

Environment and Natural Resources Contest – Water Quality Factors

Spring 2019

Use the limiting factors area on the scantron and bubble in the correct answer.

There are 10 questions.

- 1) The results of your nitrate test show that this water is _____
 - a) 2 mg/L or more over the MCL for drinking water
 - b) At the MCL for drinking water
 - c) 2 mg/L or more below the MCL for drinking water

- 2) The pH of your sample is
 - a) Acidic
 - b) Neutral
 - c) Alkaline

- 3) Denitrification is the term to describe:
 - a) Gaseous Nitrogen to Nitrate
 - b) Nitrate to Ammonia
 - c) Ammonia to Nitrate
 - d) Nitrate to Gaseous Nitrogen

- 4) The pH of natural waters is controlled primarily by the _____ system
 - a) Carbonate
 - b) Nitrate
 - c) Phosphate
 - d) Sulfate

- 5) 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

- 6) A high phosphorus concentration in fresh waters may cause:
 - a) adverse health effects in fish
 - b) algal blooms
 - c) hypoxia
 - d) eutrophication
 - e) all the above

- 7) What is the effect of increased temperature on the amount of oxygen in the water?
- The oxygen levels will increase.
 - The oxygen levels will decrease.
 - The oxygen level is unaffected by temperature.
 - The oxygen level can either increase or decrease.
- 8) A limiting nutrient is described as one that:
- causes cancer
 - is a required element that is the least abundant
 - leads to hypoxia
 - binds with iron
- 9) Phosphorus in water can come from all EXCEPT:
- manure
 - phosphorus minerals
 - sewage treatment plants
 - deposition from air
- 10) Which of the following would be an example of **Non-point Source** pollution?
- Photosynthesis due to sunlight
 - The presence of zooplankton in a body of water
 - Discharge from an overwhelmed sewage treatment plant
 - Topsoil erosion from farm fields into a river