1. Imperfect fungi do not have this phase in their life cycle
2. Symbiotic association between Plant roots and fungi
3. Carbohydrate that makes up the cell Wall of fungi
4. In this stage of the life cycle of an Ascomycete, cells contain 2 nuclei
5. Multicellular fungi are composed of These filaments
6. Fungi break down complex organic matter by releasing this chemical.
7. Rootlike hyphae that anchor fungal hyphae to a surface
8. Stem-like hyphae that anchor fungal Hyphae to a surface
9. Structure created when hyphae from two different mating types fuse
10. Spore bearing structure found on the gills that grow on the underside of mushroom caps.
11. Classification of Penicillium notatum, Which has never been observed to reproduce sexually.
12. A serious plant fungal disease that Needs two different plants to complete its life cycle
13. The structures labeled “A” in the figure above
A. Vegetative hyphae
B. Reproductive hyphae

14. Predict what would happen to the structure labeled B in Figure above if conditions were not favorable for growth.
A. Structure B would probably become dormant until environmental conditions improved
B. Structure B would never have formed
C. A greater number of structure B would be formed
D. Environmental conditions would not affect structure B

15. The figure to the right shows one phylum of fungi. Which of the organisms below are other members of this phylum.
A. Shelf fungi
B. Puffballs
C. Yeast
D. Both A & B
E. All of the above

16. According to the figure, what does the structure of the below ground portion have in common with the structure of the fruiting body?
A. Both are vegetative
B. Both are reproductive

17. Mushrooms sometimes grow from the trunks of trees. Which structure shown in the figure would likely be growing and feeding in the tree’s bark?
A. Vegetative mycelium
B. Reproductive mycelium


18. Fungi do NOT
   a. Carry out photosynthesis
   b. Grow on the food source
   c. Digest food outside their bodies
   d. Absorb food through their cell walls

19. The tangled mass that makes up the body of the fungus is the
   a. Hypha
   b. Rhizoid
   c. mycelium
   d. stolon

20. Sporangia are found at the tops of specialized hyphae called
   a. Sporangiophores
   b. Mycelia
   c. gametangia
   d. stolons

21. In the life cycle of molds, when hyphae of different mating types meet, each hypha forms a
   a. Sporangium
   b. Zoospore
   c. zygospore
   d. gametangium

22. The dry, powdered yeast used to bake bread actually contains
   a. Zygospores
   b. Ascospores
   c. conidia
   d. sporangia

23. In mushrooms, the basidia are found on the
   a. Base
   b. Stalk
   c. cap
   d. root

24. Over time, nutrients at the center of a large mycelium become depleted, causing new mushrooms to sprout only
   a. In a cluster at the center
   b. In a ring at the outer edges
   c. When the nutrients are replaced
   d. After budding takes place

25. *Penicillium* reproduces asexually by conidia, similar to reproduction in a(n)
   a. Ascomycete
   b. Zygomycete
   c. basidiomycete
   d. lichen

26. Fungi that absorb food from decaying organic matter are
   a. Parasites
   b. Saprobes
   c. mutualists
   d. autotrophs
27. Fungi feed on
   a. Only living organisms  
   b. Only dead organisms  
   c. Both living and dead organisms  
   d. Only other fungi

28. Crop damage by fungal disease is
   a. Greatest in tropical areas  
   b. Least in tropical areas  
   c. Greatest in temperate areas  
   d. Not affected by climate

29. Fungus that forms a mycelium within the outer layers of the human skin causes
   a. Ringworm and athlete’s foot  
   b. Thrush and athlete’s foot  
   c. Reproductive tract infections and ringworm  
   d. Athlete’s foot

30. Which statement about lichens is correct?
   a. They are not tolerant of harsh conditions  
   b. They cannot make their own food  
   c. They grow only in soil  
   d. They are composed of an alga or a cyanobacterium and a fungus living together

31. The association of plants and fungi in mycorrhizae illustrates a type of relationship called
   a. Parasitism  
   b. Mutualism  
   c. Competition  
   d. Parallelism

32. All fungi
   a. Make their food  
   b. Absorb their food  
   c. Produce mushrooms  
   d. All of the answers are correct

33. A mushroom is a fungal
   a. Fruiting body  
   b. Lichen  
   c. Mycorrhiza  
   d. Yeast

34. Most fungi reproduce
   a. Asexually only  
   b. Sexually only  
   c. Both sexually and asexually  
   d. Yeast

35. Stinkhorns, which mimic the odor of rotting meat, have spores that are dispersed by
   a. Wind  
   b. Birds  
   c. Snow  
   d. Flies
36. Dark fuzz that grows on bread is an example of
   a. A toadstool  c. yeast
   b. A spore       d. mold

37. Bread rises because fermentation by yeast produces
   a. Spores       c. water
   b. Rhizoids     d. carbon dioxide

38. Mushrooms are classified as
   a. Common molds c. club fungi
   b. Sac fungi    d. imperfect fungi

39. Which structure is NOT found in a mushroom?
   a. Ascus       c. cap
   b. Gills       d. stalk

40. Which statement about *Penicillium* is correct?
   a. It produces mushrooms
   b. It causes bread to rise
   c. Is the source of an antibiotic
   d. It causes athlete’s foot

41. An important role of fungi in an ecosystem is
   a. Photosynthesis
   b. Breaking down dead organisms
   c. Making alcohol
   d. Killing bacteria

42. The growth of yeasts in moist regions of the body is kept in check by
   competition from
   a. Antibiotics       c. rusts
   b. Bacteria          d. mildews

43. The normal balance between bacteria and yeasts in the body can be upset by
   a. Eating yeast-leavened bed
   b. Eating edible mushrooms
   c. Using antibiotic
   d. Being exposed to mushroom spores

44. Which of the following is NOT a single organism
   a. Rust       c. yeast
   b. Smut       d. lichen
45. In the life cycle of molds, when hyphae of different mating types meet, each hypha forms a
   a. Sporangium                 c. zoospore
   b. Zygospore                  d. gametangium

46. What is the most important role of fungi in natural ecosystems? Why is this role important?

47. How do lichens encourage soil formation on barren rock?

48. Why is it not beneficial to kill all bacteria on and in the body? What is a common result of killing naturally occurring bacteria?

49. Does the haploid or diploid condition occur most in the life cycle of fungi? Explain your answer.
50. Name the four phyla of fungi.
   What characteristic determines the phylum into which a fungi is placed?
Biology Ch 21 Practice Test Fungi

1. Sexual reproduction
2. Mycorrhizae
3. Chitin
4. Haploid
5. Hyphae
6. Enzyme
7. Rhizoid hyphae
8. Aerial hyphae
9. Gametangia
10. Basidium
11. Deuteromycota
12. Rust
13. C. stolon
14. A. structure B would probably become dormant until environmental conditions improved
15. A. shelf fungi
16. C. both are composed of mycelium
17. A. vegetative mycelium
18. A. carry out photosynthesis
19. C. mycelium
20. A. sporangiophores
21. C. zygospore
22. B. ascospores
23. C. cap
24. B. in a ring at the outer edges
25. A. Ascomycete
26. B. saprobes
27. C. both living and dead organism
28. A. greatest in tropical areas
29. A. ringworm and athletes foot
30. D. they are composed of an alga or a cyanobacterium and a fungus living together
31. B. mutualism
32. B. absorb their food
33. A. fruiting body
34. C. both sexually and asexually
35. D. flies
36. D. mold
37. D. carbon dioxide
38. C. club fungi
39. A. ascus
40. C. is the source of an antibiotic
41. B. breaking down dead organisms
42. B. bacteria
43. C. using antibiotic
44. D. Lichen
45. A. sporangium
46. Fungi most important as decomposers. Without decomposers, organic molecules would remain tied up in the bodies of dead organisms
47. Lichens gradually break down the rocks on which they grow
48. Some bacteria are beneficial and keep other organisms such as fungi from growing out of control. Killing the body’s normal bacteria can result in an overgrowth of yeast, which cause thrush and reproductive tract infections
49. During the greater part of their life cycle, the nuclei of most fungi are haploid. Diploid nuclei form during sexual reproduction. Shortly after the nuclei fuse, however, meiosis occurs and produces haploid nuclei that dominate the remainder of the life cycle.
50. Molds (Zygomycota) – create zygospores created during sexual cycle
   sac fungi (Ascomycota) – create ascus, reproductive sac that contains spores created during the sexual cycle
   club fungi (Basidiomycota) – creates a basidium, spore bearing structure that can be found on the underside of mushroom caps
   imperfect fungi (Deuteromycota) – sexual reproduction part of their life cycle has never been observed.