

**2013 Forestry CDE  
Written Exam**

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

1. \_\_\_\_\_ is the science of the interrelationships of organisms to their total environment. (PS.02.01)
  - a. Forestry
  - b. Pathology
  - c. Biology
  - d. Ecology
  
2. \_\_\_\_\_ cause abnormal tissue growths on any part of a plant. (NRS.01.01)
  - a. Borers
  - b. Leaf Feeders
  - c. Plant-Sucking Insects and Mites
  - d. Gall Insects and Mites
  
3. Identify the correct way to mix two cycle engine oil and gasoline. (PST.03.01)
  - a. Add engine oil, then gasoline, and mix contents
  - b. Add gasoline, then oil, and mix contents
  - c. Add ½ of desired amount of gas, then oil, mix, and add remaining gasoline
  - d. Add ½ of desired oil, then gas, mix, and add remaining oil
  
4. \_\_\_\_\_ is a binocular instrument used to view overlapping aerial photographs in three dimensions. (NRS.02.02.01.A)
  - a. Altimeter
  - b. Hand Lens
  - c. Stereoscope
  - d. Planimeter
  
5. Which of the following is not a factor affecting felling direction? (PST.03.01)
  - a. Direction of dead branches
  - b. Lean of tree
  - c. Bend
  - d. Wind direction
  
6. The ability of a soil to supply water and nutrients is strongly related to its \_\_\_\_\_. (PS.01.02)
  - a. Texture
  - b. Structure
  - c. Depth
  - d. All of the above
  
7. The \_\_\_\_\_ carries food made in leaves down to the branches, trunk, and roots. (PS.01.02.03.a)
  - a. Xylem
  - b. Cambium
  - c. Phloem
  - d. Heartwood

8. Which of the following is not a characteristic of ecosystems? (NRS.02.06)
- a. Stratification
  - b. Zonation
  - c. Diversity
  - d. Succession
9. If a cord of firewood cost \$150, how much would a stack of wood measuring 4' x 8' x 8' cost? (NRS.03.01)
- a. \$150
  - b. \$250
  - c. \$300
  - d. \$320
10. Which of the following is not a result of soil acidification, which is caused by atmospheric pollution? (NRS.02.06.08.B)
- a. Decreases soluble aluminum in soil
  - b. Interferes with calcium uptake
  - c. Reduces cambial growth
  - d. Reduces leaf area
11. If Mr. Fletcher plans to plant 45 acres of Longleaf Pine seedlings on 8 feet x 12 feet intervals, how many seedlings per acre will Mr. Fletcher plant? (NRS.03.01)
- a. 96
  - b. 432
  - c. 454
  - d. 544
12. When fuel burns, it reacts with oxygen from the surrounding air releasing heat and generating combustion products. This process is known as \_\_\_\_\_.
- (NRS.04.01.01.B)
- a. Oxidation
  - b. Pyrophoric
  - c. Pyrolysis
  - d. Deflagration
13. Flowering in Eastern Hemlock is \_\_\_\_\_ with the flowers in separate clusters on the same branch. (PS.01.02.04.A)
- a. Dioecious
  - b. Monoecious
  - c. Complete
  - d. Androecious
14. How many board feet are in a 14 feet x 18 inch x 1 inch Black Walnut board? (NRS.03.01)
- a. 1.9 board feet
  - b. 2.1 board feet
  - c. 21 board feet
  - d. 252 board feet

15. The contour interval on a topographic map indicates the \_\_\_\_\_. (NRS.02.02.01.A)
- different types of contour lines
  - difference in elevation represented by adjoining contour lines
  - elevation at a specific point
  - elevation of a general area
16. Berry, Drupe and Pome are types of \_\_\_\_\_. (PS.01.02.06.B)
- Fleshy Fruits
  - Dry Fruits
  - Aggregate Fruit
  - Multiple Fruit
17. \_\_\_\_\_ is cut parallel to the radius of the log. (NRS.03.01)
- Endgrain-sawn Wood
  - Quarter-sawn Wood
  - Plain-sawn Wood
  - None of the above
18. What type of leaf arrangement does a Pecan tree possess? (PS.01.02.04.A)
- Alternate
  - Whorled
  - Opposite
  - Simple
19. Which of the following is not true about Oriented Strand Board (OSB)? (NRS.03.01)
- Water Resistant
  - Insect Resistant
  - Continuous Grain
  - No internal gaps or voids
20. \_\_\_\_\_ is any plant capable of invading bare ground of a drastically disturbed area. (NRS.02.06)
- Climax Species
  - Native Plant
  - Pioneer Species
  - None of the above
21. \_\_\_\_\_ is the capacity of a tree to develop and grow in the shade while in competition with other trees. (PS.01.03.01.C)
- Toughness
  - Tolerance
  - Tracheids
  - Reproduction
22. Which of the following factors is NOT used to determine the merchantable value of a standing tree? (NRS.02.03)
- Diameter
  - Age of tree
  - Merchantable height
  - Volume of board feet
23. How many cubic inches of lumber are in one board foot? (NRS.02.03)
- 48
  - 96
  - 144
  - 148

24. Which of the following is not a way that forests protect water quality? (NRS.02.06.08.B)
- a. Filtering pollutants
  - b. Releasing nutrients
  - c. Shading water
  - d. Stabilizing banks
25. \_\_\_\_\_ is a release treatment aimed at freeing favored trees of weeds, climbers, or grasses or from less desirable trees of the same age which overlap them or are likely to do so. (NRS.01.01)
- a. Clearcutting
  - b. Crown Thinning
  - c. Cleaning
  - d. Selection Thinning
26. \_\_\_\_\_ is the productive capacity of a site for a given tree species. (NRS.01.01)
- a. Site Index
  - b. Site Quality
  - c. Site Prep
  - d. Silviculture
27. The width of a cut made by a saw is called the \_\_\_\_\_. (NRS.03.01)
- a. Cant
  - b. Gap
  - c. Kerf
  - d. Notch
28. Chromated zinc chloride is superior to zinc chloride due to its \_\_\_\_\_. (NRS.03.01)
- a. lower cost
  - b. lower fire hazard
  - c. resistance to flaking
  - d. resistance to leaching
29. Using containerized seedlings rather than barefoot seedlings usually results in \_\_\_\_\_. (PS.03.01.02.A)
- a. A much shorter planting season
  - b. Improved rates of survival and growth
  - c. Easier handling and transportation
  - d. Lower initial cost for seedlings
30. John's normal pace is 3 feet long. How many paces would he need to measure three chains? (NRS.02.03)
- a. 12
  - b. 36
  - c. 51
  - d. 66
31. A 'shake and bake' is a \_\_\_\_\_. (NRS.04.01.01.B)
- a. Fire shelter
  - b. Drip torch
  - c. Fire plow
  - d. Soil dryer

32. The terminal bud is found at the end of the \_\_\_\_\_. (PS.01.02.03.A)
- a. Individual leaf structure
  - b. Flower
  - c. Stamen
  - d. Twig or branch
33. Soil with a pH of 4.0 is considered \_\_\_\_\_. (NRS.01.01)
- a. Acidic
  - b. Alkaline
  - c. Neutral
  - d. None of the above
34. In which of the following conditions would Amber glass wedge prisms, be more useful than Clear glass prisms? (NRS.02.03)
- a. in bright sunlight
  - b. at night
  - c. in extremely cold weather
  - d. in low light and hazy conditions
35. Convulsions, secretions from nose and ears, loss of consciousness and inability to breathe are symptoms of \_\_\_\_\_. (CS.07.04.01.C)
- a. Severe pesticide poisoning
  - b. Heat stroke
  - c. Hypothermia
  - d. Smoke inhalation
36. If you are traveling at an azimuth reading of 215 you are heading \_\_\_\_\_. (NRS.02.02.01.A)
- a. Northwest
  - b. Northeast
  - c. Southwest
  - d. Southeast
37. For which of the following would an insecticide be used? (NRS.04.02.01.C)
- a. Damping off
  - b. Aphids
  - c. Wetwood/slime flux
  - d. Needle cast
38. To estimate the height of a tree use a(n) \_\_\_\_\_. (NRS.02.03)
- a. Increment borer
  - b. Clinometer
  - c. Bark gauge
  - d. Diameter tape
39. Which of the following tree species has compound leaves? (PS.01.01.01.A)
- a. Black Cherry
  - b. Eastern Cottonwood
  - c. Lodgepole Pine
  - d. Hickory
40. A soil profile is made up of different soil layers called \_\_\_\_\_. (NRS.02.06)
- a. grades
  - b. strata
  - c. horizons
  - d. none of the above

41. Smooth and serrated are terms used to describe leaf \_\_\_\_\_. (PS.01.01.01.A)
- a. Margins
  - b. Surfaces
  - c. Shapes
  - d. Apices and bases
42. The first chief of the United States Forest Service was \_\_\_\_\_. (NRS.02.05)
- a. Gifford Pinchot
  - b. James Audubon
  - c. John McSweeney
  - d. Franklin B. Hough
43. A plot of land measures 1000' X 1500'. How many acres are there? (NRS.02.03)
- a. 11.44
  - b. 18.44
  - c. 26.44
  - d. 34.44
44. You are using a clinometer to determine tree height on level ground from a distance of 100'. Your reading to the top of the tree is +85%; the bottom reading is -5%. What is the height of the tree? (NRS.02.03)
- a. 75'
  - b. 80'
  - c. 85'
  - d. 90'
45. To determine site index two measurements are needed; which include \_\_\_\_\_ (NRS.02.03.01.A)
- a. Age and diameter
  - b. Age and height
  - c. Diameter and soil index
  - d. Height and diameter
46. The federal agency that studies and monitors geology and publishes topographic maps is the \_\_\_\_\_. (NRS.02.02)
- a. Department of the Interior (DOI)
  - b. Geological Survey (USGS)
  - c. Environmental Protection Agency (EPA)
  - d. Department of Agriculture (USDA)
47. The part of a logging operation in which logs are dragged from where they were cut to a central location for loading is called \_\_\_\_\_. (PST.02.02.01.A)
- a. Skidding
  - b. Bucking
  - c. Felling
  - d. Snagging
48. Water contained within the cell wall in wood is called \_\_\_\_\_. (PS.01.02.03.A)
- a. Fiber water
  - b. Free water
  - c. Suppressed water
  - d. Bound water

49. *Quercus falcata* is the scientific name for \_\_\_\_\_. (PS.01.01.01.A)

- a. Black Oak
- b. Scarlet Oak
- c. Southern Red Oak
- d. White Oak

50. A tree with a well-developed crown extending above the other crowns is considered \_\_\_\_\_. (NRS.01.01)

- a. Intermediate
- b. Dominant
- c. Mature
- d. Co-dominant