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## CT Envirothon Forestry Test - 2014

Where appropriate fill in the blanks or circle the correct answer(s) and be sure to answer questions on both sides of the page. Each correct answer is worth 2.5 points. Use two part common names unless otherwise instructed. Use the tree scale stick as needed for measurements.

### Field Station 1: (Questions # 1 to # 19)

1. Tree # 1 is a White Oak.
2. Tree # 1's dbh is: 10" 12" 14" 16" 18".
3. Tree # 1's merchantable height as measured to the nearest one-half 16 foot log is:  
(Circle one)  
1 1-1/2 2 2-1/2 3
4. Tree # 1's volume is 275 board feet.
5. **T or F** The seeds of Tree # 1 start to sprout soon after they fall in the autumn, maturing in one season.
6. Products from high quality specimens of Tree # 1 include:
  - A. Flooring
  - B. Furniture
  - C. Barrel staves
  - D. Clear lumber
  - E. Ship Building
  - F. All of the above
  - G. Only A, B, D
7. Tree # 2 is a White Ash.
8. Tree # 2's dbh is: 20" 22" 24" 26".
9. If Tree # 2 has 2 (two) 16' logs of merchantable height, what is its volume in board feet? 370
10. Tree # 2 is susceptible to which of the following insect pests now known to be present in four Connecticut counties?
  - A. Asian Longhorned Beetle
  - B. Emerald Ash Borer
  - C. Ash Decline
  - D. All of the above

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11. Tree # 3 is a Shagbark Hickory.

12. **T or F** Tree # 3 is considered a pioneer species because it usually becomes established in openings after a disturbance.

13. Tree # 3's dbh is: 6" 8" 10" 12".

14. **T or F** Seasoned wood from Tree # 3 has little value as fuelwood because of its low BTU value.

15. **T or F** The wood from Tree # 3 is noted not only for its hardness but also for its toughness and ability to stand up under sudden shocks and is commonly used for tool handles.

16. Tree # 4 was felled and cut into 16 foot logs several years ago. Using the tree appropriate table on the tree measuring stick, what is the estimated board foot volume of the butt log?

40 bf 95 bf 180 bf 320 bf

**The following information applies to questions # 17 to # 19. (Found Along Blue Flagged Trail From Tree # 4)**

Questions # 17 & # 18 are each associated with a corresponding field site. At each site the blue marked trees have been identified for removal to match one of the following Forest Management methods. Match the site with the phrase at the right that best describes the Forest Management method that was applied.

17. Question # 17: B

A. Forest Preserve

B. Crop Tree Release

18. Question # 18: D

C. Silvicultural Clear-cut

D. Diameter Limit Cut/High Grading

19. The trees in front of you with the large crowns provide food for many species of wildlife including deer, turkey, grouse, squirrels and bear. What is general name that wildlife biologists use for the food that they provide?

A. Soft mast

B. Beech nuts

C. Cones

D. Hard mast

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**Field Station 2: (Questions # 20 to # 34 )**

20. Tree # 5 is a Red Maple.

21. Tree # 6 is a Sugar Maple.

22. Tree # 7 is a Yellow Birch.

23. The structure of Tree # 7's leaves is considered:

- A. Simple
- B. Compound

24. Tree # 8 is a Eastern Hemlock.

25. What insect pest(s) have caused the decline of Tree # 8 since the mid-1980s?

- A. Two Lined Chestnut Borer
- B. Gypsy Moth
- C. Woolly Adelgid
- D. Elongate Scale
- E. Hemlock Decline
- F. C. & D.
- G. All the above

26. Tree # 9 is a White Pine.

27. Tree # 9 has how many needles per bundle? 5

28. If the hardwood overstory were removed from the area in front of you, what tree species would most likely dominate the future forest?

- A. Hickory
- B. Beech
- C. White Oak
- D. Tamarack
- E. White Pine
- F. None of the above

29. Generally, two site factors that have the most influence on the development of trees within a stand, **and** on which foresters **can** have a significant influence are:

- A. Insects and fungus diseases
- B. Soil moisture and water table
- C. Light and space in the canopy
- D. Soil fertility and acidity

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30. **T or F** Tree height is not an indicator of tree age, nor is tree diameter.
31. At this time, which insect pest(s) has/have **not** been discovered in Connecticut?
- A. Emerald Ash Borer
  - B. Hemlock Woolly Adelgid
  - C. Asian Long-horned Beetle
  - D. White Pine Weevil
  - E. All of the above
32. At the peak of forest clearing in southern New England what percent of the landscape was deforested?
- A. 30 to 40
  - B. 40 to 50
  - C. 50 to 60
  - D. 60 to 90
33. Which of the following tree species groups are considered shade **intolerant**?
- A. White (paper) birch, aspen, tulip-poplar
  - B. Red oak, Eastern hemlock, yellow birch
  - C. Basswood, sugar maple, American beech
  - D. White oak, sugar maple, American beech
34. The art and science of manipulating the pace of nature in the forest and controlling forest establishment, composition, structure and individual tree growth is called:
- A. Horticulture
  - B. Silviculture
  - C. Landscape management
  - D. Arboriculture

**Field Station #3: ( Questions # 35 to # 40 )**

**Instructions for Questions # 35 to # 40: The following 6 questions refer to the samples in the flasks numbered 1 through 5 on the table.**

35. Of the 5 flasks before you, which contain examples of plants that are considered to be invasive in Connecticut:
- A. #1, 3, 4
  - B. #3, 4, 5
  - C. #1, 2, 5
  - D. #1 & 2
  - E. All are invasive

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36. Of the 5 flasks before you, which contain specimens that retain their leaves throughout the year?
- A. #1
  - B. #2
  - C. #3
  - D. #4
  - E. #5
37. Several of the flasks might contain specimens that have an opposite branching arrangement. It/they are:
- A. #1, 2, 3
  - B. #4 & 5
  - B. #1 & 3
  - C. #4
  - D. None
38. One or more of the flasks might contain specimens that have a compound leaf structure. It/they are:
- A. #1 & 3
  - B. #2
  - C. #1 & 4
  - D. #4
  - E. #5
39. Which of the 5 examples produce flowers at some point in the growing season?
- A. #2, 3, 4
  - B. #1
  - C. #1, 2
  - D. None of them
  - E. All of them
40. The best way to get help in identifying a plant specimen would be to use a:
- A. Plant encyclopedia
  - B. Plant taxonomic key
  - C. Plant monograph
  - D. Plant dictionary
  - E. TV Guide

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## Forestry Current Issue Questions – 2014

(Each correct answer is Worth 1 point)

1. **T or F** The CT Department of Agriculture's "Connecticut Grown Program" includes locally and sustainably grown forest products.
2. **T or F** Connecticut's forest products are marketed locally, not globally.
3. **T or F** According to Dr. Paul Barten, Professor of Forest Resources at the University of Massachusetts, the three pillars of "sustainability" include economic growth, environmental protection and social equality.
4. What does a "tie log" tie together? Rail Road Tracks
5. **T or F** The forest products that result from well managed forests are an integral part of Connecticut's agricultural heritage.
6. **T or F** Two major effects that the charcoal industry had on Connecticut's forests include large-scale clear cutting and increased frequency of forest fire. The resulting conditions were a primary factor in perpetuating Connecticut's oak forests.
7. Which of the following are potential forest management objectives:
  - A. Recreation
  - B. Aesthetics
  - C. Wildlife habitat
  - D. Timber production
  - E. Maple syrup production
  - F. All of the above
8. **T or F** Sustainable forest management never mimics the natural process of forest disturbances.
9. High quality, high value red oak veneer logs can be produced from Connecticut's forests. The veneer logs are processed by which of the following methods?
  - A. Rotary
  - B. Slicer
  - C. Chipper
  - D. Grinder
  - E. A, B, & C
  - F. A & B
  - G. All the above
10. The veneer that is produced from Connecticut's forests is used in the manufacturing of which of the following products?
  - A. Furniture
  - B. Flooring
  - C. Paneling
  - D. Cabinetry
  - E. All of the above
  - E. None of the above