

32

EXAM I
October 3, 1990
MIC 321

Direction: All explanations, definitions, and descriptions should be presented in good English. This means complete sentences should be used except when lists or fill-in-the-blanks are required. Spelling of mycological terms should be accurate. Slight misspellings may be overlooked, but major misspellings will result in wrong answers.

(1 point per blank; 40 pts total).

1. Identifications of structures, their essential basic function and their taxonomic significance. In the blanks provided identify with no more than one or two mycological terms each structure depicted, then with a short phrase describe its function (e.g. cytokinesis; asexual reproduction, etc.) and finally its taxonomic relevance at the rank(s) requested.

a.

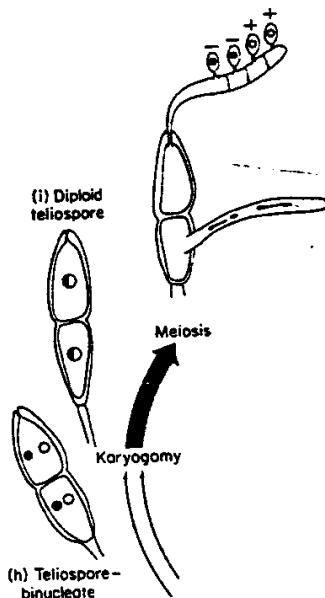


a. structure _____

b. function _____

c. phylum _____

b.



a. structures (as indicated by pluses and minuses) _____

b. function _____

c. phylum _____

d. subphylum _____

NAME _____

c.



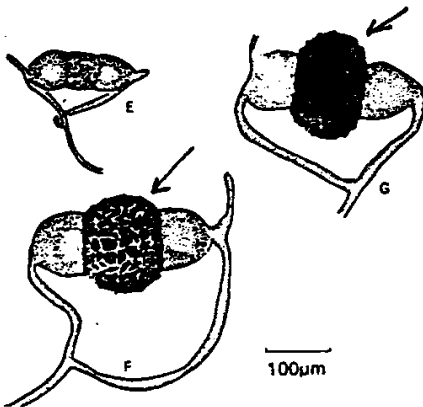
a. structure (as indicated by arrows)

b. function _____

c. subkingdom _____

d. phylum _____

d.



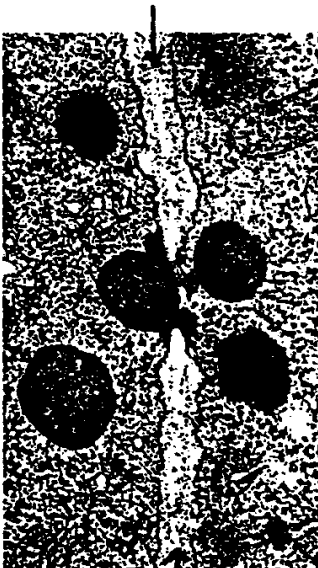
a. structure (as indicated by arrows)

b. function _____

c. subkingdom _____

d. phylum _____

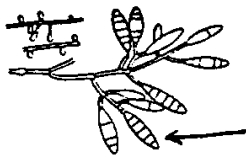
e.



a. structure (as indicated by arrows)

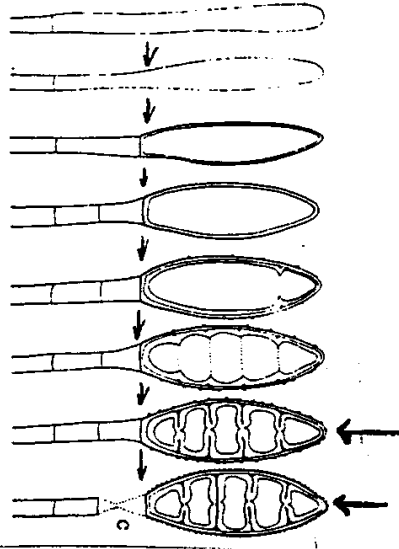
b. function _____

c. phylum _____



NAME _____

f.



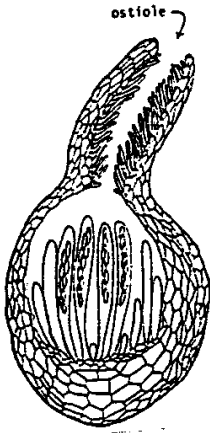
a. structure (as indicated by horizontal arrows) _____

b. function _____

c. form-class _____

d. form-phylum _____

g.



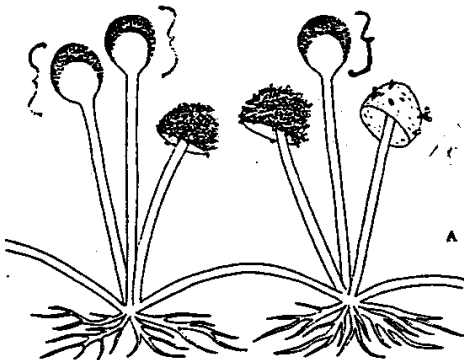
a. structure (be specific) _____

b. function _____

c. class _____

d. subdivision _____

h.



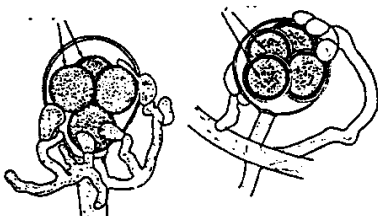
a. structure (as indicated by brackets) _____

b. function _____

c. order _____

d. phylum _____

i.



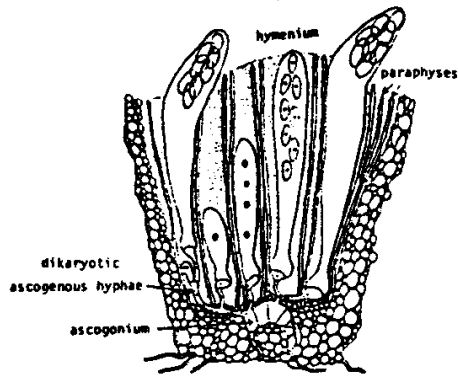
a. structures (as indicated by arrows) _____

b. function _____

c. phylum _____

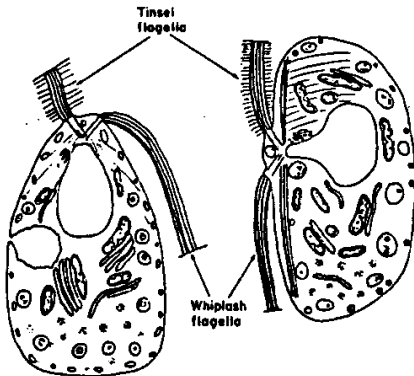
NAME _____

j.



- a. structure _____
- b. function _____
- c. class _____
- d. subkingdom _____

k.



- a. structure _____
- b. function _____
- c. phylum _____

2. (15 pts). On the answer sheets provided, and in a well written paragraph or two, suggest why early fungal biologists probably erected the class Phycomycetes, and why later fungal and evolutionary biologists no longer recognize this taxon.
3. (15 pts). On the answer sheets provided, diagram the vegetative sequence of events that sometimes perpetuates the dikaryotic condition in Basidiomycota. Make sure your diagrams are well labeled and make clear you know how this unique sequence of events is accomplished.
4. (10 pts). On the answer sheets provided, and in only one short paragraph, explain why the alpha amino adipic acid pathway of lysine biosynthesis has relevance to the taxonomy of fungi and fungal-like prototista.
5. (10 pts). In a short paragraph explain the relevance of the terms anamorph, telomorph and holomorph.
6. (10 pts @ 2 pts each) define each term without diagrams and with a single sentence or a well constructed phrase.

a. holocarpic

b. heterokaryon

c. holothallic conidium

d. yeast

e. coenocytic