Part 1 - Multiple-Choice Questions (multiple answers are possible: a & c or a, c, and d)

1. The two major purposes of sampling in the water environment are:
    a. To establish a baseline
    b. To determine the pollution
    c. To test for acid
    d. To decide whether or note you can drink it

2. Why is coliform bacteria used as an indicator of poor water quality?
    a. Indicates acid rain
    b. Indicates high O2 levels
    c. Indicates fecal contamination
    d. Indicates high nitrate levels

3. A water sample with a pH of 2.0 is considered to be
    a. Basic
    b. Acidic
    c. Neutral
    d. Perfect for aquatic life

4. The test for turbidity describes what characteristics of water?
    a. Odor
    b. Mineral concentration of the water
    c. Suspended material in the water
    d. Metal concentration of the water

5. A secchi disk is used to measure
    a. The dissolved material in the water
    b. Light penetration of a lake or pond
    c. Flow of a stream or river
    d. The depth of silt on the bottom of a lake

Did you know this answer? _____   ^——____,,

6, The alkalinity of a water sample may be defined at the
    a. Ability of a water sample to evaporate at low temperature
    b. Capacity of a water sample to react with and neutralize acid
    c. Capacity of a water sample to become toxic
    d. Ability of a water sample to carry nutrients to plant

D i d   y o u   k n o w   t h i s   a n s w e r ?   _ ^ _____

7. The quality of drinking water can be influenced by
    a. Gases and aerosols from the atmosphere
    b. Weathering and erosion of rocks and soils
    c. Human activities
    d. All of the above

8. The addition of additional nitrogen and phosphorus to aquatic systems will
    a. Increase algae and decrease O2
    b. Increase O2 and decrease algae
    c. Increase the number of fish
    d. Decrease productivity
    Did you know this answer? _____
9. The two main sources of wetlands water are
    a. Streams and ponds
    b. Oceans and streams
    c. Ground water systems
    d. Surface water and groundwater
    e. Surface water and runoff
10. As the water quality index (WQI) of a stream increases, the biodiversity
    a. Increases
    b. Deceases
    c. Remains the same
    d. Is static
   Did you know what static means? _____   ____
11. Most aquatic organisms have a pH range of
    a. 7.0-9.0
    b. 6.0-9.0
    c. 4.0-10.0
    d. 5.0-9.0
12. At a pH of 7 the concentration of H and OH are
    a. Unbalanced H
    b. Inequilibium
    c. Balanced
    d. Unbalanced OH
13. Generally, daily pH cycles peak:
    a. In the morning
    b. In the evening
    c. At Noon
    d. At Night
14. The amount of oxygen in any body of water depends on
    a. The amount of animal species diversity
    b. The amount of plant species diversity
    c. Water temperature, number of green plants, and sunlight
    d. All of the above

15. More oxygen is dissolved in
    a. Warm water and high pressure (high elevation)
    b. Cold water and low pressure (low elevation)
    c. Cold water and high pressure (high elevation
    d. Cold water and high pressures (high elevation)
16. Which holds more dissolved oxygen?
    a. Water at 20° C
    b. Water at 10°C
    c. Water at 5°C
    d. Water at 25°
17. Which of the following is a non-point source of pollution to a river or stream?
    a. Industrial effluent
    b. Sewage Effluent
    c. Livestock grazing
    d. Mining Effluent
18. The pH sampling procedure is to collect the water sample at
    a. The river bank
    b. Near the bottom of the river
    c. Away from the river bank and below the surface
    d. It does not matter where you collect the sample
19. List two human-caused changes in the temperature of a river

20. What type of pollution is a change in temperature?

21. How would you test for thermal pollution?
    a. Test in one location in the morning
    b. Test downstream
    c. Test upstream near the source of the river
    d. Test above and below where the suspected source
22. True or false, the greater the turbidity, the murkier the water. _____

23. Which of the following are causes of turbidity
    a. Soil erosion
    b. Waste Discharge
    c. Urban runoff
    d. All of the above
24. Why does water become warmer as more suspended particles enter a river?

25. True or false, DO levels do not vary much according to time, weather, and
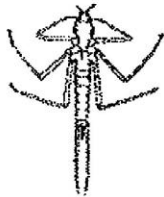   temperature.
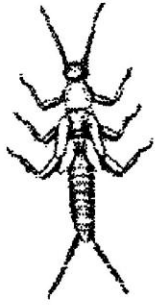
26. _____

27. _____

28. _____

29. _____

30. _____

31. _____

32. _____

1. a&b
2. c
3. b
4. c
5. b.
6. b
7. d
8. a
9. d.
10. a 11.a
12. c
13. d
14. d
15. d
16. c
17. c
18. c
19. industries such as power plants, cutting down trees, street runoff
20. thermal pollution 21.d
22. true
23. d
24. suspended particles absorb heat from sunlight
25. false
26. stonefly
27. whirlgig larvae
28. damselfly nymph
29. black fly larvae
30. lunged snail
31. leech
32. caddis fly larvae