

2025 Ag Challenge of Champions Written Test

Multiple Choice: (On the back of the scan sheet, bubble in the correct answer in the "Written Exam A" section of the scan sheet)

Agricultural/Livestock Industry

1. What feedstuff contributes most of the carbohydrates in swine rations?
 - a. alfalfa meal
 - b. corn**
 - c. oats
 - d. soybean meal
2. The largest compartment of the ruminant stomach for a mature grazing cow is called the:
 - a. abomasum
 - b. omasum
 - c. reticulum
 - d. rumen**
3. The average age of puberty in sheep is:
 - a. 3 months
 - b. 6 months**
 - c. 12 months
 - d. 18 months
4. Feed additives used to prevent disease and promote growth are:
 - a. anthelmintics
 - b. antibiotics**
 - c. antioxidants
 - d. hormone
5. The age of the beef animal and the amount of marbling in the carcass affect the:
 - a. dressing percentage
 - b. hot carcass weight
 - c. quality grade**
 - d. yield grade

6. The ability to initiate, sustain, and support reproduction is referred to as:
- a. **fertility**
 - b. gestation
 - c. inbreeding
 - d. lactation
7. Breeds of cattle that are used for both milk and meat production are considered to be:
- a. continental breeds
 - b. **dual-purpose breeds**
 - c. maternal breeds
 - d. terminal breeds
8. 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. finishing ration
 - c. lactation ration
 - d. maintenance feed
9. The biggest problem of raising sheep is the loss caused by:
- a. blue tongue
 - b. external parasites
 - c. **internal parasites**
 - d. overeating disease
10. Which livestock product has the highest consumption rate in the United States?
- a. **beef**
 - b. goat
 - c. lamb
 - d. pork

Farm Equipment

11. Which machine is specifically designed to harvest crops like wheat?
- a. **combine**
 - b. cultivator
 - c. grain drill
 - d. plow

12. What type of baler is commonly used for making hay bales?

- a. round baler
- b. square baler
- c. both a and b**
- d. none of the above

13. Which tool is primarily used for applying herbicides and pesticides on crops?

- a. cultivator
- b. disk
- c. grain drill
- d. sprayer**

14. What type of equipment do farmers use to transport harvested crops from the field?

- a. grain cart
- b. grain truck
- c. hay wagon
- d. all of the above**

15. What is the function of an irrigation system on a farm?

- a. to harvest grain
- b. to plow fields
- c. to store grain
- d. to water crops**

16. Which implement is designed for preparing soil before planting?

- a. cultivator**
- b. grain drill
- c. harvester
- d. sprayer

17. What kind of tool is a "sickle"?

- a. a harvesting tool**
- b. a planting tool
- c. a tilling tool
- d. a watering tool

18. Which type of equipment is used for cutting forage crops?

- a. rake
- b. plow
- c. sprayer
- d. **swather**

19. What is the purpose of a grain drill on a farm?

- a. to harvest crops
- b. **to plant seeds in rows**
- c. to spray pesticides
- d. to till the soil

20. What is the function of a grain cart on a farm?

- a. to plant seeds
- b. to spray chemicals
- c. to store fuel
- d. **to transport harvested grain**

Farm Management

21. Farmer Joe has taken such good care of his market hog, that today she is ready for the county fair weighing 260 pounds. She spent 3 weeks on her mom, 4 weeks in the nursery, and 17 weeks being finished for the fair. How many weeks old is this market hog?

- a. 20 weeks
- b. 21 weeks
- c. **24 weeks**
- d. 284 weeks

22. A Beefmaster cow and calf are out on pasture and doing well. The cow weighs 1,255 pounds and the calf weighs 435 pounds. How much more does the cow weigh than the calf?

- a. 470 pounds
- b. 740 pounds
- c. **820 pounds**
- d. 850 pounds

23. Dairy cows love to eat and need to eat to produce nature's most perfect food, milk. A herd of 10 cows were given 200 pounds of silage at today's feeding. How many pounds of silage will each cow average eating today?
- a. 10 pounds
 - b. 20 pounds**
 - c. 30 pounds
 - d. 200 pounds
24. Ten calves are on milk replacer. They each weigh 85 pounds. How much do all of the calves weigh together?
- a. 185 pounds
 - b. 260 pounds
 - c. 500 pounds
 - d. 850 pounds**
25. A pen of pigs have been weaned into a dry, warm comfortable nursery. The room temperature starts out at 80 degrees, just right for 12-pound pigs. The pigs stay 5 weeks in the nursery and leave weighing 45 pounds, with the room cooled to 68 degrees. How many degrees in temperature did the nursery drop?
- a. 7 degrees
 - b. 12 degrees**
 - c. 23 degrees
 - d. 35 degrees
26. Goat kids are weaned between 60-90 days of age. Three kids are eating 4 pounds of grain and 8 pounds of hay a day. How much are these three kids eating each day?
- a. 4 pounds
 - b. 8 pounds
 - c. 12 pounds**
 - d. 36 pounds
27. Market lambs can cost an exhibitor anywhere from \$100 to \$200. If the price range on a market lamb is from \$100 to \$200, what would be the average price of a market lamb be?
- a. \$50
 - b. \$100
 - c. \$150**
 - d. \$200

28. A pen of 4 wethers weight 81 pounds each. These goats were used in a grading demonstration. The white goat is a grade #1, while the others are all grade #2. What is the total weight of these wether goats?
- a. 144 pounds
 - b. 324 pounds**
 - c. 334 pounds
 - d. 444 pounds
29. A gray colored steer has 30 days until market. He gains 1 pound for every 7 pounds he eats. He is gaining 3 pounds a day. How much does he eat to gain the 3 pounds each day?
- a. 14 pounds
 - b. 21 pounds**
 - c. 28 pounds
 - d. 30 pounds
30. A modern milking parlor has the capability to milk 120 cows producing 5 gallons each in 2 hours. How many cows can be milked in an hour in this parlor?
- a. 40 cows
 - b. 50 cows
 - c. 60 cows**
 - d. 120 cows

General Agriculture

31. What is main reason why bees are important for agriculture?
- a. they build hives
 - b. they fly fast
 - c. the help pollinate flowers**
 - d. they make honey
32. What season do most farmers plant their crops?
- a. fall
 - b. spring**
 - c. summer
 - d. winter

33. What do we call the science of growing crops and raising animals?

- a. **agriculture**
- b. carpentry
- c. cooking
- d. gardening

34. Which insect is known to be a farmer's friend because it eats pests?

- a. ant
- b. butterfly
- c. grasshopper
- d. **ladybug**

35. What is the name of the process by which plants make their own food using sunlight?

- a. digestion
- b. germination
- c. **photosynthesis**
- d. respiration

36. Which type of livestock is commonly raised for its wool?

- a. cow
- b. horse
- c. pig
- d. **sheep**

37. What is the main purpose of crop rotation?

- a. to attract animals
- b. to grow more crops
- c. **to keep the soil healthy**
- d. to make the farm look nice

38. What is the main crop used to produce oil for cooking?

- a. barley
- b. oats
- c. rice
- d. **sunflower**

39. Which cereal grain is commonly used to make pasta?

- a. barley
- b. corn
- c. oats
- d. **wheat**

40. What farming technique involves growing plants without soil by using mineral nutrient solutions in water?

- a. agroforestry
- b. conventional farming
- c. **hydroponics**
- d. permaculture