

**2012 National FFA Forestry CDE  
Written Exam**

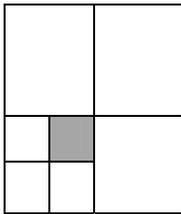
1. The study of insects and their relationship with the forest is called:
  - A. Dendrology
  - B. Entomology
  - C. Hydrology
  - D. Pathology
  
2. A cant of wood that measures 12" x 12" x 40' contains \_\_\_\_\_ board feet.
  - A. 5769
  - B. 480
  - C. 144
  - D. 40
  
3. A snag is a:
  - A. Blocked firebreak.
  - B. Branch from one tree caught up in the branches from another tree.
  - C. Pinched chainsaw bar.
  - D. Standing dead tree over 20'.
  
4. Which of the following could you use to determine the slope of a hill?
  - A. Abney Level
  - B. Densiometer
  - C. Diameter Calipers
  - D. Increment Borer
  
5. When felling a tree, the part of the cut that controls the tree's direction of the fall is the:
  - A. Notch
  - B. Limbing
  - C. Bucking
  - D. Backout
  
6. The definition of magnetic declination is:
  - A. The point at which a compass points to the magnetic north pole.
  - B. The angle of difference between true north and magnetic north.
  - C. The easterly direction if you are in a westerly position of the agonic line.
  - D. The 0° north of the equator.
  
7. Elastomers and gels are used in fire-fighting to:
  - A. Enhance the ability of water to suppress fire.
  - B. Prevent soil erosion after a wild fire.
  - C. Provide long-term fire prevention.
  - D. Set back fires.

8. Which of the following is a conifer?
- A. Aspen
  - B. Black cherry
  - C. Eastern cottonwood
  - D. Eastern redcedar
9. What does the contour interval on a topographic map indicate?
- A. Elevation of general area
  - B. Elevation at a specific point
  - C. Different types of contour lines represented by different colors
  - D. Difference in elevation represented by adjoining contour lines
10. What type of forest inventory is a wedge prism used in?
- A. Point sampling
  - B. Plot sampling
  - C. Double sampling
  - D. Cluster sampling
11. The specialized cells used to transport water from the tree roots to the limbs, twigs and leaves are called the \_\_\_\_\_.
- A. Cambium
  - B. Phloem
  - C. Xylem
  - D. Pith
12. \_\_\_\_\_ is a partial cut in an even-aged stand of trees to improve growth by regulating density.
- A. Thinning
  - B. Sanitation Cut
  - C. Salvage Cut
  - D. Release Cut
13. Which of the following trees has more than one leaflet per leaf?
- A. White Spruce
  - B. Redcedar
  - C. Pecan
  - D. Black Birch
14. A forest soil with a pH of 3.2 would be considered \_\_\_\_\_.
- A. Alkaline
  - B. Acidic
  - C. Neutral
  - D. None of the Above

15. \_\_\_\_\_ is the language used as a basis for most scientific names of trees.
- A. German
  - B. English
  - C. Latin
  - D. French
16. Which of the following trees has opposite leaf arrangement?
- A. Aspen
  - B. Sycamore
  - C. Red Maple
  - D. Sweetgum
17. The correct quadrant reading for a 220 degree azimuth bearing is:
- A. S40W
  - B. S40E
  - C. N40W
  - D. N40E
18. What two measurements are needed to determine the site index of a tract?
- A. Age and DBH
  - B. Age and Height
  - C. DBH and Soil Index
  - D. Height and DBH
19. If it is  $\frac{3}{4}$  of an inch between 3 rivets on a chainsaw chain, what would the pitch be?
- A.  $\frac{1}{2}$
  - B.  $\frac{3}{8}$
  - C.  $\frac{1}{2}$
  - D.  $\frac{5}{8}$
20. How long would a line need to be on a topographic map with a scale of 1:24000 to equal a mile?
- A. 4.54 inches
  - B. .55 inches
  - C. 25.6 inches
  - D. 2.64 inches
21. The debris left after logging, such as limbs, tops and knockdown trees is called:
- A. Conk
  - B. Kerf
  - C. Slash
  - D. Stumpage
22. Stream direction can be determined on a topographic map by contour lines that are:
- A. in a circular pattern.
  - B. in a "V" shape.
  - C. placed close together.
  - D. placed perpendicular to the map margin.

23. Defoliators are insects that attack the \_\_\_\_\_ of the tree.
- A. Bark
  - B. Buds
  - C. Roots
  - D. Leaves
24. The length of time needed to air dry or season wood depends on:
- A. Climate
  - B. Method of stacking
  - C. Wood size
  - D. All of the above
25. Which of the following tools would be correct to use to measure how fast the water is moving in a stream?
- A. Flow meter
  - B. Colorimeter
  - C. pH meter
  - D. Altimeter

26. How many acres does the shaded area on the section represent?



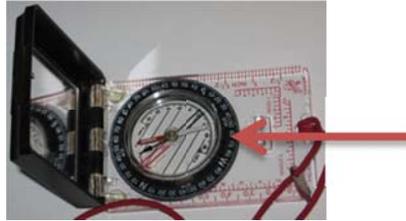
- A. 640 acres
  - B. 160 acres
  - C. 40 acres
  - D. 10 acres
27. Select the correct legal land description for the section of land in question 26. You may assume that it is Section 1, T19N, R20W.
- A. NW1/2, NE1/4, Section 1, T19N, R20W
  - B. NE1/4, SW1/4, Section 1, T19N, R20W
  - C. Section 1, T19N, R20W, NW1/2, NE1/4
  - D. Section 1, T19N, R20W, NE1/4, SW1/4
28. A forest tract measures 2640' wide by 5280' long. How many acres are in the tract?
- A. 640
  - B. 460
  - C. 500
  - D. 320
29. One use of a GPS is to run cruise lines in a forest. What do the letters GPS stand for?
- A. Geosynchronous Polar Station
  - B. Geosynchronous Positioning System
  - C. Global Position Siting
  - D. Global Positioning Syste

30. When a fire burns in the humus layer of the soil, it is called a \_\_\_\_\_ fire.
- A. Ground
  - B. Soil
  - C. Crown
  - D. Prescribed
31. An example of an insect that may be beneficial in controlling damaging insects is a(n):
- A. Asian Longhorned Beetle
  - B. Gypsy Moth
  - C. Ladybug/bird Beetle
  - D. White Pine Weevil
32. Which of the following forest practices is more likely to result in soil erosion?
- A. Herbicide site-prep
  - B. Clear cutting
  - C. Selective cutting
  - D. Hand planting seedlings
33. Which of the following maple species is known as a hard maple?
- A. Boxelder
  - B. Red Maple
  - C. Silver Maple
  - D. Sugar Maple
34. Browse lines along the edge of forests are caused by:
- A. Beaver
  - B. Porcupine
  - C. White-tail Deer
  - D. Wild Turkey
35. What are cant hooks used for?
- A. Rolling and positioning logs
  - B. Tree climbing
  - C. Soil sampling
  - D. Holding a chain saw
36. What does the term “kerf” refer to?
- A. Width of cut made by saw blades
  - B. Time it takes to saw completely through a board
  - C. Size of the board cut by a saw blade
  - D. Protective gloves worn by a saw operator
37. Which of the following terms is used to describe a smooth leaf margin?
- A. Serrate
  - B. Entire
  - C. Dentate
  - D. Crenate

38. Which of the following trees have achene type fruit?
- A. Elm
  - B. Sugar Maple
  - C. Pecan
  - D. Sycamore
39. The term “biological control” refers to \_\_\_\_\_.
- A. Pest control using 245T chemical.
  - B. Pest control chemicals that are created in a lab by biologists.
  - C. Pest control using natural agents.
  - D. Pest control chemicals containing ammonia.
40. What is a stereoscope used for?
- A. Viewing microscopic insects
  - B. Interpretation of aerial photos
  - C. Listening to radio waves
  - D. Analyzing tree rings
41. What does multiple-use forestry refer to?
- A. Manages the forest for today with no regard to the future.
  - B. Combining two or more management objectives.
  - C. Manages the forest for timber production.
  - D. Manages the forest for aesthetic qualities.
42. Which forest management practice creates the majority of risks to negatively impact water quality?
- A. Chemical site preparation
  - B. Hand planting
  - C. Tree growth cycle
  - D. Harvesting
43. If a sample of wood had an un-dried weight of 12 ounces and its dried weight was 10 ounces, what would its moisture content be?
- A. 20%
  - B. 80%
  - C. 43%
  - D. 33%
44. Most conifers are evergreens. Which of the following is not an evergreen?
- A. Pitch Pine
  - B. Red Cedar
  - C. Baldcypress
  - D. Lodgepole Pine
45. What is the definition of bucking a tree mean?
- A. Cutting a tree from its stump
  - B. Removing its limbs
  - C. Directing the fall of a tree to a specific location
  - D. Hauling the tree to a loader

46. What is the name of the part of the hand compass that the arrow is pointing to?

- A. Index mark
- B. Orienting arrow
- C. Baseplate
- D. Bezel



47. Which of the following is considered a non-capital asset?

- A. Land
- B. Chainsaw gas
- C. Skidder
- D. Timber

48. What part of a timber sale contract depends on the harvesting objective?

- A. Preamble
- B. Description of the sale area
- C. Conditions of the sale
- D. Designation of the trees to be sold

49. Which type chart helps set the declination on a compass?

- A. Isogonic
- B. Latitude
- C. Longitude
- D. Agronomic

50. Why are herbicides used as a tool in forest management?

- A. To control the growth of the trees being grown for wood
- B. To speed up the growth of the trees being grown for wood
- C. To control the growth of unwanted plants
- D. To speed up the development of the root systems of plants