Native Plants Cumulative Final Spring 2013

This exam comprises the cumulative portion of the Microbiology final. It is worth 50 points. A hand written paper copy of this portion of the final must be handed in at the **beginning** of the in-class final on May 22. **No electronic or word-processed copies can be accepted.** Failure to meet the deadline will result in the standard deduction for late work (minus 25%).

1. What is the petiole? Describe the three major patterns of leaf venation. For each provide an example of a plant with that pattern of leaf venation.

2. Explain the difference between pinnately compound and palmately compound leaves. Provide named examples (Genus and species) of plants that have pinnately compound leaves and palmately compound leaves. Provide labelled drawings of each.

3. Name and describe the function of each of the whorls of modified leaves that make up a typical flower (perfect and complete).

4. Construct a table in which you compare the structures of monocotyledons and dicotyledons. (you should be able to name 5 differences)

5. Provide an example of a correctly worded latin binomial for a Californian Native plant of your choice. Indicate with arrows the genus and species names.

6. Name the life zones described by C. Hart Merriam as occurring on Mountains in South West USA.

7. Discuss how abiotic factors vary with slope position and slope aspect.

8. Describe five physical and/or chemical adaptations that allow plants to defend themselves against animal herbivores.

9. Describe why summer fog forms along the Central California coast. Discuss the beneficial affects of summer fogs to California's Redwood forest communities.

10. Using specific examples for each explain the differences between primary and secondary succession.