

# ESC 115 Physical Geology

## Test 3

Fall, 2010

The first 10 questions refer to the slides we will view together in class. Please use the space provided to answer the questions.

1. (**3 pts**) P waves are faster than S waves. What does their arrival at a seismograph tell us?
2. (**4 pts**) What is the cause of the Reelfoot Rift shown? What is its effect?
3. (**4 pts**) What is the definition of risk? How is the information shown used as part of that definition? Explain how precursor events, such as small earthquakes, might be used to help reduce the risk.
4. (**4 pts**) What is the difference between relative and absolute sea level? How do they apply to the figure shown?
5. (**4 pts**) In the slides shown, shallow earthquakes are shown in yellow, intermediate depth in green and deep in red. Explain the patterns in the two features circled.



12. (6 pts) Explain differences between volcanoes that come from felsic, intermediate, and mafic magma. Aim for at least two distinctions of each.
13. (5 pts) Who was Oetzi? What are two things his remains can tell us?
14. (4 pts) How is tidal range related to what is found in a wetland or coastal zone? Use a sketch to illustrate your answer.
15. (7 pts) What is an estuary? What are three things all organisms want to do? Why are estuaries a good place to do these three?
16. (4 pts) What are two reasons we have ice ages?
17. (6 pts) What are three ways a stream changes as you go from its headwaters to its mouth?

18. (8 pts) Draw a diagram of the main features of a floodplain. Label at least four features.

19. (4 pts) What is a delta? How does it form?

20. (4 pts) What are the two general patterns with respect to where glaciers form?

21. (4 pts) What is one question you reviewed for this test that did not appear on it? Answer it.