1. Swine diets measure protein levels in rations by:
   A. Amino acid concentration
   B. grams
   C. pounds
   D. percentages

2. True or False. Whole raw soybeans are a viable source of protein in swine diets.

3. Which is not an amino acid?
   A. Lysine
   B. Leucine
   C. Methionine
   D. Isolleucine
   E. All are amino acids

4. Which one of the following is not a vitamin?
   A. Vitamin K
   B. Thiamine
   C. Ascorbic acid
   D. All of these are vitamins

5. On average, how many pounds of feed does a pig eat to gain 1 pound?
   A. ½ lb.
   B. 1 lb.
   C. 3 lbs.
   D. 5 lbs.

6. When balancing swine rations we usually consider protein requirements, but what should we actually use?
   A. amino acids
   B. carbohydrates
   C. fatty acids
   D. vitamin/mineral

7. True or False? Fishmeal is used as an energy source in show pig diets.

8. When does the mature sow have the lowest nutrient requirement?
   A. gestation
   B. lactation
   C. estrus
   D. requirements do not change

9. What is lysine?
   A. fatty acid
   B. amino acid
   C. vitamin
   D. mineral

10. True or False. Pigs possess more taste buds than humans.

11. True or False. Canola Meal is a byproduct of vegetable oil production.

12. Which is the most practical source of protein for a commercial pig weighing 150 lbs.?
   A. fish meal
   B. corn
   C. soybean meal
   D. blood meal

13. Electrolytes are used at a hog show to?
   A. hydrate the pigs muscle fibers
   B. increase the pigs appetite
   C. calm the pig down
   D. make the pig sounder (walk better in the show ring)
   E. cool the pig down

14. True or False. A feed with a medicated supplement added to the feed will display a withdraw time on the label of the bag?

15. Name the major categories of essential nutrients in pigs?
   Water, Protein, Carbohydrates, Vitamins, Minerals.

16. True or False. Pig are ruminants.

17. What is the nutrient that gives the hog energy and should make up the majority of the diet?
   Carbohydrates

18. About how much feed does a sow consume each day during peak lactation?
   Accept any answer 8 - 20 lbs.
19. Name the product that can be added to swine diets to reduce the amount of phosphorus contained in hog manure.  
**Phytase**

20. Would you expect gestating sows to require more or less feed each day than a sow nursing a litter?  
**Less. Gestating sows normally eat 4-6 lbs. per day. Lactating sows 10-20 lbs. per day.**

21. Name the first limiting amino acid in swine diets.  
A. Arginine  
B. Tryptophan  
C. **Lysine**

22. Name the swine feed additive that increases muscling and decreases fat.  
**Paylean® or Ractopamine**

23. What cost will have the largest influence on profitability of a farrow to finish enterprise?  
A. Labor  
B. **Feed**  
C. Propane  
D. Fire Extinguishers

24. About how much water will a lactating sow drink each day? 2, 5, or 18?  
**About 5 gallons actual intake ranges from 3 to 7 gallons.**

25. Overfeeding protein to finishing pigs results in a need for (more or less) acreage for manure disposal in a nitrogen-based nutrient management plan.  
**More**

26. Name one energy feedstuff besides corn that can be used in swine feeds.  
**Barley, wheat, oats, milo**

27. **True or false. A pig's digestive system is similar to that of a human.**

28. What is a swine creep diet?  
**Diet provided to nursing pigs from about 3 days old until weaning**

29. Which of the following is not a protein feed?  
A. Fish meal  
B. Sunflower meal  
C. **Steam flaked corn**  
D. Soybean meal

30. Most creep feeds for pigs contain what percent of crude protein?  
**15-20% crude protein**

31. **True** or False. Gastric ulcers occur most commonly when pigs are eating finely ground, pelleted feed.

32. Name one fat soluble vitamin that is normally added to swine diets.  
**Vitamin A, D, E, or K**

34. Between barrows and gilts, which would you expect to consume more feed per day?  
**Barrows**

35. During the entire finishing period from 50 to 250 pounds what would be an average daily feed intake for a market hog.  
**Accept answers from 4.5 to 6 lbs. per day.**

36. True or **False. It requires the same amount of feed for a pig to gain a pound of muscle as it does for a pound of fat.**

37. Between nursery pigs and finishing pigs, which would require a diet with a higher percent protein?  
**Nursery pigs**

(continued)
38. Calculate its Feed-to-Gain ratio for a pig that gained 100 pounds and ate 300 pounds of feed.
   Three, or 3:1.

39. Between barrows and gilts, which are generally more efficient converters of feed to lean meat?
   Gilts

40. Would you expect pigs to be more efficient at converting feed to muscle if they were eating mash feed or pelleted feed?
   Pelleted feed because the particle size is smaller and more highly digestible.

41. True or False. We would expect nursery pigs to convert feed to pork less efficiently than finishing pigs.

42. During periods of cold weather, pigs use a (higher or lower) percentage of the feed energy they consume to maintain body temperature.
   Higher

43. True or False. In split-sex fed finishing pigs, barrows are normally fed a higher protein diet than gilts of the same body weight.

44. Gestating sows in an outside lot require more or less feed per day to maintain body condition.
   More

45. Name two trace elements that must be added to swine diets.
   Iron, zinc, manganese, selenium, iodine, copper