2026 Regional Iowa Envirothon Forestry Test (25 points)

1. When European-American settlers first came to Iowa and the Midwest, the green shaded areas were _____. (see map)
A. coniferous forests
B. deciduous forests
C. prairie
D. tundra
E. swamps



2. When using this tree harvesting method, five or more scattered trees per acre are left in the harvested area to provide seeds for a new forest stand. These trees are selected based on their growth rate, form, seeding ability, wind resistance and future marketability.
A. Group Selection Harvest
B. Seed Tree Harvest
C. Single-Tree Selection Harvest
D. Clearcut Harvest

3. Foresters who can provide assistance and help landowners improve their woodland for wildlife, recreation, water quality, or wood products are available in Iowa through the _____.
A. County Forestry Service Office
B. Iowa Department of Natural Resources
C. Farm Service Agency
D. University of Iowa Forestry Department

4. When should oak trees be pruned?
A. Any time of year
B. Late spring
C. Dormant season (December–February) only

D. Mid-summer during high heat

5. What is the name for this common insect problem for trees in Iowa? (see picture)

A. Eastern tent beetle
B. Emerald ash borer
C. Green-winged grasshopper
D. Insect gall
E. Japanese beetle



6. Which part of a tree is living xylem that is actively involved in fluid transport?

A. Heartwood
B. Outer bark
C. Sapwood
D. Cork

7. Roots of most species of trees are invaded by soil fungi to form root-fungus structures called _____.

A. apical meristem
B. decurrent
C. excurrent
D. mycorrhizae

8. Which tree has opposite simple leaves with five lobes, a smooth margin, and a fruit that is a u-shaped samara? (see picture)

A. Black Walnut
B. Boxelder
C. Sugar Maple
D. Red Oak
E. Black Locust



9. To measure tree height with a Biltmore stick, how far should you stand from the tree?
A. 33 ft (10.06 m)
B. 50 ft (15.24 m)
C. 66 ft (20.12 m)
D. 100 ft (30.48 m)

10. Which of the following is a characteristic shape of the exit hole made by an adult Emerald Ash Borer as it exits from under the bark of an ash tree?
A. Round hole
B. V-shaped hole
C. Square hole
D. D-shaped hole

11. Although insects are the most important food source for forest birds in Iowa, the fruits of flowering plants are also an important food source for many bird species. These fruits include soft fleshy fruits, as well as nuts and acorns and are referred to as _____.
A. flora
B. mast
C. mycorrhizae
D. sepal

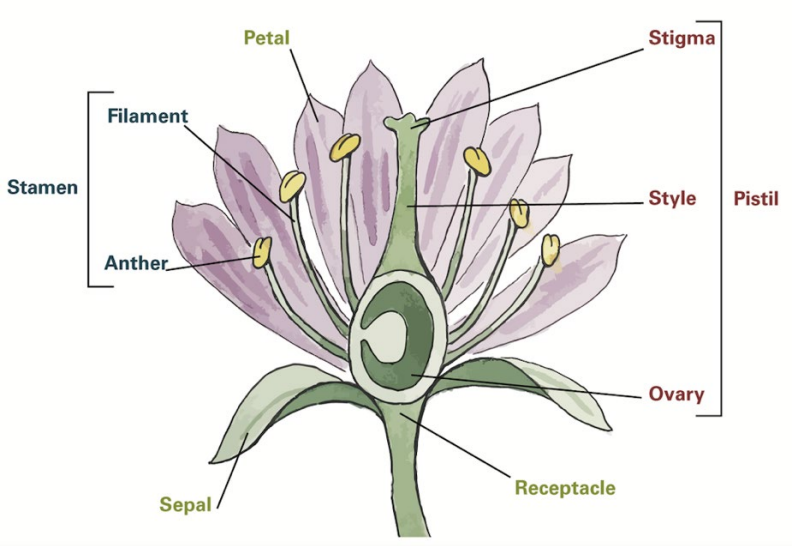
12. This bird is primarily found in open areas, will often nest in trees at forest edges, and will erect and maintain its large stick nest high in the canopy of trees? (See picture)
A. Eastern kingbird
B. Eastern wood-pewee
C. Peregrine falcon
D. Red-tailed hawk



13. Some native trees can take on invasive characteristics in the absence of disturbance or management. A prime example of a native tree with invasive potential is the _____, which, when allowed to become overabundant, can set the stage for a forested environment that will have less diversity and therefore support fewer of Iowa's forest-dependent birds.
A. Buckthorn
B. Bur Oak
C. Eastern redcedar

D. Garlic mustard
E. White pine

14. The female reproductive parts of a flower include _____. (see picture)
A. petals
B. the pistil
C. sepals and the receptacle
D. the stamen
E. all of these



15. _____ have hollow stems with needle-like hairs that serve as a good deterrent for animal consumption. This plant's epidermal hairs act like hypodermic needles and inject irritating chemicals, which results in a painful itch when touched. (See picture)
A. Jewelweed (Impatiens capensis)
B. Wild parsnip (*Pastinaca sativa*)
C. Poison Ivy (Toxicodendron radicans)
D. Stinging nettles (Urtica dioica)



16. _____ were once common in Iowa, but now are one of the rarest and most threatened ecosystems in our state.
A. Forests
B. Prairies

C. Savannas
D. Wetlands

17. Which of the following represent tertiary consumers in an Iowa forest food web? (see picture).
A. polyphemus moth caterpillar, common eastern bumble bee, white-footed mouse
B. eastern mole, western fox snake, Virginia opossum
C. bobcat, barred owl
D. American giant millipede, sulfur shelf fungi, slug
E. all of these are correct



18. Which of the following is true regarding Iowa forests?
A. There is a trend toward shadier forests because of lack of disturbance.
B. Iowa is losing thousands of acres of oak habitat annually.
C. Oak regeneration has been negatively impacted due to the trend toward more shady forests.
D. all of these

19. A strategy for managing and controlling invasive plants in forests include _____.
A. avoiding introduction of plants that could be invasive
B. hand-pulling and mowing
C. prescribed fire
D. all of these

20. Which tree species is easily recognized by its long needles grouped into bundles of two, three, or five?
A. Fir trees
B. Pine trees
C. Spruce trees
D. Cedar trees

E. all of the above

MATCHING: Match the definition with the appropriate term.

A. Forest
B. Giant millipede
C. Spongy moth (formerly Gypsy Moth)
D. Polyphemus
E. Red oak
F. Ring-necked pheasant
G. Stewardship
H. Tundra
I. White oak
J. Wild Turkey

_____ 21. a biological community dominated by trees

_____ 22. acorns from this tree contain less of the bitter compound, tannin, which makes it a preferred acorn for wildlife consumption

_____ 23. an abundant game species in Iowa today, that had disappeared from the state by the early 1900s because of unregulated hunting and habitat loss.

_____ 24. well-known non-native health threat to Iowa forests

_____ 25. means to be responsible for, plan, protect, care, and manage something