1. What is the difference between mechanical and natural ventilation?

   Mechanical ventilation relies on fans to move air through a room. Natural ventilation depends on wind and convection.

2. Pennsylvania’s Nutrient Management Act requires producers with over ____ animal units per acre to submit a nutrient management plan.

   2 animal units

3. True or False. Manure haulers and brokers must become certified before accepting payment for hauling manure.

4. Which odor source has the largest potential for odor complaints from neighbors?
   A. Buildings
   B. Manure storage
   C. Manure application
   D. Compost

5. Name two weather factors that should be taken into account before spreading manure.

   Wind direction, time of day, impending rainfall, relative humidity, frozen ground

6. A single 100-pound finishing pig produces approximately how much manure each day?
   A. 2 quarts
   B. 1 gallon
   C. 1.5 gallons
   D. 10 gallons

7. True or False. Drafts are a desirable component of wintertime ventilation - especially for baby pigs.

8. Which would NOT be observed in a poorly ventilated room in the winter?
   A. Condensation on walls and ceiling
   B. Wet slats
   C. High humidity
   D. High temperature

9. Name the three major nutrients found in swine manure.

   Nitrogen, Phosphorus, Potassium

10. True or False. A negative pressure ventilation system pushes air into a building.

11. True or False. Dead pigs can be successfully composted in a mixture of sawdust so that even the bones mostly disappear.

12. True or False. Dust accumulation on fan blades and louvers can reduce the amount of air the fan moves.

13. True or False. Injection or immediate incorporation (disking in) of manure reduces odors associated with spreading manure.

14. True or False. Tunnel ventilation moves air down the length of a barn and serves to increase air speed and animal comfort in warm weather.

15. Why would manure be injected into the ground?
   A. Increase phosphorus absorption in pigs
   B. Increase odor
   C. Cost benefit
   D. Decrease chance of runoff