

**2022 4-H/FFA Forestry CDE
State Senior Exam**

Select the best answer from the choices provided. Bubble the answer to the corresponding question on the Scantron answer sheet, General Knowledge Exam section. Return this test booklet to the room monitor when finished.

1. An area of land that is drained by a body of water is known as a what?
 - a. man-made pond
 - b. water hole
 - c. watershed
 - d. none of the above

2. Flash flooding is not a problem in dry mountainous areas.
 - a. True
 - b. False

3. Which type of product leads to an injury in hardwood seedlings that is more common as the product is more widely used in the agriculture industry?
 - a. Glyphosate
 - b. Glufosinate
 - c. Diquat
 - d. None of the above

4. Frost damage most often appears as what on new leaves or shoots?
 - a. dried or blackened
 - b. dried or yellowed
 - c. wet or blackened
 - d. wet or yellowed

5. Which type of tree is particularly susceptible to frost injury because they often grow in low areas where cold air drains from surrounding hillsides?
 - a. oak
 - b. maple
 - c. walnut
 - d. ash

6. When avoiding dieback, when should young trees be given additional water?
 - a. late spring
 - b. late summer
 - c. later autumn
 - d. late winter

7. Trees exposed to heavy loads of ice shouldn't be inspected for limb breakage and splitting.
 - a. True
 - b. False

8. When is gypsum applied?
 - a. before the trees are planted
 - b. after trees are planted
 - c. two years after a tree is planted
 - d. whenever

9. Which of the following are side effects of a tree that has damage from flooding?
 - a. appearing stunted
 - b. new leaves seem smaller than normal
 - c. shoots may appear wilted and drought-stressed
 - d. all of the above

10. Which combination can lessen the risk of damage to a tree when it comes to flooding?
 - a. warmer temperatures and still flood water
 - b. hot temperatures and flowing flood water
 - c. cooler temperatures and flowing flood water
 - d. cooler temperatures and still flood water

11. A side effect of tree stuck by lightning would be
 - a. deep gashes running the width of the bole
 - b. burn marks
 - c. the bark has exploded all the way around the trunk
 - d. all of the above

12. Wind shake can be deep in a tree and hidden until it is revealed at harvest.
 - a. True
 - b. False

13. The following symptoms describe what type of injury: stripped bark, broken limbs, and forking?
 - a. flooding
 - b. tractor blight
 - c. tree-fall injury
 - d. dieback

14. All of the following factors have an affect the severity of a drought EXCEPT:
 - a. leaf area
 - b. wind speed
 - c. tree-fall incidents
 - d. humidity

15. Sloped fields and a crusted soil surface make watering of trees easy.
 - a. True
 - b. False

16. Drought-stressed trees often take how long to recover after watering?
- Minutes
 - Hours
 - Days
 - Weeks
17. Fertilization doesn't stimulate weed growth.
- True
 - False
18. When transporting seedlings, you must protect them for what so they don't dry out?
- sun and water
 - sun and wind
 - wind and water
 - wind and shade
19. Which of the following terms helps determine where and how well trees grow?
- topography
 - geography
 - thermograohy
 - biogeography
20. Sub-climax forests are very resistant to widespread change.
- True
 - False
21. Pesticides should not be applied over or within _____ of streams, ponds, lakes, etc.
- 25 feet
 - 30 feet
 - 35 feet
 - 40 feet
22. _____ requires you to estimate expenses and revenues many years into the future
- UNICAP
 - NRCS
 - DCFA
 - QTP
23. Trees are planted for many reasons EXCEPT:
- landscaping
 - soil and water conservation
 - wildlife habitat
 - recreational purposes
24. Trees planted for commercial timber production are subject to uniform capitalization rules.
- True
 - False

25. The limit for total expensing per tax payer per year is:
- \$15,000
 - \$5,000
 - \$100,000
 - \$10,000
26. A soil pH between ____ and ____ is optimal for most fine hardwood species.
- 5.4 and lower
 - 5.5 and 6.4
 - 6.5 and 7.2
 - 7.2 and higher
27. _____ can be used to limit damage caused by large animals.
- Tree shelters
 - Fencing
 - Cages
 - Tree guard
28. All hardwoods are:
- get severely damaged by pests and diseases
 - able to resist diseases and recover from pests
 - susceptible to the invasion of new and exotic pests and diseases
 - susceptible to only a few pests and diseases depending on the season
29. Mowing a path through the plantation along the route that deer are likely to travel will:
- encourage the deer to not even go down the path .
 - Make the deer interested in whats on the other side.
 - scare the deer away because the path is unusual.
 - encourage the deer to pass through without stopping to eat.
30. Low rainfall, high soil pH, and organic matter can affect how young trees respond to herbicides
- True
 - False
31. Trees with salt burn often appear to have symptoms of _____ deficiency.
- Nitrogen
 - Potassium
 - Iron
 - Oxygen
32. For number 3 log grade, what is the maximum number of cuttings allowed?
- 1
 - 2
 - 3
 - no limit

33. Indiana has over _____ native tree species.
- 60
 - 67
 - 80
 - 100
34. Which is NOT something to include in a tree planting plan?
- your objectives
 - labor
 - species to be planted
 - recreational activities
35. Pruning is essential to the health of trees
- True
 - False
36. What can be done to encourage vertical growth in planted trees?
- Close Spacing
 - Wide Spacing
 - Deep planting
 - Shallow planting
37. What is a "Clearcut"?
- A tree that has been cut all the way through
 - An area of forest where most trees have been cut down
 - A recently pruned tree
 - A type of sawmill method
38. The number of birds in a forest decrease after a clearcut.
- True
 - False
39. Because the goal of thinning is to maintain a steady growth rate:
- fertilizing often is important
 - Thinning every couple of days is important
 - monitoring the growth rate is important
 - don't monitor the tree as you won't see a difference
40. Pruning tools are chosen based on the:
- type of tree
 - diameter of the branch to be pruned.
 - reason why the tree needs pruned
 - diameter of the tree

41. Which method of management control when it comes to animals is controversial?
- repellants
 - using toxins
 - hunting
 - Frightening
42. All commercial repellants must be applied following:
- how many animals you're trying to keep away
 - your own judgment
 - label directions
 - What a friend tells you
43. What is a sign of deer browse?
- Damaged bark
 - Holes near the trees
 - Root damage
 - None of the above
44. What is a common alternative to a complete harvest every 80 years?
- 15 year harvests
 - 20 year harvests
 - 10 year harvests
 - 100 year harvests
45. What can cause both direct and indirect injuries to trees?
- Rabbits
 - Livestock
 - Deer
 - Voles
46. Some environmental and management related injuries can be treated, but it is best to :
- prevent their occurrence
 - Know what you are dealing with first
 - Not treat it and let it heal naturally
 - Assume the injuries are from animals and put up fencing
47. Sunscald is a type of _____ injury?
- Spring
 - Summer
 - Fall
 - Winter
48. What is the percentage of log length required in clear cutting for a Number 3 grade log?
- 25%
 - 50%
 - 66 2/3%
 - 100%

49. Planting your own trees may be feasible with all of the following EXCEPT:

- a. you are planting a small area
- b. hand planting
- c. you have a strong back and lots of energy
- d. you are planting a big area, more than 5 acres

50. Ideally, seedlings should be planted within _____ of leaving the nursery.

- a. 12 hours
- b. 2 days
- c. 1 week
- d. 24 hours