

**2011 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. Which of the following is not a common topographic map scale?
 - a. 7.5 minute 1:24,000 scale, 1 inch represents 2,000 feet
 - b. 1:63,360 scale, 1 inch represents 1 mile
 - c. 1:100,00 scale, 1 inch represents about 1.6 miles
 - d. 1:250,000 scale, 1 inch represents about 4 miles

2. Identify the topographic map symbol.
 - a. Guard Station
 - b. Forest Headquarters
 - c. House of Worship
 - d. Ranger District Office

3. The total environment of a tree is a complex integration of physical and biological elements. Which of the following is a biological element?
 - a. Fungi
 - b. Air movement
 - c. Precipitation
 - d. Soil texture

4. Farmer Brown has stacked firewood 4 feet high, 4 feet wide, and 100 feet long. How many cords has he stacked?
 - a. 8.5 cords
 - b. 10.5 cords
 - c. 12.5 cords
 - d. 14 cords

5. What is the scientific name of Douglas Fir?
 - a. *Picea glauca*
 - b. *Pinus ponderosa*
 - c. *Pseudotsuga menziesii*
 - d. *Taxodium distichum* var. *distichum*

6. According to the Homelite Owner's Manual, an operator should move a chainsaw at least _____ feet from the fueling point before starting the engine.
 - a. 20
 - b. 30
 - c. 40
 - d. 50

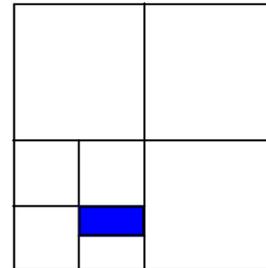
7. Which statement is true about carrying a chainsaw?
- Engine stopped, brake engaged, guide bar/chain to the rear, muffler away from body
 - Engine stopped, brake engaged, guide bar/chain to the front
 - Engine stopped, guide bar/chain to the rear, muffler away from body
 - None of the above
8. The trunk grows in diameter by means of cell division in the _____.
- Heartwood
 - Cambium Layer
 - Outer bark
 - Roots
9. Identify the tool: 76" Diameter in inches, 10ths on one side; 20' linear in feet, 10ths, 100ths on other side. 3/8" Wide line with claw hook. Handcrank rewind. Case dimensions: 3-1/2" x 1".
- Logger's Tape
 - Bark Gauge
 - Hip Chain
 - Diameter Tape
10. Which statement is correct?
- Kingdom, order, division, family, genus, species
 - Kingdom, division, order, family, genus, species
 - Division, kingdom, order, genus, species, family
 - Species, genus, family, order, division, kingdom
11. All scientific names of plants consists of two _____ words, first the genus name, followed by the species name.
- Greek
 - Spanish
 - German
 - Latin
12. Identify the tool: Attaches directly to a quart can without the need for an adapter. Made of lightweight but extremely strong material that keeps your hand warmer in the winter than metal models. Comes with reversible, self-cleaning .021" nickel-finished nozzle.
- Hypo-Hatchet
 - Drip Torch
 - Tree Marking Gun
 - Tally Meter
13. Who was the President of the United States when Gifford Pinchot became head of the United States Forest Service in 1905?
- Grover Cleveland
 - William McKinley
 - Theodore Roosevelt
 - William Taft

14. Which of the following is not a part of a mature tree trunk?
- a. Lateral bark
 - b. Heartwood
 - c. Inner bark
 - d. Outer bark
15. Identify an example of structural lumber from the list below.
- a. Wood for Cabinets
 - b. Wood for Millwork
 - c. Dimensional lumber
 - d. Joists
16. How many board feet are in a 2 inch x 4 inch board 36 inches long?
- a. 1
 - b. 2
 - c. 3
 - d. 4
17. Which of the following is not a dendrometer?
- a. Biltmore Stick
 - b. Tree Calipers
 - c. Clinometer
 - d. Diameter Tape
18. In an all-aged forest, the dominant trees may damage the growth of the overall stand. Removal of dominant trees to maximize timber volume produced is called _____.
- a. Sanitation Cutting
 - b. Liberation
 - c. Thinning
 - d. Salvage Cutting
19. What is a disadvantage of planting seedlings?
- a. Complete control over the species
 - b. Control of tree spacing
 - c. Fast erosion control
 - d. Initial investment is high
20. _____ eat their way through the sapwood and heartwood of the tree.
- a. Wood Borers
 - b. Bark Borers
 - c. Defoliators
 - d. Tip Feeders
21. Which of the following is not a noninfectious disease?
- a. Fungi
 - b. Acid Rain
 - c. Sunscald
 - d. Flood Damage
22. Which of the following is not an advantage of livestock grazing in forests?
- a. Control hardwoods
 - b. Soil compaction
 - c. Reduce fire hazard
 - d. Natural Fertilizer

23. Most forest fuels have ignition temperatures of _____ to _____.
- a. 200 degrees / 450 degrees
 - b. 400 degrees / 660 degrees
 - c. 600 degrees / 880 degrees
 - d. None of the above
24. Which type of forest fire is the easiest to control?
- a. Ground Fire
 - b. Surface Fire
 - c. Crown Fire
 - d. Brush Fire
25. Of all the environmental factors that influence the growth of trees, the most limiting is...
- a. Soil quality
 - b. Temperature
 - c. Topography
 - d. Moisture
26. When planting trees, a spacing of 8 x 9 feet will result in how many trees per acre?
- a. 340
 - b. 1015
 - c. 605
 - d. 825
27. Aphids excrete a clear, sugary liquid called.....
- a. conks
 - b. manna
 - c. plant benign cancer
 - d. honeydew

28. What is the legal description of the shaded tract of land shown below?

- a. SW $\frac{1}{4}$, SE $\frac{1}{4}$, N $\frac{1}{2}$, S24, T32N, R18E
- b. N $\frac{1}{2}$, SE $\frac{1}{4}$, SW $\frac{1}{4}$, S24, T32N, R18E
- c. SE $\frac{1}{4}$, SW $\frac{1}{4}$, N $\frac{1}{2}$, S24, T32N, R18E
- d. N $\frac{1}{2}$, SW $\frac{1}{4}$, SE $\frac{1}{4}$, S24, T32N, R18E



29. Using the diagram for question 28, how many acres are in the marked parcel?
- a. 20
 - b. 40
 - c. 160
 - d. 640
30. _____ embraces a multi-managerial system that includes municipal watersheds, wildlife and fisheries habitats, outdoor recreational opportunities, landscape design, and the future production of wood fiber as raw material.
- a. Timberland
 - b. Tree Farm System
 - c. Urban Forestry
 - d. Multiple-use Forest

31. Which of the following is not a characteristic of an ecosystem?
- a. Stratification
 - b. Zonation
 - c. Succession
 - d. Diversity
32. Another name for sapwood is _____.
- a. Phloem
 - b. Xylem
 - c. Cambium
 - d. Heartwood
33. Pores on the underside of leaves are called _____.
- a. Guard Cell
 - b. Epidermis
 - c. Cuticle
 - d. Stomata
34. The _____ bears the flower's pollen, which fertilizes the pistil, resulting in development of the fruit.
- a. Anther
 - b. Calyx
 - c. Corolla
 - d. Filament
35. Which of the following is an example of Angiospermae?
- a. Hemlock
 - b. Aspen
 - c. Cedar
 - d. Douglas Fir
36. _____ is small, dry, one-seeded, and unwinged, but often hairy.
- a. Samara
 - b. Nut
 - c. Achene
 - d. Capsule
37. Which species of tree leaves do not turn red in autumn?
- a. Red Oak
 - b. Sweet Gum
 - c. Maple
 - d. Cottonwood
38. John's step factor is 2.2 feet. How many steps does John take to measure the distance of one chain?
- a. 25 steps
 - b. 28 steps
 - c. 30 steps
 - d. Not enough information
39. A tree measures 14 inches at DBH, and is 10.9 inches in diameter inside the bark at the top of the first 16 foot log. What is the form class for this tree?
- a. 127
 - b. 1.27
 - c. 78
 - d. .774

40. _____ - shorter, smaller-crowned trees extending just into the general canopy level and receiving little direct sunlight from above.
- a. Overtopped
 - b. Intermediate
 - c. Dominant
 - d. Codominant
41. Which forest range type requires the least amount of acres to support a cow during grazing periods?
- a. Longleaf-Slash Pine Type
 - b. Shortleaf-Loblolly-Hardwood Type
 - c. Upland Hardwood Type
 - d. None of the above
42. A 2 inch x 6 inch x 13 feet Maple board weighed 48 ounces when cut. When dried, the same board weighed 36 ounces. What was the moisture content of the board?
- a. 25%
 - b. 28%
 - c. 33%
 - d. 36%
43. _____ the process of removing limbs and cutting the tree stem into log or bolt lengths.
- a. Felling
 - b. Loading
 - c. Skidding
 - d. Bucking
44. Which statement is not true about coal-tar creosote?
- a. Toxic to fungi and insects
 - b. Corrodes metal
 - c. Insoluble in water
 - d. Chemical composition is inconsistent
45. _____ include working for major wood-based corporations and for marketing and consulting firms or environmental organizations.
- a. Public employment
 - b. Self-employment
 - c. Private employment
 - d. Urban employment
46. A tree has a 13.1 inch diameter. Using a 2 inch diameter class, determine the diameter.
- a. 10
 - b. 12
 - c. 13
 - d. 14
47. Which of the following is not a harvest cutting?
- a. Sanitation Cutting
 - b. Clear Cutting
 - c. Seed Tree Cutting
 - d. Shelterwood Cutting

48. A tractor, mechanical planter, and a two-person crew can set out _____ to _____ seedlings per day on suitable sites.

a. 3,000 / 6,000

c. 7,000 / 10,000

b. 4,000 / 8,000

d. 9,000 / 12,000

49. _____: pricing on the basis of so much per thousand board feet or cords.

a. Load scale

c. Lump sum

b. Weight

d. Tree scale

50. Which species is non-porous?

a. Cedar

b. Maple

c. Black Walnut

d. Ash