Bio-10-Q2W7,8-Test1-Plants

Multiple Choice
Identify the choice that best completes the statement or answers the question.

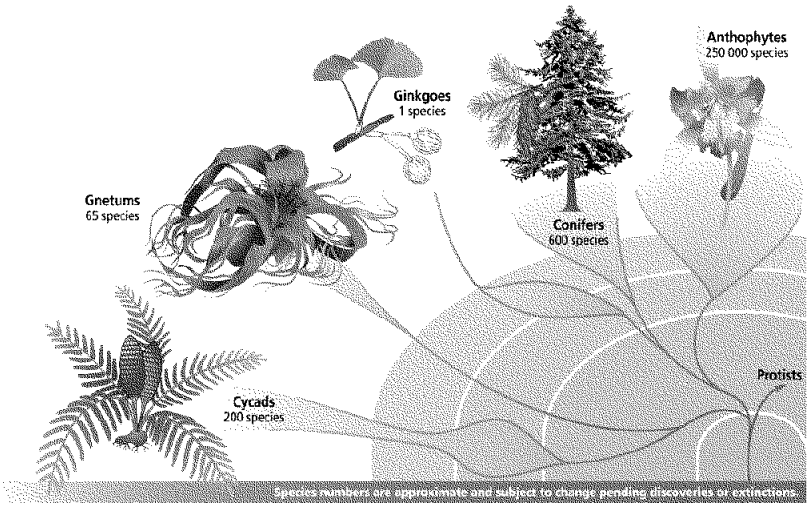

Figure 22-6

____ 1. According to Figure 22-6, which species was the fastest to differentiate from the rest of the ones shown?
a. gnetums and cycads
b. anthophytes, conifers, and ginkos
c. anthophytes
d. conifers and ginkos

____ 2. What can be inferred from Figure 22-6?
a. anthophytes are the most common seed plants
b. there used to be more than one species of ginkos
c. ginkos only grow in one area of the world
d. seed plants are more closely related to protists than non-seed plants

____ 3. According to Figure 22-6, with which division of seed plants do ginkos share the most recent common ancestor?
a. gnetums
b. cycads
c. anthophytes
d. conifers

____ 4. Nonvascular plants is the only plant division in which the gametophyte stage is _____.
a. dependent upon the sporophyte
b. dominant
c. smaller than the sporophyte
d. composed of 2n cells

____ 5. An anthophyte differs from a conifer in that _____.
a. its seeds are enclosed in a fruit
b. it produces seeds
c. it has vascular tissue
d. it is deciduous

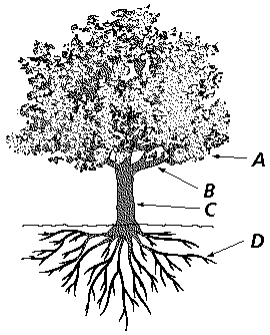

Figure 21-3

____ 6. Refer to Figure 21-3. Removing which structure would cause this plant to starve?
a. D
b. B
c. A
d. C

____ 7. Refer to Figure 21-3. Removing which structure would cause this plant to fall over?
a. A
b. C
c. D
d. B

____ 8. Refer to Figure 21-3. Which structure collects water?
a. B
b. D
c. C
d. A

____ 9. Refer to Figure 21-3. Which structure is used for the transportation of nutrients?
a. D
b. A
c. B
d. C

____ 10. The female reproductive structure of nonvascular plants is called a(n) _____.
a. pinnae
b. rhizoid
c. antheridia
d. archegonia

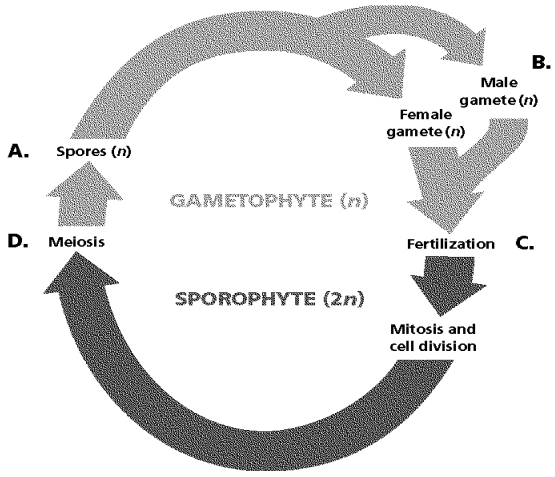

Figure 21-2

____ 11. If the plant described in Figure 21-2 has 16 chromosomes in the gametophyte stage, how many chromosomes does it have in the sporophyte stage?
a. 4
b. 16
c. 8
d. 32

____ 12. Where does the asexual reproductive cycle begin in Figure 21-2?
a. B
b. D
c. A
d. C

____ 13. Where are seeds developed in Figure 21-2?
a. C
b. A
c. B
d. D

____ 14. Where does the sexual reproductive cycle begin in Figure 21-2?
a. D
b. C
c. B
d. A

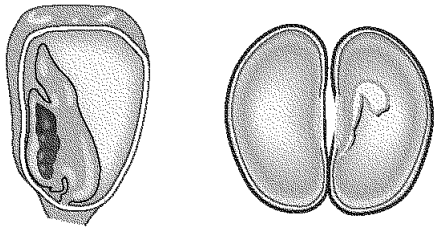

Figure 22-5

____ 15. If you cut open a stalk of the plant that produced the seed shown to the right in Figure 22-5, how would the vascular bundles appear?
a. in a ring
b. net-like
c. they do not exist
d. scattered

____ 16. How are the vascular tissues bundled in the stalks of the seed shown to the left in Figure 22-5?
a. scattered
b. net-like
c. in a ring
d. they do not exist

____ 17. You pick a flower off the plant that produced the seed shown to the right in Figure 22-5. What is a possible number of petals this flower could have?
a. 7
b. 6
c. 3
d. 8

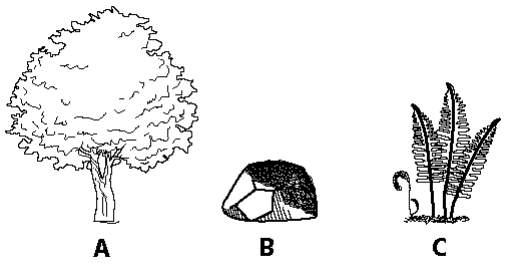

Figure 22-2

____ 18. Which of the plants shown in Figure 22-2 uses seeds to reproduce?
a. C
b. B
c. A
d. all of them

____ 19. Which of the plants shown in Figure 22-2 has a dominant gametophyte generation?
a. B
b. C
c. A
d. all of them

____ 20. Which of the plants shown in Figure 22-2 uses alternation of generations to reproduce?
a. B
b. A
c. C
d. all of them

____ 21. Which reproductive process is NOT used by all three of the plants shown in Figure 22-2?
a. asexual
b. fruit generation
c. gametophyte
d. sexual

____ 22. Which of the plants shown in Figure 22-2 does NOT contain vascular tissue?
a. A
b. C
c. B
d. none of them contains vascular tissue

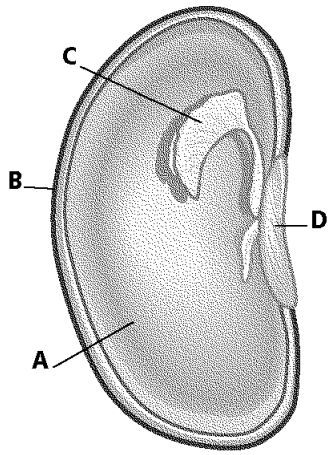

Figure 21-4

____ 23. Which structure in Figure 21-4 is analogous to a yolk in a chicken egg?
a. C
b. B
c. A
d. D

____ 24. Which structure in Figure 21-4 is analogous to a human fetus?
a. B
b. D
c. C
d. A

____ 25. Which structure in Figure 21-4 is analogous to an egg's shell?
a. D
b. A
c. B
d. C

____ 26. The fronds of ferns are divided into leaflets called _____.
a. rhizomes
b. sori
c. pinnae
d. cycads

____ 27. Which of the following are considered BOTH a vascular and non-seed plant?
a. Hepatophytes
b. Pterophytes
c. Bryophytes
d. Coniferophytes

____ 28. Although all plants produce spores only _____ produce flowers.
a. Anthocerophytes
b. Ginkgophytes
c. Coniferophytes
d. Anthophytes

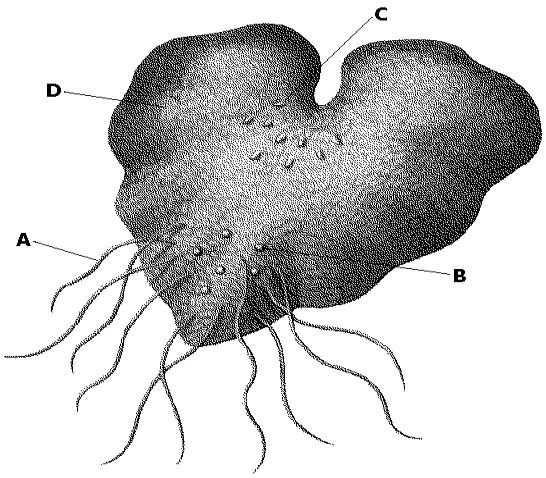

Figure 22-4

____ 29. Where is the structure shown in Figure 22-4 located?
a. in the stalk
b. in the root
c. in the ground
d. in the leaves

____ 30. Where are the male gametophytes produced in Figure 22-4?
a. D
b. B
c. A
d. C

____ 31. Bryophytes and Hepatophytes tend to be found in moist environments because _____.
a. they are both small plants
b. they rely on osmosis and diffusion for transport of nutrients
c. they contain vascular tissue
d. they don't produce seeds

____ 32. Horsetails are _____.
a. bryophytes
b. arthrophytes
c. pterophytes
d. lycophytes

____ 33. Which division of seed plants is represented by only one living species?
a. Gnetophyta
b. Coniferophyta
c. Cycadophyta
d. Ginkgophyta

____ 34. Which of these are vascular plants?
a. spike mosses
b. ferns
c. club mosses
d. all of these

____ 35. Both algae and plants store their food in the form of _____.
a. proteins
b. glycogen
c. glucose
d. cellulose

____ 36. The gametophyte of a moss produces _____.
a. gametes
b. 2n cells
c. spores
d. vascular tissue

____ 37. Fossil and genetic evidence suggests that _____ were the first land plants.
a. liverworts
b. mosses
c. horsetail
d. lycophytes

____ 38. Which of the following is not a dicotyledon?
a. dandelion
b. lettuce
c. grass
d. maple tree

Figure 22-3

____ 39. What type of plant died out in the time marked B in the timeline shown in Figure 22-3?
a. vascular plants
b. seed plants
c. non-seed vascular plants
d. nonvascular plants

____ 40. What originated at point A on the timeline shown in Figure 22-3?
a. non-seed vascular plants
b. seed plants
c. vascular plants
d. nonvascular plants

____ 41. What type of plant is completely extinct at point C in the timeline shown in Figure 22-3?
a. conifers
b. vascular plants
c. nonvascular plants
d. none of the above

____ 42. Plant cells all have a _____ composed of cellulose.
a. nucleus
b. cell wall
c. cytoplasm
d. cell membrane

____ 43. In most seed plants, fertilization does not require _____.
a. a gametophyte generation
b. the production of eggs
c. a film of water to carry the sperm to the egg
d. alternation of generations

____ 44. Which of the following are NOT considered non-seed plants?
a. Hepatophytes
b. Bryophytes
c. Coniferophytes
d. Anthocerophytes

____ 45. Anthophytes that live for only one year or less are called _____.
a. annuals
b. perennials
c. biennials
d. dicots

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