

2014 National FFA Forestry Career Development Exam

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

1. A beetle is an insect that belongs to the \_\_\_\_\_ order, and feeds on plant and animal matter.  
A. Lepidoptera  
B. Isoptera  
C. Coleoptera  
D. Hymenoptera
2. Which part of the tree produces nuts and fruits?  
A. Roots  
B. Trunks  
C. Crown  
D. None of the above
3. Which of the following is non-porous?  
A. Eastern Red Cedar  
B. Douglas Fir  
C. Lodgepole Pine  
D. Black Walnut
4. Which state established the first forestry agency in the United States?  
A. Colorado  
B. Ohio  
C. California  
D. New York
5. A \_\_\_\_\_ is a device attached to a cable for securing logs.  
A. Chokers  
B. Canthook  
C. Caliper  
D. Baseplate
6. As part of 1933's "New Deal", President Franklin D. Roosevelt created the Civilian Conservation Corps (CCC). This program employed about two million people to \_\_\_\_\_.  
A. Cut fire breaks in our forest.  
B. Clear cut our National forest.  
C. Perform prescribed burns in our National Forest.  
D. plant trees, build campgrounds and shelters.
7. All owners of forest land in excess of \_\_\_\_\_ acres may qualify for membership in the American Forest Foundation's Tree Farm System.  
A. 5  
B. 10  
C. 20  
D. 50
8. \_\_\_\_\_ are the most widely-sold specialty forest product nationwide, and enjoy year-round popularity.  
A. Decorative bowls  
B. Baseball bats  
C. Shredded hardwood bark  
D. Evergreen wreaths

9. Various forest layers such as the upper canopy, saplings, and small herbaceous plants near the forest floor are indicative to....
- A. Zonation
  - B. Diversity
  - C. Stability
  - D. Stratification
10. \_\_\_\_\_ is a form of amorphous carbon, used for fuel, and produced when wood, peat, cellulose, or other carbonaceous substances are heated with little or no air present.
- A. Charcoal
  - B. Spalted wood
  - C. Burls
  - D. BTUs
11. Mycorrhiza can be found attached to pine \_\_\_\_\_.
- A. Needles
  - B. Bark
  - C. Roots
  - D. Twigs
12. In a Silvopastoral system a landowner is able to integrate trees with \_\_\_\_\_.
- A. the production of grapes
  - B. the production of forage and livestock
  - C. the production of corn and wheat
  - D. all of the above.
13. Xylem cells carry water and nutrients from the \_\_\_\_\_ to \_\_\_\_\_.
- A. Crown to roots
  - B. Roots to crown
  - C. Crown to trunk
  - D. Both A & C
14. Which layer of the forest is made up of the tallest trees that rise above all others?
- A. Emergent layer
  - B. Understory layer
  - C. Canopy layer
  - D. Forest floor
15. Which flower part does not make up the pistil?
- A. Stigma
  - B. Style
  - C. Filament
  - D. Ovary
16. Evergreens retain their leaves, scales or needles throughout the year. As new leaves are produced, the tree gradually sheds the oldest ones and maintains its green appearance. An exception is the \_\_\_\_\_, which sheds all of its leaves each year.
- A. Pitch Pine
  - B. Western Hemlock
  - C. Western Red Cedar
  - D. Baldcypress
17. Which language is used for taxonomy?
- A. Latin
  - B. French
  - C. Spanish
  - D. Portuguese

18. What type of leaf margin does the Sycamore tree have?
- A. Lobed
  - B. Lanceolate
  - C. Sinuate
  - D. Crenate
19. An apple is an example of a \_\_\_\_\_.
- A. Drupe
  - B. Pome
  - C. Capsule
  - D. Samara
20. \_\_\_\_\_ refers to the growth and development of single trees, and the forest as a biological unit.
- A. Silvics
  - B. Ecosystem
  - C. Biodiversity
  - D. Reforestation
21. \_\_\_\_\_ would be applicable to survey states, countries, continents, or oceans.
- A. Plane survey
  - B. Boundary survey
  - C. Elevation survey
  - D. Geodetic Survey
22. Which of the following activities would **not** be in a forest management plan?
- A. Loans
  - B. Harvesting
  - C. Site preparation
  - D. Regeneration
23. Five chains is the equivalent of \_\_\_\_\_.
- A. 330 ft
  - B. 400 ft
  - C. 66 ft
  - D. 132 ft
24. Which harvesting method involves a three-stage removal of crop trees over a period of years. It includes a preparatory cut, establishment cut and a removal cut.
- A. Clearcut
  - B. Shelterwood Cut
  - C. Seedtree Cut
  - D. Selection Cut
25. The reverse bearing of N34W is \_\_\_\_\_.
- A. S34W
  - B. S34E
  - C. N43E
  - D. N13W
26. How many species of the bark beetles of the genus *Dendroctonus* attack forest trees?
- A. 3
  - B. 7
  - C. 5
  - D. 9

27. This pest migrated to the U.S. from France. Now it infests white and red oak trees in the Northeast.
- |                     |                             |
|---------------------|-----------------------------|
| A. Gypsy Moth       | C. Douglas Fir Tussock Moth |
| B. Tent Caterpillar | D. Sawfly                   |
28. \_\_\_\_\_ is used to measure pulpwood and fence posts. Measures 128 cubic feet.
- |               |               |
|---------------|---------------|
| A. Board Foot | C. C-Unit     |
| B. Cord       | D. Basal Area |
29. The Cicada is a large insect that is typically black with green markings. The nymph lives \_\_\_\_\_.
- |   |
|---|
| A. In trees and feeds on the leaves                           |
| B. In the ground and feeds on roots                           |
| C. In trees and sucks juices from the petioles of leaves      |
| D. In the ground during the day and feeds on leaves at night. |
30. How many square miles is in a township?
- |        |        |
|--------|--------|
| A. 36  | C. 40  |
| B. 160 | D. 640 |
31. The \_\_\_\_\_ is a rotating ring graduated from 0 to 360 degrees, and labeled with cardinal directions (N,S,E, and W) and quadrants (NE, NW, SE, SW)
- |            |               |
|------------|---------------|
| A. Bezel   | C. Baseplate  |
| B. Capsule | D. Index Mark |
32. Magnetic North is continually shifting, so a compass must be adjusted using East or West declination, a factor indicating the difference between true North and magnetic North. \_\_\_\_\_ charts show the number of degrees, East or West, of this shift.
- |                |             |
|----------------|-------------|
| A. Azimuths    | C. Bearings |
| B. Topographic | D. Isogonic |
33. \_\_\_\_\_ are primarily found in the upper soil layer and break down plant and animal matter to be repeatedly recycled by green plants.
- |                |                      |
|----------------|----------------------|
| A. Decomposers | C. Producers         |
| B. Consumers   | D. None of the above |
34. \_\_\_\_\_ is an expression of a tree's taper, used to select the appropriate local volume table for a stand.
- |               |                |
|---------------|----------------|
| A. Form Class | C. DBH         |
| B. Log Rule   | D. declination |

35. Which type of forest fire is the easiest to control?
- A. Ground Fire
  - B. Surface Fire
  - C. Crown Fire
  - D. Brush Fire
36. Which of the following is not a safety feature that a modern chainsaw must be fitted with?
- A. Kickback guard & chain brake
  - B. Throttle lock & chain catcher
  - C. Bar stop & thumb grip
  - D. Right-hand guard & easy accessible stop control
37. \_\_\_\_\_ is the process by which water vapor leaves a living plant and enters the atmosphere.
- A. Respiration
  - B. Circulation
  - C. Transpiration
  - D. Photoperiodism
38. The chain brake should be activated when you start the chainsaw.
- A. True
  - B. False
39. How do you check the chain lubrication function before starting work?
- A. Rub the chain with a paper towel to check for oil.
  - B. If the chain smokes during operation it is functioning properly.
  - C. Start the chainsaw. Hold the saw over a stump and rev up the engine. Chain lubrication is working if there is a line of oil left on the stump.
  - D. All of the above
40. When limbing, Husqvarna recommends that you....
- A. Always stand on the left side of the tree trunk and limb from the roots to the top end.
  - B. Always stand on the left side of the tree trunk and limb from the top end to the roots.
  - C. Always stand on the right side of the tree trunk and limb from the roots to the top end.
  - D. Always stand on the right side of the tree trunk and limb from the top end to the roots.
41. What happens if the depth gauge clearance is too small?
- A. It will cut too deeply into the wood
  - B. The cut is more aggressive with high vibrations as a result.
  - C. The risk of kickback increases and the chainsaw is exposed to unnecessary stress.
  - D. It cuts a very small amount of wood

42. 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
43. 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. 1:44,440 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
44. The trunk grows in diameter by means of cell division in the \_\_\_\_\_.
- A. Heartwood
  - B. Cambium Layer
  - C. Outer bark
  - D. Roots
45. Which of the following is not a dendrometer?
- A. Biltmore Stick
  - B. Tree Calipers
  - C. Clinometer
  - D. Diameter Tape
46. When planting trees, a spacing of 6 x 6 feet will result in how many trees per acre?
- A. 340
  - B. 1015
  - C. 605
  - D. 1210
47. Piling used in docks, wharves, bridges, and foundations must have a minimum quality rating of.....
- A. Class A
  - B. Class B
  - C. Class C
  - D. Class D
48. Which of the following is not a factor effecting felling direction?
- A. Direction of dead branches
  - B. Lean of tree
  - C. Bend
  - D. Wind direction
49. Soil with a pH of 7.5 is considered \_\_\_\_\_.
- A. Acidic
  - B. Alkaline
  - C. Neutral
  - D. None of the above
50. The depth gauge has the words soft and hard stamped on it. The depth gauges should be filed using the \_\_\_\_\_ setting when cutting conifers.
- A. Soft
  - B. Hard
  - C. Both A and B can be used
  - D. Alternate one soft and the next one ha

2014 National FFA Forestry Career Development Exam – Answer Key

1. C
2. C
3. D
4. C
5. A
6. D
7. A
8. D
9. D
10. A
11. C
12. B
13. B
14. A
15. C
16. D
17. A
18. C
19. B
20. A
21. D
22. A
23. A
24. B
25. B
26. B
27. A
28. B
29. B
30. A
31. A
32. D
33. A
34. A
35. B
36. C
37. C
38. A
39. C

- 40. A
- 41. D
- 42. C
- 43. B
- 44. B
- 45. C
- 46. D
- 47. B
- 48. A
- 49. B
- 50. A