

Area IV Envirothon 2016 – Forestry

1. This tree would be considered part of which crown class?
 - a. Co-Dominant
 - b. Dominant
 - c. Intermediate
 - d. Overtopped

2. Which of these is not a commonly applied technique for timber stand improvement?
 - a. Basal Bark Spraying
 - b. Broadcast Spraying
 - c. Cut Stump
 - d. Frilling or Girdling

3. When utilizing basal bark treatments, which of these is the greatest concern
 - a. Basal area of stand
 - b. Damaging non-targeted plants
 - c. Sap flow
 - d. Spacing of cuts

4. Trees and vines cut during a timber stand improvement operation _____.
 - a. May be left standing in the woods
 - b. May not be sold and have no commercial value
 - c. Must be removed from woods for sanitation
 - d. Require herbicides to complete treatment

5. The influence of livestock grazing on Ohio's timber resource is pronounced. Which of the following statements describes the influences of livestock's impact?
 - a. Livestock increase production of fine hardwood timber
 - b. Livestock increase soil compaction causing reduced oxygen to roots
 - c. Livestock increase the diversity of wildlife species
 - d. Livestock increase the number of seedlings in the understory

6. Grazing woodlands often result in changes to the species make-up of the woods. Which of the following species is least likely to increase with the presence of livestock?
 - a. Hawthorn
 - b. Ohio Buckeye
 - c. Red Cedar
 - d. Red Oak

7. Is this plant a non-native invasive?
 - a. Yes
 - b. No

8. Which of these tree species produce soft mast?
- Hazelnut
 - Persimmon
 - White Oak
 - Yellow Buckeye
9. Which of these is the least effective way to maintain or increase mast producing trees and shrubs?
- Allow invasive plants like bush honeysuckle to fill in the understory
 - Maintain approximately 2-3 fruit bearing grapevines per acre
 - Mow or cut 1/5 of shrubby woodland edges yearly
 - Plant a variety of native shrubs and trees
10. Which of these tree derived food sources is typically high in fat, carbohydrates, and protein?
- Bread
 - Hard Mast
 - Insects
 - Soft Mast
11. Forest Management Plans should be considered “living documents” meaning that they should be adaptable to changing natural events and ownership objectives. Because of this, reviews of the management plan with a professional forester should be done how often?
- Every year
 - Every other year
 - Every 10 years
 - Every 20 years
12. Managing a woodland for only one product or amenity is called what type of management?
- Dominant use
 - High yield use
 - Intermediate use
 - Multiple use
13. Forest management plans should be developed after which of the following is completed?
- Bankruptcy
 - Ownership changes
 - Resource inventory
 - Timber harvesting
14. The gradual replacement of one community of plants by another is the definition of what?
- Ecosystem
 - Habitat
 - Succession
 - Vertical Structure

15. Even aged forest management enhances habitat for wildlife species such as cottontail rabbit or prairie warbler by creating
- Early successional forests
 - Late successional forests
 - Mature forests
 - Old growth forests
16. When managing a woodland for both timber harvesting and wildlife habitat determining which trees should be retained in the stand is very important. Which of these attributes is least important when choosing retention trees?
- Leaf production
 - Living trees with cavities
 - Mast production
 - Small groups of trees
17. This tree is valued for its lumber and soft mast production, please identify:
- Black Cherry
 - Black Gum
 - Black Oak
 - Black Walnut
18. If a tree is 20 inches DBH and has 2 merchantable logs, how much does the Doyle Rule underestimate board footage compared to the International $\frac{1}{4}$ Inch Rule? (I will provide volume charts)
- 60 bdf
 - 80 bdf
 - 100 bdf
 - 120 bdf
19. Which of these tools is used to measure annual tree growth rates?
- Biltmore stick
 - Clinometer
 - Compass
 - Increment borer
20. Merchantable tree volume is expressed in what increments?
- Board Feet
 - Cubic Inches
 - Square Inches
 - Square Feet
21. This tree often holds its leaves all winter despite being deciduous, please identify.
- American Beech
 - Black Cherry
 - Black Walnut
 - Sugar Maple

22. This species of maple is least tolerant of poorly drained soils, please identify.

- a. Box Elder
- b. Red Maple
- c. Silver Maple
- d. Sugar Maple

23. This is an important hard mast producing tree in the fall, please identify.

- a. Shagbark Hickory
- b. Red Oak
- c. White Oak
- d. Yellow Poplar

24. When considering harvesting trees from a streamside woodland, which of these is cutting methods should be used in most circumstances?

- a. Clearcutting
- b. Group Selection
- c. Single Tree Selection
- d. No Harvesting

25. Please measure the diameter this tree to the nearest 10th of an inch. (I will provide d-tapes)

- a. 17.0 inches
- b. 17.4 inches
- c. 18.0 inches
- d. 18.6 inches