

Example: first exam Spring Semester, 2003

1. In general, where is global biodiversity greatest? Compare and contrast two explanations for this trend.
2. What (number) is the approximate current global biodiversity? Discuss some of the factors (including biases) that make this number difficult to estimate.
3. Sketch a distribution map for an organism (a real one, plenty of examples from the readings and notes) and discuss the probable factors that limit the distribution of that organism. (The sketch of the borders is not so important as what the borders are.)
4. Compare and contrast the concepts of “community” and “ecosystem” as they pertain to the distributions of groups of organisms.
5. Discuss one of the nineteenth century biogeographic rules or laws, including the scales (chronologic, aerial, taxonomic, etc.) to which it applies and ecological or evolutionary processes that might explain it.
6. Discuss some of the geographical, ecological or evolutionary correlates (aerial, taxonomic, etc.) with the size of an organism’s range.

Examples of short answer questions

_____ seventeenth century founder of taxonomy whose “biotic zones” were based on the book of Genesis.

_____ geophysical model explaining the production of ocean floor and movement of continents based on mantle circulation, ridge-push, and plate-pull

There are _____ described species, world wide, but the actual total number is estimated at _____

Example of sort (medium length) question.

The figure at the right shows a _____ filter. Explain (couple of sentences) how this kind of filter influences distributions of organisms, compare it to other kinds of filters. Give an example of where (place name) one exists (describe briefly).

