

KY Envirothon – Forestry - Multiple-Choice Practice Test – 2026 Kentucky's

Forests

- 1. Approximately what percentage of Kentucky is forested?**
 - A. 25%
 - B. 40%
 - C. Almost 50%
 - D. 75%
- 2. How many acres of forest does Kentucky have?**
 - A. 5 million
 - B. 12.4 million
 - C. 20 million
 - D. 30 million
- 3. What percentage of Kentucky's forests is privately owned by individuals?**
 - A. 10%
 - B. 40%
 - C. 60%
 - D. 80%
- 4. How many different tree species are found in Kentucky?**
 - A. 50
 - B. 85
 - C. 120+
 - D. 200+
- 5. Which process converts CO₂, water, and sunlight into sugar and oxygen?**
 - A. Respiration
 - B. Digestion
 - C. Photosynthesis
 - D. Transpiration

History of Forestry

- 6. Where did the field of forestry originate?**
 - A. United States
 - B. Canada
 - C. Germany
 - D. France

7. **What estate is known as the “Cradle of Forestry”?**
 - A. Yellowstone
 - B. Biltmore Estate
 - C. Shenandoah
 - D. Yosemite

8. **Who was the first forester in the United States?**
 - A. John Muir
 - B. Theodore Roosevelt
 - C. Gifford Pinchot
 - D. Aldo Leopold

9. **Who served as the first head of the U.S. Forest Service?**
 - A. Aldo Leopold
 - B. Gifford Pinchot
 - C. Henry Graves
 - D. John Wesley Powell

Tree Anatomy

10. **Which is NOT one of the main parts of a tree?**
 - A. Roots
 - B. Trunk
 - C. Crown
 - D. Bark only

11. **Which layer is responsible for tree growth in diameter?**
 - A. Cambium
 - B. Pith
 - C. Phloem
 - D. Bark

12. **Which part transports sugars through the tree?**
 - A. Cambium
 - B. Phloem
 - C. Heartwood
 - D. Xylem

13. **Apical meristems are found where?**
 - A. In the trunk
 - B. In the roots and branch tips

- C. Only in leaves
- D. In the heartwood

Tree Regeneration

14. Which is a form of natural reproduction?

- A. Air layering only
- B. Seeds
- C. Grafting
- D. Cloning

15. Sprouting from a stump or roots is called:

- A. Coppice sprouting
- B. Layering
- C. Budding
- D. Seeding

16. Layering occurs when:

- A. Seeds fall into moist soil
- B. A branch touches the ground and roots
- C. Two trees fuse trunks
- D. Insects create wounds

Tree Classification

17. What percentage of Kentucky's trees are conifers?

- A. 5%
- B. 10%
- C. 25%
- D. 50%

18. Broadleaved trees make up about:

- A. 40%
- B. 60%
- C. 90%
- D. 100%

19. Which statement describes conifers?

- A. They have broad, flat leaves.
- B. They are usually evergreen and cone-bearing.
- C. They lose leaves each fall.
- D. They have compound leaves.

Identifying Conifers

20. Which feature helps identify conifers?
- A. Leaf color only
 - B. Number of needles per fascicle
 - C. Bark thickness only
 - D. Root type
21. Which two conifers in Kentucky have scale-like leaves?
- A. Eastern white pine & loblolly pine
 - B. Eastern redcedar & northern white cedar
 - C. Hemlock & fir
 - D. Spruce & cypress

Identifying Broadleaved Trees

22. Which is not a leaf arrangement?
- A. Opposite
 - B. Alternate
 - C. Whorled
 - D. Circular
23. MADBuck stands for which groups?
- A. Maple, Ash, Dogwood, Buckeye
 - B. Maple, Alder, Dogwood, Birch
 - C. Magnolia, Ash, Douglas-fir, Buckeye
 - D. Maple, Ash, Douglas-fir, Basswood
24. A simple leaf has:
- A. Several leaflets
 - B. One blade per leaf stem
 - C. No veins
 - D. Parallel leaves

Ecology

25. Ecology is the study of:
- A. Water cycles only
 - B. Interactions between organisms and their environment
 - C. Forest products
 - D. Soil nutrients only

26. An ecosystem is:

- A. A forest with only trees
- B. A nursery
- C. An environment where organisms interact with biotic and abiotic factors
- D. A weather pattern

27. Biotic means:

- A. Non-living
- B. Living or once-living
- C. Mineral
- D. Synthetic

Forest Growth Factors

28. A desert receives how much rainfall per year?

- A. Less than 16 inches
- B. 17–60 inches
- C. 60–100 inches
- D. More than 200 inches

29. Topography refers to:

- A. Soil chemistry
- B. Lay of the land
- C. Tree size
- D. Elevation only

Forest Development

30. Forest succession is:

- A. Planting trees in rows
- B. Long-term changes from pioneer species to mature forest
- C. Cutting trees
- D. Soil formation

Forest Crown Classes

31. Dominant trees receive:

- A. No sunlight
- B. Full sun from above and partial sun from sides
- C. Only side sunlight
- D. Only ground reflection

32. Which receive little sunlight?

- A. Dominant
- B. Co-dominant
- C. Intermediate
- D. Suppressed

33. Suppressed trees receive:

- A. Full sun
- B. Some side sun
- C. No direct sunlight
- D. Only morning sun

Forest Health

34. Which is an insect pest of Kentucky trees?

- A. Emerald ash borer
- B. Monarch butterfly
- C. Honeybee
- D. Praying mantis

35. Which disease affects sassafras?

- A. Thousand cankers
- B. Laurel wilt
- C. Root rot
- D. Cedar rust

36. Which is a potential future pest?

- A. Ladybugs
- B. Spotted lanternfly
- C. Cicadas
- D. Ants

Invasive Plants

37. Which reason explains invasive plant success?

- A. Slow reproduction
- B. Produce large quantities of seed
- C. Prefer poor light conditions
- D. Require rich soil

38. Many invasive plant seeds are spread by:

- A. Water only

- B. Birds, wind, or humans
- C. Mammals only
- D. Soil erosion

Sustainable Forest Management

39. Forest management is:

- A. Allowing forests to grow without intervention
- B. Planned actions to meet goals for a forest
- C. Cutting all trees
- D. Studying weather

40. A forest cruise involves:

- A. Boating
- B. Measuring trees and site conditions
- C. Removing pests
- D. Planting seedlings

Management Practices

41. Silviculture is the art and science of:

- A. Mining
- B. Controlling forest growth and composition
- C. Hunting wildlife
- D. Soil erosion prevention

42. Clearcutting creates:

- A. Even-aged stands
- B. Uneven-aged stands
- C. Seed banks
- D. Multi-layered shrubs

Regeneration & Thinning

43. Seed-tree regeneration leaves:

- A. No trees
- B. Just enough mature trees to reseed
- C. Many trees
- D. Only seedlings

44. Shelterwood regeneration leaves:

- A. More trees for seed and shelter
- B. No trees

- C. Only dead trees
- D. Only shrubs

45. Thinning removes trees to:

- A. Increase crowding
- B. Reduce competition
- C. Clear entire stands
- D. Stop sunlight

Forest Products

46. In 2019, Kentucky's Forest & Wood Industry contributed:

- A. \$1 billion
- B. \$5 billion
- C. \$13+ billion
- D. \$50 billion

47. How many people were directly employed?

- A. 5,000
- B. 10,000
- C. 28,000
- D. 50,000