
A anestrus
***B lactation**
C fertilization
D ovulation
228. The degree to which the crossbred offspring out performs its purebred parents is:
A high performance
B phenotype
C ratio condition
***D hybrid vigor**
229. What month of the year is the price of slaughter hogs the highest on average?
A October
B March
C December
***D July**
230. Ruminant animals can synthesize _____ of the 22 required amino acids.
A 10
B 18
***C 22**
D 0
231. The length of the estrous cycle for a ewe is:
A 72 hours
B 21 days
C 14 days
***D 17 days**
232. What hormone is produced primarily by the ovaries in female animals?
A infundibulum
B testosterone
***C estrogen**
D globulin

233. Rations formulated to keep an animal at its current weight and size is a _____ ration.
- A gestation
 - B weaning
 - C finishing
 - *D maintenance**
234. A selective form of breeding in which the sire and dam are related which some refer to as a mild form of inbreeding is called:
- A terminal
 - *B linebreeding**
 - C outcrossing
 - D crossbreeding
235. The majority of composite breeds of cattle in the United States use what breed as a foundation?
- A Polled Hereford
 - B Charolais
 - *C Brahman**
 - D Brown Swiss
236. When evaluating sheep, the term that refers to ruggedness and stamina is:
- A condition
 - *B constitution**
 - C character
 - D balance
237. The critical stage of production in livestock when giving birth to their offspring is:
- A palpation
 - *B parturition**
 - C gestation
 - D pregnancy
238. Which of the following elements is not a component of a carbohydrate?
- A Oxygen
 - *B Nitrogen**
 - C Carbon
 - D Hydrogen
239. The first milk produced by a cow after giving birth is known as:
- A lactose
 - B buttermilk
 - *C colostrum**
 - D skim milk
240. A disease that affects cattle and sheep with symptoms of lameness, followed by depression and fever, followed by swelling in the muscles of the hip, shoulder, chest. Back, and neck, with sudden death within 3 days of the onset of the symptoms is:
- *A blackleg**
 - B leptospirosis
 - C pneumonia
 - D distemper

241. A nutritional problem characterized by a swollen abdomen on the left side, labored breathing, profuse salivation, groaning, lack of appetite, and stiffness.
- A colic
 - B founder
 - C anemia
 - *D bloat**
242. More than one-half of all the crossbred sheep in the United States carry some percentage of the particular breed.
- *A Rambouillet**
 - B Merino
 - C Dorset
 - D Columbia
243. Swine are in a class of animals that consume both plants and meat known as:
- A herbivores
 - B carnivores
 - *C omnivores**
 - D ruminants
244. Meat provides about what percent of the animal protein consumed in the world?
- A 0.55
 - B 0.9
 - C 0.1
 - *D 0.35**
245. An objectionable inherited defect in swine known as a whorl is actually a(n) :
- *A hair disturbance**
 - B defective color
 - C inverted teat
 - D extra dewclaw
246. Limousin, Charolais, and Maine-Anjou cattle are important breeds used in U.S. beef production that all originated from:
- A England
 - B Italy
 - C Scotland
 - *D France**
247. A male sheep castrated before reaching sexual maturity is called a:
- A ram
 - B mutton
 - *C wether**
 - D buck
248. Which of the following feeds is highest in total digestible nutrients (TDN)?
- *A corn**
 - B sudangrass
 - C silage
 - D coastal Bermuda

249. The process of preparing calves for the stress of being moved into the feedlot is called:
A stockering
B stretching
C finishing
***D preconditioning**
250. In comparing breed performance for litter size in swine, which breed has the highest litter size ratio?
A Chester White
B Hampshire
C Duroc
***D Landrace**
251. Which breed of sheep has the strongest flocking instinct?
A Leicester
***B Rambouillet**
C Shropshire
D Suffolk
252. Which of the following medium wool breeds of sheep are solid white in color?
A Southdown
***B Dorset**
C Oxford
D Shropshire
253. The testes produce sperm cells and the male sex hormone:
A estrogen
***B testosterone**
C infundibulum
D progesterone
254. The estrous cycle in swine occurs:
***A every 21 days**
B twice per year
C bi-monthly
D weekly
255. The length of gestation for swine is an average of how many days?
A 148 days
B 283 days
C 151 days
***D 114 days**
256. A method of animal identification that is a puncture in the skin of numbers or letters is known as:
***A tattoo**
B freeze brand
C hot brand
D eartag

257. Animals that through selection and breeding have come to resemble one another and pass those traits uniformly to their offspring are defined as:
- A a hybrid
 - B progeny
 - *C a breed**
 - D genetics
258. Accelerated lambing is a system that produces _____ lamb crops in two years.
- A four
 - B one
 - *C three**
 - D two
259. The recommended protein percent of a grower ration for swine from weaning to 75 pounds is:
- A 0.19
 - B 0.12
 - C 0.22
 - *D 0.16**
260. Which breed of beef cattle has been the leader on total number registered since 1970?
- A Hereford
 - B Simmental
 - C Charolais
 - *D Angus**
261. A disease carried by insects that affect the eyes of cattle is:
- A leptospirosis
 - B brucellosis
 - C anthrax
 - *D pinkeye**
262. The amount of ammoniacal nitrogen in a feed multiplied by 6.25 is the _____ content of a feed.
- A fiber
 - *B crude protein**
 - C fat
 - D vitamins
263. Which major swine breed originated in England, with the major development of the breed occurring in Kentucky? Originally known as the Thin Rind.
- A Chester White
 - B Poland China
 - *C Hampshire**
 - D Duroc
264. The state having the highest population of sheep and lambs is:
- A Wyoming
 - B Colorado
 - *C Texas**
 - D California

265. The feed component containing the most easily digested carbohydrates is the:
A amino acids
B minerals
***C nitrogen free extract**
D crude fiber
266. Diseases present in the animal's body at levels too low to cause visible effects are:
***A subclinical**
B probiosis
C chemobiotics
D subtherapeutic
267. Feed additives in swine rations that control internal parasites are:
A amino acids
B vitamins
C antibiotics
***D anthelmintics**
268. Suffolk sheep ancestry goes back to what breed of sheep?
A Merino
B Dorset
C Rambouillet
***D Southdown**
269. Cattle have how many pairs of chromosomes?
A 60
***B 30**
C 24
D 16
270. Vitamins that are stored in the body and need not be consumed everyday are:
A B complex vitamins
B selenium & manganese
***C fat soluble**
D water soluble
271. What is the average normal temperature of healthy swine in degrees Fahrenheit?
***A 102.6**
B 98.6
C 104.1
D 100.4
272. In a swine carcass, the loin is about _____ percent of the total carcass.
A 0.3
B 0.4
***C 0.2**
D 0.1

273. What feedstuff contributes most of the carbohydrates in swine rations?

- A oats
- B soybean meal
- C alfalfa meal
- *D corn**

274. The most common parasites affecting beef cattle are:

- A ticks
- *B flies**
- C roundworms
- D liver flukes

275. The breeds of cattle with origin in Europe such as Charolais, Simmental, and Limousin are usually referred to as:

- *A Continental breeds**
- B British breeds
- C Commercial breeds
- D Maternal breeds