Chapter 41. Waste Management Quiz

1. Immobile plant nutrients such as Phosphorus and Calcium are concentrated mainly in:
   a. Feces
   b. Urine
   c. Manure

2. A herd of cattle deposit 50 lbs of N on an intensively grazed pasture. Approximately how many pounds of the deposited nitrogen will be available for plant growth over the next year?
   A. 0 lbs
   B. 25 lbs
   C. 50 lbs
   D. 75 lbs

3. A herd of cattle deposit 100 lbs of P on an intensively grazed pasture. Approximately how many pounds of the deposited P will be available for plant growth over the next 20 or so years?
   A. 0 lbs
   B. 20 lbs
   C. 90 lbs
   D. 120 lbs

4. Stocker cattle are grazed on Bermuda grass that is no-till seeded with wheat for additional cool season grazing. The field is irrigated with swine lagoon effluent through a center pivot system. If effluent is applied to meet the nitrogen needs of the pasture, what do you expect soil test phosphorus levels to do over the next 20 years?
   A. Slowly decrease with time
   B. Stay the same
   C. Slowly increase with time
   D. Spike up after the first year, and then slowly decrease with time

5. 20 tons per acre of dairy manure are spread on an alfalfa field. The field is then disked and sprigged with bermuda grass. Cattle are grazed on the newly
established pasture. The pasture does not receive any additional phosphorus fertilizer for the next 20 years. How would you expect soil test phosphorus levels to respond to this change in management?

A. Slowly decrease with time
B. Stay the same
C. Slowly increase with time
D. Spike up after the first year, and then slowly decrease with time

6. Answer true (T) to all of the following operations that may require a pollution control permit, false (F) to those that do not:

T  F  Cow-calf operation: 300 cows always on pasture
T  F  Cow-calf operation: 1,500 cows always on pasture
T  F  Stocker operation: 300 head held 20 days per year in a dirt lot, remainder of time on pasture
T  F  Stocker operation: 6,000 head held 20 days per year in dirt lot, remainder of time on pasture
T  F  Receiving lot: rolling herd size of 1,500 head, held in dirt lot 100 days per year
T  F  Receiving lot: rolling herd size of 100 head, held in dirt lot 365 days per year
T  F  Auction barn: capacity for 2,000 head, filled approximately 52 days per year
T  F  Beef Feedlot: 800 head capacity, filled 365 days per year
T  F  Beef Feedlot: 500 head capacity, filled 365 days per year and a small creek runs along one edge of the lot
T  F  Beef Feedlot: 40,000 head capacity, filled 365 days per year.