

THE FOLLOWING QUESTIONS WILL BE USED AS A RESOURCE FOR THE VIGO COUNTY SKILLATHON CONTEST.

All questions for the contest will be selected from this resource. The junior and intermediate division will have 40 questions. Seniors will have 50 questions.

1. **Proteins produced by an animal's immune system in response to invasion by bacteria, viruses, or parasites are:**
 - A vaccines
 - B serums
 - C toxoids
 - *D antibodies**

 2. **True or false, bacteria will stop growing at refrigerated temperatures.**
 - A True
 - *B False**

 3. **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 Tounge
 - B Vibriosis
 - C Enterotoxemia
 - *D Tetanus**

 4. **True or False, meat varies in tenderness based on the muscle it is from?**
 - *A True**
 - B False

 5. **True or False, meat protein contains all 9 essential amino acids?**
 - *A True**
 - B False

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

 7. **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 Polled Hereford
 - *B Angus**
 - C Gelbvieh
 - D Devon
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8. The leg and loin of a lamb are the primary wholesale meat cuts that come from the:
- A rack
 - B foresaddle
 - C chuck
 - *D hindsaddle**
9. Which country accounts for the highest percent of the world cattle population?
- A Russia
 - *B India**
 - C Australia
 - D USA
10. What does the acronym, USDA stand for?
- A United States Development of Agriculture
 - *B United States Department of Agriculture**
 - C United States Department of Animals
 - D United States Development Standards
11. The process of taking food nutrients through the intestinal wall is:
- A assimilation
 - B regurgitation
 - C mastication
 - *D absorption**
12. What governmental agency requires and oversees meat labeling?
- *A Food Safety and Inspection Service (FSIS)**
 - B Food and Drug Administration (FDA)
 - C Livestock and Poultry Program (L&P)
 - D Agricultural Marketing Services (AMS)
13. Which breed of medium wool sheep has the characteristics of white ears, face, nose, and legs?
- *A Dorset**
 - B Hampshire
 - C Southdown
 - D Shropshire
14. What does A.R.B.A. stand for?
- *A American Rabbit Breeders Association**
 - B Association of Rabbit Breeders of America
 - C Animal Rabbit Breeds Association
 - D All Rabbit Breeders of America

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15. The _____ breed of swine can be traced to the early 1700's?
- *A **Berkshire**
 - B Poland China
 - C Duroc
 - D Hampshire
16. Beef cattle categorized as American breeds have what breed as a genetic base?
- *A **Brahman**
 - B Shorthorn
 - C Hereford
 - D Angus
17. 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 Brangus
 - B Beefmaster
 - *C **Santa Gertrudis**
 - D Shorthorn
18. The first American breed of beef cattle was the:
- *A **Texas Longhorn**
 - B Angus
 - C Santa Gertrudis
 - D Polled Hereford
19. One common characteristic between Yorkshire, Landrace, and Chester Whites is:
- A maternal qualities
 - B terminal qualities
 - C ear shape
 - *D **color**
20. Sheep are a major enterprise in the _____ area of the United States.
- *A **western**
 - B eastern
 - C northern
 - D southern
21. A _____ is a person who works on horses' feet.
- A Jockey
 - B Hazer
 - *C **Farrier**
 - D Heeler

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22. Ruminant animals can synthesize _____ of the 22 required amino acids.
- A 0
 - B 10
 - *C 22**
 - D 18
23. The most popular breed of registered medium wool sheep in the United States is the:
- A Shropshire
 - *B Hampshire**
 - C Southdown
 - D Rambouillet
24. The Pietrain breed of swine originated in _____.
- *A Belgium**
 - B Germany
 - C Denmark
 - D China
25. The breeds of cattle with origin in Europe such as Charolais, Simmental, and Limousin are usually referred to as:
- *A Continental breeds**
 - B Maternal breeds
 - C Commercial breeds
 - D British breeds
26. What is the most common cause of foodborne illness?
- A Unsanitary harvest facilities
 - *B Mishandling of food**
 - C Lapse in HACCP documentation
 - D Unhealthy live animal prior to harvest
27. According to USDA, the greatest expense in the production of livestock is:
- A livestock purchased
 - B fuel and electricity
 - C contract and hired labor
 - *D feed purchased**
28. Feed additives in swine rations that control internal parasites are:
- A antibiotics
 - B vitamins
 - C amino acids
 - *D anthelmintics**

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29. What feedstuff contributes most of the carbohydrates in swine rations?
- *A corn
 - B alfalfa meal
 - C oats
 - D soybean meal
30. Which breed of beef cattle has been the leader on total number registered since 1970?
- A Charolais
 - B Simmental
 - *C Angus
 - D Hereford
31. Fat present in muscle tissue is known as:
- A tallow
 - B condition
 - C finish
 - *D marbling
32. 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
33. Which breed of cattle descended from Spanish Andalusian cattle brought over by Columbus on his second voyage?
- A Scotch Highland
 - B Hereford
 - *C Texas Longhorn
 - D Santa Gertrudis
34. A nutritional problem characterized by a swollen abdomen on the left side, labored breathing, profuse salivation, groaning, lack of appetite, and stiffness.
- A anemia
 - B colic
 - C founder
 - *D bloat
35. Amino acids are the building blocks of:
- *A protein
 - B vitamins
 - C fats
 - D sugars
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36. A _____ animal is one that is of a particular breed.
- A linebred
 - B crossbred
 - *C purebred**
 - D outcrossed
37. Which state has greatest feedlot beef cattle production?
- A Oklahoma
 - *B Nebraska**
 - C Iowa
 - D California
38. The use of living organisms or their products (livestock production) is also known as:
- *A biotechnology**
 - B animal welfare
 - C animal rights
 - D genetic engineering
39. Estrus in cattle usually occurs every:
- A 60 days
 - B 30 days
 - C 12 days
 - *D 21 days**
40. 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 leptospirosis
 - B distemper
 - *C blackleg**
 - D pneumonia
41. The length of the estrous cycle for a ewe is:
- A 21 days
 - *B 17 days**
 - C 72 hours
 - D 14 days
42. Which Medium Wool breed of sheep has a white face?
- A Hampshire
 - B Shropshire
 - *C Dorset**
 - D Suffolk

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43. One common characteristic between Hampshire, Yorkshire, and Berkshire swine is:
- *A erect ears
 - B terminal qualities
 - C maternal qualities
 - D color
44. Which common breed of swine was imported to the United States from Denmark?
- A Duroc
 - B Yorkshire
 - *C Landrace
 - D Hereford
45. Baby pigs require temperatures of _____ degrees F.
- A 50-60
 - B 60-70
 - C 70-80
 - *D 80-90
46. The most serious health problem of sheep and goats is:
- A Bacterial diseases
 - B Nutritional deficiencies
 - *C Internal parasites
 - D External parasites
47. Solid floors in hog houses are usually made of _____.
- A wood
 - B earthen
 - C pea gravel
 - *D concrete
48. Helminths are of major economic importance to the livestock industry in regard to the management of:
- A disease
 - *B internal parasites
 - C external parasites
 - D viruses
49. The first breed of beef cattle imported to the United States in the late 1700's was the:
- A Brahman
 - *B Shorthorn
 - C Hereford
 - D Angus
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50. Horses are measured for height from the ground to the top of the withers in "Hands". A Hand is equivalent to _____ inches.

- A 2
- B 3
- *C 4**
- D 5

51. Archaeological evidence from the Middle East indicates domestication of the pig occurred as early as _____ years ago.

- *A 9000**
- B 5000
- C 500
- D 1000

52. The genetic makeup of an animal is called its:

- A dominance
- *B genotype**
- C recessiveness
- D phenotype

53. Which breed of goat produces mohair?

- *A Angora**
- B Boer
- C Nubian
- D Toggenburg

54. 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 a breed**
- C progeny
- D genetics

55. The largest compartment of the ruminant stomach for a mature grazing cow is called the:

- A reticulum
- *B rumen**
- C abomasums
- D omasum

56. Feed additives used to control worms and other internal parasites are:

- A Antimicrobials
- B Probiotics
- C Coccidiostats
- *D Anthelmintics**

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57. Archeology has found evidence that sheep have been domesticated for _____ years.
- A 2000
 - B 250
 - C 1000
 - *D 6000**
58. Fats and oils provide _____ times more energy than do carbohydrates,
- *A 2.25**
 - B 10
 - C 5.5
 - D 100
59. Which major swine breed originated in England, with the major development of the breed occurring in Kentucky? Originally known as the Thin Rind.
- A Poland China
 - *B Hampshire**
 - C Duroc
 - D Chester White
60. In horses, the _____ is a fast, two-beat, diagonal gait, where the opposite front feet and hind feet leave and strike the ground at the same time.
- A Pace
 - *B Trot**
 - C Rack
 - D Amble
61. An animal's central nervous system includes the brain and:
- A effector organ
 - *B spinal cord**
 - C somatic nerves
 - D autonomic nerves
62. Which part of the ruminant stomach is recognized as the true stomach?
- A Rumen
 - B Reticulum
 - C Omasum
 - *D Abomasum**
63. What is a free-roaming "wild" animal that was once domesticated called?
- A buck
 - B stag
 - C boar
 - *D feral**

64. Yearlings are feeder calves between one and two years old weighing about _____ pounds.

- A 400-550
- B 100-250
- C 250-400
- *D 550-700**

65. _____ hay has long been considered the standard hay for feeding horses.

- A Oat
- *B Timothy**
- C Bermuda
- D Orchard Grass

66. 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 Berkshire
- B Chester White
- C Landrace
- *D Yorkshire**

67. 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 A
- *B Vitamin C**
- C Vitamin E
- D Vitamin D

68. In order to be classified as ponies, they must measure under _____ hands.

- *A 14.2**
- B 12.2
- C 13
- D 12

69. How is the yolk of a day-range or free-range bird different from the yolk of a cage raised hen?

- *A The yolks will be darker color**
- B The yolks will be lighter color
- C The yolks will be larger in size
- D There will be no difference

70. Which species of livestock reaches puberty based on the season and not age?

- A Swine
- B Sheep
- C Cattle
- *D Goats**

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71. What do Hampshires, Polands, and Berkshires have in common?
- *A color
 - B origin
 - C popularity
 - D ear shape
72. The presence of visible blood cells during candling indicates that you are looking at what type of egg:
- A An infertile egg
 - B An embryo that died early in incubation
 - *C A healthy embryo
 - D Not enough information given
73. 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
74. A method of animal identification that uses very low temperature to change pigment color of the skin is:
- A tattoo
 - *B freeze brand
 - C notching
 - D hot brand
75. What is the standard term for giving birth to a litter of rabbits?
- A Hatching
 - *B Kindling
 - C Farrowing
 - D Whelping
76. When evaluating swine performance data, litter weights are adjusted to a standard of how many days?
- A 12 days
 - *B 21 days
 - C 15 days
 - D 28 days
77. Which breed of sheep was developed at North Carolina State University?
- A Suffolk
 - B Hampshire
 - *C Polled Dorset
 - D Southdown
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78. Diseases caused by a virus or bacteria are classed as:

- *A pathogenic
- B morphological
- C physiological
- D nutritional

79. Cholera is a _____ disease.

- A nutritional
- *B viral
- C fungal
- D bacterial

80. _____ is a disease that affects the tissue of the foot in sheep.

- *A Foot Rot
- B Scrapie
- C Tetanus
- D Impaction

81. Newborn animals receive immunity to diseases by drinking:

- A sterile water
- B fibrinogen
- C vaccines
- *D colostrum

82. The period of time which an animal is pregnant is called:

- A Ovulation
- *B Gestation
- C Estrus
- D Parturition

83. Range production accounts for _____ percent of the total sheep production in the United States.

- A 30
- *B 70
- C 10
- D 50

84. Which term refers to a rabbit show category for breeds having an ideal adult weight of 9 pounds and over?

- A Four-Class
- B Heavyweight Class
- *C Six-Class
- D Meat Class

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85. The average daily gain for growing cattle on full feed.
- A 1 lb/day
 - B 10 lb/day
 - C 5 lb/day
 - *D 3 lb/day**
86. A male sheep castrated before reaching sexual maturity is called a:
- A ram
 - B mutton
 - C buck
 - *D wether**
87. The majority of composite breeds of cattle in the United States use what breed as a foundation?
- A Brown Swiss
 - *B Brahman**
 - C Charolais
 - D Polled Hereford
88. The most important factor when formulating a ration for livestock is:
- A feed cost
 - B size of the animal
 - *C total digestive nutrients**
 - D availability of feed
89. A cattle producer that produces breeding stock including bulls and females for cow-calf operations is commonly called a:
- A commercial cattleman
 - *B seedstock/purebred breeder**
 - C stocker operator
 - D feedyard manager
90. What is the only breed of sheep raised for fur in the United States?
- A Merino
 - B Dorset
 - *C Karakul**
 - D Cheviot
91. What is a cockeral?
- A Parent bird
 - B Production Level Female
 - *C Production Level Male**
 - D An automatic cull
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92. Which production trait in swine is not increased when crossing with a purebred sow?
- *A Conception rate
 - B Days to 250 pounds
 - C Feed/gain ratio
 - D Litter size weaned
93. Which agency regulates the use of feed additives in the United States?
- A Animal Health and Production Division (AHPD)
 - B Federal Register (FR)
 - C Food and Drug Administration (FDA)
 - *D United States Department of Agriculture(USDA)
94. Sheep and cattle both have multiple-compartment stomachs referred to as a(n):
- A colon
 - B intestine
 - *C ruminant
 - D omasum
95. A single stomach animal can synthesize _____ of the 22 required amino acids.
- *A 12
 - B 2
 - C 0
 - D 22
96. What breed of hair sheep originated in Texas?
- A Rambouillet
 - B Suffolk
 - C Rabo Largo
 - *D Barbado
97. The major objection of boar meat is the odor of the meat called boar taint. One compound causing boar taint is:
- A Progesterone
 - B Testosterone
 - *C Skatole
 - D Sulfamethazine
98. In studying the parts of the horse, the Chestnuts are found _____.
- A Only on males
 - *B On the leg
 - C On the head
 - D On the sole of the foot
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99. The sudden death of heavily muscled hogs is referred to as:
- A Porcine Cardiac Complex
 - B Mycoplasmal Pneumonia
 - C Porcine Circivirus
 - *D Porcine Stress Syndrome**
100. What hormone is produced primarily by the ovaries in female animals?
- A globulin
 - B infundibulum
 - C testosterone
 - *D estrogen**
101. Organic compounds, which are the building blocks in the formation of proteins, are:
- A chromosomes
 - B fat-soluble vitamins
 - *C amino acids**
 - D glycogens
102. The weight of a hot beef carcass compared to the live weight of the animal is referred to as:
- A quality
 - B balance
 - C carcass merit
 - *D yield**
103. What is the primary purpose of an ear tattoo in domestic rabbits?
- A Medication dosing
 - *B Identification**
 - C Age determination
 - D Sexing
104. When evaluating sheep, the term that refers to ruggedness and stamina is:
- A condition
 - B character
 - C balance
 - *D constitution**
105. Pinkeye is a disease in cattle that is carried by _____.
- A rodents
 - B mites
 - *C insects**
 - D worms

106. Feedstuffs such as hay and silage are classified as:

- *A roughages
- B proteins
- C concentrates
- D minerals

107. Beef cattle or sheep born without horns are commonly referred to as:

- A bald
- B hornless
- *C polled
- D scurred

108. Which trait in beef cattle has the highest heritability estimate?

- A Weaning weight
- B Carcass weight
- *C Rib eye area
- D Yearling weight

109. A good leghorn hen will produce _____ eggs per year

- A 75-100
- B 900-1000
- *C 285-310
- D 205-260

110. The process of preparing calves for the stress of being moved into the feedlot is called:

- A stretching
- B finishing
- *C preconditioning
- D stockering

111. Administering an medicinal agent to livestock that requires placement directly into a vein is called:

- *A intravenous
- B intramuscular
- C subcutaneous
- D intrarumen

112. Feed additives used to prevent disease and promote growth are:

- *A antibiotics
- B hormones
- C antioxidants
- D anthelmintics

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113. When animals band together in a herd or flock, the behavior is known as:
- A allelomimetic
 - B agonistic
 - *C gregarious**
 - D investigative
114. Nutrients, which an animal can synthesize for growth and maintenance, are in a category called:
- A minerals
 - B protein
 - C essential nutrients
 - *D non-essential nutrients**
115. A chronic degenerative disease that affects the central nervous system of cattle (also called "Mad Cow Disease")
- A Bovine Respiratory Syncytial Virus
 - B Keratoconjunctivitis
 - *C Bovine Spongiform Encephalopathy**
 - D Infectious Bovine Rhinotracheitis
116. The removal of the testicles from a male animal is:
- A dehorning
 - B insemination
 - *C castration**
 - D vaccination
117. A cantle is _____.
- A. a slow three-beat gait
 - B. called a lope in Western riding
 - *C. part of the saddle behind the rider**
 - D. both A and B
118. Swine are in a class of animals that consume both plants and meat known as:
- A ruminants
 - B carnivores
 - C herbivores
 - *D omnivores**
119. More than one-half of all the crossbred sheep in the United States carry some percentage of the particular breed.
- A Columbia
 - B Dorset
 - C Merino
 - *D Rambouillet**
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120. The most important wholesale cut of lamb is:

- A shoulder
- *B leg**
- C foreshank
- D rib

121. The growth and development of animals prior to birth.

- A placental
- B embryo
- *C prenatal**
- D gestation

122. What breed of sheep that has a distinctive white face originated in Scotland?

- A Corriedale
- *B Cheviot**
- C Drysdale
- D Suffolk

123. The reflex and response that an animal has at birth is:

- A intelligence
- B reasoning
- *C instinct**
- D conditioning

124. 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 anemia
- *C founder**
- D bloat

125. Which state produces the most hogs?

- *A Iowa**
- B Texas
- C Illinois
- D Oklahoma

126. The age at which an animal reaches sexual maturity is:

- A adolescence
- B parturition
- C heterosis
- *D puberty**

127. In the fowl, the lungs are connected to large, thin-walled

- A viscera.
- B air cells.
- *C air sacs.**
- D pulmonic reservoirs/pulmonary cavities

128. An impairment that affects the performance of the vital life functions.

- A protozoa
- B parasite
- *C disease**
- D metabolism

129. 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 side
- D front

130. Accelerated lambing is a system that produces _____ lamb crops in two years.

- *A three**
- B one
- C four
- D two

131. Subcutaneous injections are given:

- A orally
- B in the muscle
- C in the ear
- *D under the skin**

132. Pigs must be ear notched for _____, which is necessary for good record keeping.

- A vaccination
- B sexing
- C grouping
- *D identification**

133. Cattle are in a class of animals which consume only plant products known as:

- A carnivores
- B omnivores
- C non-ruminants
- *D herbivores**

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134. **Wheat bran and animal fat are feed concentrates that are classified as:**
- A animal proteins
 - B plant proteins
 - *C processing by-products**
 - D grains
135. **The average dressing percentage of a steer grading choice is:**
- A 0.7
 - B 0.43
 - *C 0.62**
 - D 0.51
136. **Many of the odor problems from confinement operations are related to the release of _____ from manure.**
- A carbon dioxide
 - B sulfur
 - *C ammonia**
 - D methane
137. **Which state has the greatest total number of beef cattle?**
- *A Texas**
 - B Nebraska
 - C California
 - D Kentucky
138. **Milk fever is a nutritional disease affecting both sheep and goats during lactation due to a lack of _____ in the blood.**
- A iron
 - *B calcium**
 - C iodine
 - D selenium
139. **The age of the beef animal and the amount of marbling in the carcass affect the**
- A yield grade
 - *B quality grade**
 - C hot carcass weight
 - D dressing percentage
140. **The mating of animals of different family lines within the same breed is:**
- A inbreeding
 - B crossbreeding
 - C linebreeding
 - *D outcrossing**
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141. What trait of a hog refers to its ability to raise large litters of pigs?
- *A maternal quality
 - B conversion ratio
 - C terminal quality
 - D yield
142. 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 Packers and Stockyard Act
 - D Beef Quality Assurance Act
143. What term refers to a female rabbit?
- A Buck
 - *B Doe
 - C Kit
 - D Litter
144. What breed of cattle used in the United States came from Australia?
- *A Murray Grey
 - B Salers
 - C Brangus
 - D Blonde d'Aquitaine
145. Which breed of beef cattle imported from France was originally used as draft animals?
- *A Maine-Anjou
 - B Brangus
 - C Hereford
 - D Chianina
146. What is the most important nutrient in a swine ration?
- A corn
 - B roughage
 - C soybean meal
 - *D water
147. How well an animal likes or accepts a feed is referred to as the:
- A balance
 - *B palatability
 - C composition
 - D digestibility

148. Which species of livestock has a diploid number of 27 (pairs of chromosomes)?

- A Cattle
- B Swine
- *C Sheep**
- D Goats

149. How many total teeth does a rabbit have?

- A 24
- B 26
- *C 28**
- D 32

150. Poultry breast meat is white in color because of low levels of _____ pigment.

- *A myoglobin**
- B melanin
- C carotenoid
- D melanin

151. Which protein concentrate is limited to use by ruminants?

- A meat scraps
- B soybean meal
- *C urea**
- D molasses

152. When using ultrasound to evaluate breeding swine, the two measurements taken are backfat thickness and:

- A lean percent
- B marbling
- C internal fat
- *D loin-eye area**