

Aquatic Science: 2013 Fall Final Exam Questions

Part 1: Lab and Field Safety and General Science

Understanding

1. Which of the following is a good hypothesis?
2. How do you know if a plant is poison ivy?
3. Select all of the following that could be limitations of science.
4. Which of the following is the best way to handle live specimens?
5. Scientific knowledge is (select all that apply):

Part 2: Basic Topography

Use the topographic map to answer questions 6-7

6. What are the lines called in this map?
7. What is the approximate elevation change from point A to point B on the map?

Part 3: Basic Geography

8. Red River
9. Galveston Bay
10. Rio Grande River
11. Laguna Madre Bay
12. Trinity River

Match the correct Ocean or continent

13. Pacific Ocean
14. Australia
15. Asia
16. Indian Ocean
17. Atlantic Ocean
18. North America
19. Africa
20. Antarctica

Part 4: Basic Hydrological Cycle

Match the correct term to its appropriate label

21. Transpiration
22. Infiltration
23. Evaporation
24. Precipitation

Part 5: Basic Water Chemistry Cycle

25. Oil (0.89g/mL), Styrofoam (0.02g/mL), Salt Water (1.2g/mL), Gasoline (0.98g/mL) and Water (1.0g/mL) are all placed in a beaker. Which of the following is the correct order from TOP to BOTTOM?
26. How much electricity can pure water conduct at 22°C?
27. What is it called when water molecules “stick” to each other?
28. Which of the following is a correct depiction of a water molecule?

29. A power plant discharges warm water into a stream. This could affect fish populations because the increase in temperature may lead to...
30. Which of the following shows the correct arrangement of water molecules around a positive ion?
31. Which of the following would you expect to see water perform the most capillary action (crawl the highest)?
32. When something dissolves in water to produce $[H^+]$ the resulting solution could have a pH of?
33. What causes turnover in lakes/ponds? (**PICK TWO**)
34. At which points is water boiling?
35. At what point is water completely frozen?

Part 6: Basic Oceanography

36. What is the Coriolis Effect?
37. Which of the following is not a step in the process of wind creation?
38. A Tsunami is usually caused by _____ or _____.
39. When we experience a full moon, we also experience a _____.
40. The rhythmic rising and falling of ocean water in predictable cycles due to gravitational forces are called:
41. Neap tides occur when:
42. Gyres in the southern hemisphere are: