

Weekly Exam 6

Botany 372, Fall 2008

Lab Day \_\_\_\_\_

Name \_\_\_\_\_

1. The term poikilohydric refers to an organisms  
A. temperature relations B. colonial relations C. water relations D. light relations E. sexual reproduction
2. The correct term for the stalk of a liverwort sporangium is:  
A. stipe B. foot C. capsule D. seta E. sporangiophore
3. In liverworts, the gametophyte thallus is described as being either \_\_\_\_\_ or \_\_\_\_\_.  
A. extinct; extant C. thallose; leafy E. haploid; diploid  
B. thallose; prothallus D. subterranean; epigeous
4. The most acceptable common name for the phylum to which *Anthoceros* belongs is:  
A. hornworts B. liverworts C. mosses D. mossworts E. leafy liverworts
5. In bryophytes, the special structures involved in **asexual** reproduction are generally called:  
A. gametophores B. gemmae C. setae D. caulids E. plantlets
6. Which of the following is a general term including both archegonia and antheridia?  
A. gametophores B. archegoniophores C. antheridiophores D. gametangia E. sporangia
7. Which of the following is a liverwort with complex thallus and special reproductive branches called gametophores?  
A. *Porella* B. *Riccia* C. *Ricciocarpus* D. *Marchantia* E. *Anthoceros*
8. Special structures in liverwort capsules responsible for influencing a gradual dispersal of spores are called  
A. calyptras B. elaters C. columellas D. opercula E. peristomes
9. Which of the following is an important shared characteristic of all three phyla of "bryophytes"?  
A. reproduction involving seeds in cones or fruits D. very large size  
B. sporophyte generally smaller and remaining attached to the gametophyte E. produce xylem but no phloem  
C. sporophyte generally larger and with the gametophyte dependent upon it
10. Which statement is true for the spores of organisms in the Kingdom Plantae?  
A. spores are produced in gametangia and their ploidy level is n C. spores are the result of meiosis and their ploidy level is n  
B. spores are the result of mitosis and their ploidy level is 2n D. spores are produced in sporangia and their ploidy level is 2n
11. Among the three phyla of bryophytes, the Anthocerophyta can be distinguished from all the others by having  
A. indeterminate growth in the sporophyte C. indeterminate growth in the gametophyte  
B. multiple chloroplasts in each cell D. stomates on the sporangium
12. The dark multicellular structures (arrow) clustered inside a special 'container' on this thallus are:  
A. antheridia B. gametophore C. gemmae D. gemmae cup E. archegoniophore
13. The ploidy level of these structures is  
A. n B. 2n C. 3n D. 4n E. 5n
14. The structure indicated by the red arrow is a  
A. sporophyte B. antheridiophore C. archegoniophore D. leaf E. embryo
15. The plants bearing these special branches are therefore  
A. male gametophytes B. sporophytes C. hermaphroditic D. of unknown sex E. female gametophytes
16. What is the ploidy level of the round structure inside this archegonium?  
A. haploid B. diploid C. polyploid D. insufficient data E. anybody's guess
17. What is the large round structure indicated by the bracket?  
A. sporophyte B. antheridium C. archegonium D. gametophyte E. rhizoid
18. \_\_\_\_\_ Name the part of this sporophyte indicated by the arrow.
19. \_\_\_\_\_ What is the ploidy level of this structure?
20. \_\_\_\_\_ Name the phylum to which this specimen belongs.
21. \_\_\_\_\_ What is the name for the upright cylindrical structures?
22. \_\_\_\_\_ Name the **genus** to which they belong.
23. \_\_\_\_\_ Name the small structure indicated by the bracket.
24. \_\_\_\_\_ What are the large dark structures embedded here, and shown in closeup at lower left?
25. \_\_\_\_\_ Name the phylum to which this specimen belongs.
26. \_\_\_\_\_ & \_\_\_\_\_ The yellow powdery masses indicated here are composed of \_\_\_\_ & \_\_\_\_ (see inset).
27. \_\_\_\_\_ Name the round structures on the surface of these thalli. What sex are the plants bearing these structures? Explain your answer: