

2016 Reno County Ag Challenge of Champions

Friday, July 22, 2016

Name _____ Age _____

4-H Club/FFA Chapter _____

RULES:

1. A county extension agent or FFA Instructor must certify each contestant as a Reno county student.
2. The superintendent and committee of the contest shall be in charge of the contest. They shall have the authority for interpretation of the rules.
3. No contestants will be allowed to have books or notes during the contest.
4. While the contest is in session, there shall be no communication between contestants.

GOOD LUCK!!!

2016 Ag Challenge of Champions Written Test

Multiple Choice: (Circle the letter of the correct answer)

Agricultural/Livestock Industry

- The record of the ancestors of a particular animal is recorded in its:
 - performance record
 - pedigree**
 - phenotype
 - genetic map
- One common characteristic between Hampshire, Yorkshire and Berkshire swine is:
 - color
 - maternal qualities
 - erect ears**
 - terminal qualities
- Breeds of cattle that are used for both milk and meat production are considered to be:
 - maternal breeds
 - terminal breeds
 - dual-purpose breeds**
 - continental breeds
- Beef cattle or sheep born without horns are commonly referred to as:
 - hornless
 - polled**
 - scurred
 - bald
- One common characteristic between Yorkshire, Landrace and Chester White swine is:
 - maternal qualities
 - terminal qualities
 - ear shape
 - color**
- What is an animal resulting from the mating of two different breeds?
 - purebred
 - inbred
 - crossbred**
 - feral
- Animals that through selection and breeding have come to resemble one another and pass traits uniformly to their offspring are defined as:
 - a breed**
 - a hybrid
 - a progeny
 - genetics

8. What is the basic energy feed used in hog rations?
- soybean meal
 - alfalfa meal
 - oats
 - corn**
9. Sheep rations typically consists of 80 to 90 percent:
- corn
 - roughage**
 - concentrate
 - sorghum
10. 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:
- lactation ration
 - finishing ration
 - creep feed**
 - maintenance feed

Farm Equipment

11. What is the most common vehicle used in agriculture?
- truck
 - combine
 - tractor**
 - swather
12. Before the advent of machinery, farmers used _____ to help in farming?
- domesticated animals**
 - solar energy
 - astrology
 - wind pressure
13. What is an agricultural machine used to harvest cotton?
- stone picker
 - cotton puller
 - cotton huller
 - cotton picker**
14. What does "PTO" stand for?
- power take over
 - power take off**
 - power transfer object
 - power tractor output
15. What is the benefit of practicing conservation tillage on a farm?
- less soil erosion
 - fewer trips across the field, thereby saving fuel and machinery costs
 - less groundwater contamination by pesticides
 - all of the above**

16. What type of engines do modern farm tractors usually have?
- diesel**
 - electric
 - gasoline
 - steam
17. What farm equipment is used to cultivate the soil before planting?
- combine
 - plow**
 - rake
 - swather
18. A _____ is used to cut forage crops such as grass and/or alfalfa.
- baler
 - combine
 - swather**
 - tractor
19. After plowing, a _____ is used to make the soil smoother and finer.
- disk/cultivator**
 - drill
 - planter
 - rake
20. A _____ is used to harvest forage crops such as grass and/or alfalfa.
- baler**
 - combine
 - tractor
 - truck

Farm Management

21. Little pigs grow really fast. A piglet weighed 4 pounds at birth. He nurses his mother for 21 days and gains 16 pounds. What does the pig weigh at weaning time?
- 7
 - 20**
 - 25
 - 37
22. A Hereford crossbred heifer is 14 months old. Farmer Joe wants her to have a calf at 24 months of age. It takes 9 months for a baby calf to be born. How long does Farmer Joe want to wait until he can turn this heifer with the bull?
- 1**
 - 2
 - 5
 - 10
23. Dairy cattle spend 6 hours a day grazing. If there are three Jersey and three Holstein cows grazing in a field. How much time do these cows in the field spend grazing each week?
- 6
 - 12
 - 24
 - 42**

24. A doe has had three kiddings. The most recent kid was a single. The other two have been a set of twins (2) and a set of triplets (3). What is the average kidding that this doe has?
- 1
 - 2**
 - 3
 - 4
25. Mr. Buerer can shear a sheep in 4 minutes. He has three (3) left to shear and it takes two (2) minutes to change sheep. How long will it take Mr. Buerer to finish?
- 7
 - 12
 - 16**
 - 18
26. An older sow raised 11 pigs. The litter of pigs weighed 35 pounds at birth. The pigs weighed 158 pounds at the weaning age of 21 days. How many pounds did the litter of pigs gain while nursing their mother?
- 112
 - 123**
 - 142
 - 213
27. A very stylish Angus heifer is 7 months old weighing 555 pounds. She is gaining 3 pounds per day. She will be a year old in 152 days. What will she weigh on her birthday?
- 456 pounds
 - 807 pounds
 - 915 pounds
 - 1,011 pounds**
28. A dairy cow produces 75 pounds of milk a day or nearly 9 gallons. Farmer Wendell receives 12 cents a pound or about \$1.03 for a gallon milk picked up at the farm. The retail price is 30 cents per pound or \$2.60 a gallon. What percent of retail price did Farmer Wendell receive?
- 20%
 - 30%
 - 40%**
 - 50%
29. Goats are selling for \$1.00 per pound. Five kids sold for \$52, \$62, \$49, \$55 and \$66. How much money did Farmer John receive for his five goats?
- \$102
 - \$264
 - \$284**
 - \$324
30. A black ewe lamb is 150 days old and weighs 135 pounds. She was weaned at 60 days weighing 72 pounds. She was a single lamb and got all of her mother's milk. How long has she been weaned?
- 63
 - 75
 - 78
 - 90**

General Agriculture

31. Which of the following farm crops are used in cereals?

- a. wheat
- b. corn
- c. rice
- d. oats
- e. **all of the above**

32. What fabric contains a farm product?

- a. nylon
- b. **cotton**
- c. polyester
- d. acrylic

33. One farmer produces enough food for about how many people?

- a. 10
- b. 25
- c. 90
- d. **155**
- e. 300

34. During the past 50 years, the number of farms in the U. S. has:

- a. increased
- b. stayed about the same
- c. **decreased**

35. Milk is an important source of which nutrient?

- a. **calcium**
- b. iron
- c. vitamin C
- d. carbohydrates
- e. vitamin A

36. Carrots are an important source of which nutrient?

- a. calcium
- b. iron
- c. vitamin C
- d. carbohydrates
- e. **vitamin A**

37. Out of every 100 people in the U. S., how many are farmers?

- a. **1-2 people**
- b. 3-4 people
- c. 5-7 people
- d. 10 people

38. Which of the following has allowed farmers to increase production during the past 100 years?

- a. larger farms
- b. computers
- c. farm machinery such as tractors
- d. pesticides
- e. **all of the above**

39. Erosion of the soil is:

- a. soil which crumbles easily
- b. controlled by using lots of fertilizer
- c. **the wearing away of the land**
- d. controlled by allowing cattle to graze the land in unlimited numbers
- e. all of the above

40. World food production in the future will need to _____ to feed everyone on the planet?

- a. **increase**
- b. decrease
- c. stay the same