

2010 National FFA Forestry

Career Development Event Exam

Directions: Select the best answer and bubble it in on the score sheet provided. You may write on test booklet, if needed.

1. _____ species, sometimes called conifers, are trees that have leaves in the form of needles.
 - a. Hardwood
 - b. Softwood
 - c. Evergreen
 - d. Deciduous
2. The first appropriation for the acquisition of timberland by the federal government was made in _____.
 - a. 1789
 - b. 1799
 - c. 1809
 - d. 1819
3. Which of the following is not a characteristic of ecosystems?
 - a. Stratification
 - b. Zonation
 - c. Diversity
 - d. Succession
4. _____ are primarily found in the upper soil layer and break down plant and animal matter to be repeatedly recycled by green plants.
 - a. Decomposers
 - b. Consumers
 - c. Producers
 - d. None of the above
5. Which of the following is not an example of a simple ecosystem?
 - a. Apple orchard
 - b. Pine-hardwood forest
 - c. Pine plantation
 - d. Cotton field
6. _____ lack root hairs.
 - a. Oaks
 - b. Maples
 - c. Birches
 - d. Pines
7. _____ is the process by which water vapor leaves a living plant and enters the atmosphere.
 - a. Respiration
 - b. Circulation
 - c. Transpiration
 - d. Photoperiodism

8. If a flower lacks a _____, then it is an incomplete flower.
- a. Calyx
 - b. Corolla
 - c. Stamen
 - d. All of the Above
9. _____ is considered the father of systematic botany.
- a. Linnaeus
 - b. Pinchot
 - c. Dubiel
 - d. Hasiotis
10. On deciduous trees, _____ is the most important identification feature in the dormant winter period.
- a. Twigs
 - b. Bark
 - c. Fruit
 - d. Leaves
11. If a cord of firewood cost \$200, how much would a stack of wood measuring 4' x 6' x 8' cost?
- a. \$200
 - b. \$250
 - c. \$300
 - d. \$312
12. A _____ is the most accurate tool for measuring tree diameters.
- a. Biltmore Stick
 - b. Diameter Tape
 - c. Tree Caliper
 - d. Wedge Prism
13. A _____ removes all injured, diseased, or vulnerable trees in a stand, regardless of their merchantability.
- a. Sanitation cutting
 - b. Clear cutting
 - c. Seed tree cutting
 - d. Shelterwood cutting
14. Which is not a factor affecting the success or failure of direct seeding?
- a. Vegetative Cover
 - b. Soil Moisture
 - c. Temperature
 - d. Bird Populations
15. If Mr. Brown plans to plant 15 acres of Longleaf Pine seedlings on 6 feet x 10 feet intervals, how many seedlings per acre will Mr. Brown plant?
- a. 726
 - b. 908
 - c. 680
 - d. 544
16. As a rule, only about ____ to ____ percent of all properly planted seedlings will survive.
- a. 65 / 70
 - b. 70 / 75
 - c. 75 / 80
 - d. 80 / 85

17. If the specific gravity of wood is expressed as 0.56, and a cubic foot of water weighs 62.5 pounds, how much would a cubic foot of wood weigh?
- a. 33 pounds
 - b. 35 pounds
 - c. 37 pounds
 - d. 39 pounds
18. If an undried sample of Southern Pine sample weighed 10 ounces and the same sample once dried weighed 8 ounces, what would be the moisture content of the sample?
- a. 20%
 - b. 23%
 - c. 25%
 - d. 30%
19. _____ is frequently called *Old Field Pine* since it is commonly found in abandoned fields.
- a. Shortleaf Pine
 - b. Loblolly Pine
 - c. Longleaf Pine
 - d. Slash Pine
20. Round timbers, generally driven into the ground to support other structures and generally pressure-treated with creosote are called _____.
- a. Poles
 - b. Cross-ties
 - c. Mine Timber
 - d. Piling
21. Which of the following has not resulted in a sharp reduction in the damage caused by forest fires?
- a. Global Warming
 - b. Improved knowledge of forest fires
 - c. Better equipment
 - d. More adequately trained personnel
22. _____ are insects that consume all or part of a leaf.
- a. Borer
 - b. Leaf Feeders
 - c. Plant-sucking Insects
 - d. Gall Insects
23. What are four types of roots in a complete root system?
- a. Tap root, lateral roots, fibrous roots, root hairs
 - b. Tap root, lateral roots, fibrous roots, deeply descending roots
 - c. Tap root, lateral roots, deeply descending roots, cambium
 - d. Root cap, lateral roots, fibrous roots, deeply descending roots

24. When measuring diameter breast height of a tree with a Biltmore Stick, how many inches from the eye is the stick held?
- a. 21 inches
 - b. 24 inches
 - c. 25 inches
 - d. 30 inches
25. How many board feet are in a 2 inch x 12 inch x 24 inch Southern Pine board?
- a. 2.5 board feet
 - b. 3.5 board feet
 - c. 4 board feet
 - d. 4.5 board feet
26. A helicopter can direct seed as many as _____ acres per day.
- a. 1,500
 - b. 1,800
 - c. 2,250
 - d. 2,500
27. Which of the following is not an advantage of planting seedlings?
- a. Initial investment is high
 - b. Complete control over the species
 - c. Fast erosion control
 - d. Control of tree spacing
28. The American Forest Institute says there are four steps in developing a good forest management program. Which of the following is not a proper step in developing a good forest management program?
- a. Analyze the situation
 - b. Becoming a certified tree farm
 - c. Decide on your objectives
 - d. Develop a plan
29. Which of the following is a biological control of forest insects?
- a. Introduction of a predator
 - b. Planting of resistant varieties
 - c. Application of pesticides
 - d. Selective harvesting
30. Which of the following is not a cause of noninfectious disease?
- a. Air pollution
 - b. Drought damage
 - c. Ice damage
 - d. Parasites

31. _____ is the most violent and dangerous type of forest fires.
- a. Ground fire
 - b. Crown fire
 - c. Surface fire
 - d. None of the above
32. Which of the following is not a factor affecting the anatomy of fire?
- a. Slope
 - b. Moisture
 - c. Ignition point
 - d. Natural barriers
33. When felling a tree, a _____ removes a wedge of wood from the side where the logger wants the tree to fall.
- a. Back cut
 - b. Over cut
 - c. Front cut
 - d. Undercut
34. _____ refers to a leaf being shaped like a heart.
- a. Rhomboid
 - b. Deltoid
 - c. Cordate
 - d. Elliptic
35. Which is not part of the fire triangle?
- a. Fuel
 - b. Soil
 - c. Heat
 - d. oxygen
36. All of the following are determined by measuring basal area EXCEPT...
- a. the degree of stocking of a stand of trees
 - b. the amount of timber to remove in thinning an overstocked stand
 - c. timber volume calculations
 - d. the height of a particular tree
37. Generally speaking, a technician is someone who has majored in forestry and has graduated from a _____.
- a. technical school
 - b. high school
 - c. 4 year college
 - d. Post-Bachelorette program
38. Sunlight, carbon dioxide and water produce carbohydrates through a process known as _____.
- a. Respiration
 - b. Photosynthesis
 - c. Inspiration
 - d. Oxidation

39. Controlled fire can be used for all but the following:
- a. public relations
 - b. hazard reduction
 - c. site preparation
 - d. hardwood control
40. How many sections are in a township?
- a. 640
 - b. 23,040
 - c. 36
 - d. 40
41. How many acres are in an area 20 chains long by 20 chains wide?
- a. 20
 - b. 40
 - c. 640
 - d. 400
42. Legume, follicle, capsule and pome are types of _____.
- a. Bark
 - b. Flowers
 - c. Fruit
 - d. Leaves
43. Immediately outward from the cambium are the living cells called the inner bark, or _____.
- a. Sapwood
 - b. Phloem
 - c. Annual ring
 - d. Xylem
44. Magnetic declination is the _____.
- a. amount of local attraction
 - b. angle between true and magnetic
 - c. both A and B
 - d. none of the above
45. The contour interval on a topographic map indicates the _____.
- a. different types of contour lines
 - b. difference in elevation represented by adjoining contour lines
 - c. elevation at a specific point
 - d. elevation of a general area
46. The basal area per acre is _____ if one has tallied 8 trees with a 10 factor prism.
- a. 8 sq. ft
 - b. 80 sq. inches
 - c. 800 sq. ft
 - d. 80 sq. ft
47. Which of the following is not a disadvantage of natural regeneration?
- a. Less control of spacing and stocking
 - b. Generally lower yield
 - c. Low cost establishment
 - d. No genetic improvement

48. _____ is the portion of the fire from which air is moving away. This portion of the fire is moving slowest and is burned over.

- a. Head
- b. Flank
- c. Rear
- d. None of the above

49. The relative humidity range for most prescribe burns should be from _____ to _____.

- e. 25% / 35%
- f. 40% / 60%
- g. 30% / 60%
- h. 30% / 60%

50. MSDS is an abbreviation for.....

- a. Material safety data sheet
- b. Mowing safely down slopes
- c. Materials, supplies, and delivery standards
- d. None of the above