

Tarleton State University ENR Invitational 2016
Water Quality – Limiting Factors

1. A water sample with a pH of 6.5 is classified as:
 - a) alkaline
 - b) neutral
 - c) acidic

2. Agricultural BMPs to control nutrients include all EXCEPT:
 - a) building wetlands
 - b) installing riparian buffers
 - c) fencing row crop areas
 - d) timing fertilizer applications
 - e) using conservation tillage

3. Which of the following would be an example of **Point-source** pollution?
 - a) Fertilizer applications on cropped fields
 - b) Urban runoff after a heavy storm
 - c) Discharge from an overwhelmed sewage treatment plant
 - d) Topsoil erosion from farm fields into a river

4. Recommended total phosphorus concentrations in lakes are:
 - a) 0.02 mg/L
 - b) 0.2 mg/L
 - c) 2 mg/L
 - d) 20 mg/L

5. Which of the following is not true?
 - a) Eutrophication in rivers, lakes and estuaries is caused by over-enrichment with N and P
 - b) Excess fertilization and manure production cause a surplus of N and P that can wind up in US waters.
 - c) The major sources of nonpoint pollution are agriculture and mining.
 - d) Soil runoff transports P to aquatic ecosystems.

6. What is the effect of increased temperature on the amount of oxygen in the water?
 - a) The oxygen levels will increase
 - b) The oxygen levels will decrease
 - c) The oxygen level is unaffected by temperature
 - d) The oxygen level can either increase or decrease.

7. The movement of soluble nutrients out of the root zone by water percolating down through the soil is called:
 - a) weathering
 - b) leaching
 - c) degradation
 - d) aggradation

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8. What is eutrophication?
- a) The process in which water levels heat up, lowering dissolved oxygen
 - b) The process in which dissolved oxygen levels are lowered due to the overgrowth of algae
 - c) The process in which mutagenic compounds lower the levels of dissolved oxygen in the water
 - d) The process in which the population of fish increases too quickly, lowering dissolved oxygen
9. Nitrates are soluble thus travel with _____, while phosphorus is less soluble and thus travels with _____.
- a) water, water
 - b) water, soil
 - c) soil, water
 - d) soil, soil
10. The pH of natural waters is controlled primarily by the _____ system
- a) sulfate
 - b) nitrate
 - c) phosphate
 - d) carbonate

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Answers

1	c
2	c
3	c
4	a
5	c
6	
7	b
8	b
9	b
10	d