

Part I: Multiple Choice

1. What is the difference between coenocytic and septate hyphae?
2. What is net primary productivity?
3. What is unique about each of the fungi phyla asexual stage?
4. What are lichens and who gets what in their symbiosis?
5. What is the difference between an exchange pool and a reservoir?
6. What is the difference between nitrogen fixation, ammonification and nitrification?
7. What are some distinguishing characteristics about basidiomycota?
8. Name some general traits of the fungi, and of each of the fungal phyla.
9. Explain the 'law of tolerance'.
10. Describe the following terms: native species, endemic species, and introduced species.

11. What is environmental patchiness, why is it important?
12. Explain both phylogeography and biogeography.
13. Explain the competitive exclusion principle.
14. What are 2 possible outcomes to competitive exclusion?
15. Describe the following terms: keystone species, indicator species, dominant species, and ecosystem engineers.
16. What is the difference between Mullerian mimicry and Batesian mimicry?
17. What are some examples of functional groups?
18. What is character displacement?
19. What is more stable a long food chain or a short one?
20. Explain top down and bottom up forcing, and give an example of each.
21. Explain what Hadley cells are and where they occur, and what affect they have in areas where air masses are rising and where air masses are sinking.

22. What is a rainshadow?

23. Describe the difference between r-selected and K-selected species.

24. What is the difference between successional facilitation and successional inhibition.

25. What is the process that results in a heterokaryotic cell?

Part II: Short Answer

1. Diagram the general fungal life cycle. Include an asexual stage, and clearly label all stages, and structures.

2. What factors can lead to high species diversity. Explain.

