

**2013 Nursery/Landscape CDE
Written Exam Key**

Directions: Select the best answer for each question and mark your selection on the separate answer sheet provided. Using a #2 pencil, completely darken in the letter on the answer sheet that corresponds to the best answer for each item.

1. What is the advantage of using plants in the landscape that are native to the area or plants that are derived from native species?
 - A. Native plants and selected varieties of native plants are less expensive.
 - B. Native plants and selected varieties are smaller at maturity and require less pruning.
 - C. Native plants and selected varieties will grow in all soil conditions in the area.
 - * D. Native plants and selected varieties are usually more resistant to pests and are better adapted to the environment of the area.

2. A pesticide that enters the plant system and moves throughout the plant to control plant pests as they feed on the plant tissues is best defined as which of the following?
 - A. systemic.
 - B. internal poison.
 - C. fumigant.
 - D. contact poison.

3. Which nutrient is most readily lost from the soil and is applied according to general recommendations for plant needs rather than soil test results?
 - * A. nitrogen
 - B. phosphorous
 - C. calcium
 - D. magnesium

4. Generally, solid wooden fences should be about ___ feet high to provide privacy, some wind protection, and reduced noise.
 - A. 4
 - * B. 6
 - C. 8
 - D. 10

5. Which of the following is the best definition of “massing plants” in landscape design?
 - A. many plants that grow at different heights so that a vertical wall of green is formed.
 - B. one half deciduous and one half evergreen plants in a bed.
 - C. one-third each of deciduous plants, blooming plants, and evergreen plants.
 - * D. many plants of one or a few species in a group to fill large amounts of landscape space.

6. An example of items commonly found in the service area of the home landscape include:
 - A. birdbaths, statuary, and fountains.
 - B. specimen trees, fruiting shrubs, and fountains.
 - C. miniature putting greens, vegetable gardens, and sitting areas.
 - * D. tool sheds, garbage cans, and storage.

7. The walkway leading to the front door of a home should be at least ____ feet wide.
- A. 2
 - * B. 4
 - C. 6
 - D. 8
8. Hydroseeding, which is the process of _____, is often used to establish grass on steep slopes.
- * A. applying a mixture of seed, water, fertilizer, and mulch in a spray slurry
 - B. infusing hydrogen into seed for quick germination
 - C. planting seeds by air pressure
 - D. soaking seeds in water and a mild paste before application
9. Turf that is to be maintained at 2 inches high should be mowed when it is about ____ inches tall.
- * A. 3
 - B. 5
 - C. 7
 - D. 9
10. Grasses that are to be maintained at a low height, such as bentgrass on golf greens, are best cut with a _____ mower.
- * A. reel
 - B. rotary
 - C. flail
 - D. riding
11. Which federal agency is responsible for inspecting businesses to ensure that employers provide employees with a workplace that is free from recognized hazards that are likely to cause harm to the employees?
- A. American Community and Workplace Administration.
 - B. Cooperative Extension Service.
 - * C. Occupational Safety and Health Administration.
 - D. Hazard Prevention Administration.
12. In the process of obtaining bids on large landscape projects, a _____ bond is often required to assure that the contractor who is selected as the winning bidder for the job will actually sign the contract and follow through to complete the landscape job he/she bid.
- A. bail
 - * B. bid
 - C. loss
 - D. materials
13. Upright trees generally have a center, main branch called a _____ and side branches often called _____ branches.
- A. top, terminal
 - B. sucker, scaffold
 - C. main, terminal
 - * D. leader, lateral

14. A Federal governmental agency which, among other responsibilities, protects plant health by inspecting for plant diseases that may be brought into the U.S. by international travelers at airports, ports, etc., is:
- A. PLANET.
 - * B. APHIS.
 - C. NLCA.
 - D. OSHA.
15. Carrying adequate liability insurance on the business helps reduce _____ for the business.
- A. inventory
 - B. gross sales
 - * C. risk
 - D. costs
16. A simple plant leaf is made up of which of the following?
- A. lenticels, internode, and serrations.
 - B. petiole and lenticels.
 - C. internode, node, petiole, and leaf blade.
 - * D. petiole and leaf blade.
17. In the analysis of a landscape business the following data for the year were collected. Which single item is most accurate in indicating the profitability of the business?
- A. Gross sales = \$68,000
 - * B. Payroll = \$185,000
 - C. Inventory = \$213,000
 - D. Payroll = \$350,000
18. A customer tells you that a large limb about 5 inches in diameter was broken off of their tree recently in a storm leaving a frayed stub about 15 inches from the tree trunk. What is the best advice for this customer?
- A. Spray the frayed stub with wound spray.
 - B. Cut the frayed stub back about 5 inches from the trunk and seal with wound dressing.
 - C. Do nothing. Research has shown that treating wounds of this nature is not beneficial.
 - * D. Make a clean cut next to the trunk, avoiding the collar area. Apply wound spray if desired.
19. Which of the following is a Federal tax that is deducted from the pay checks of full time employees?
- A. property tax
 - B. Medicaid
 - * C. Social Security
 - D. state income tax
20. A call to _____ is always advisable if you think you may be digging anywhere near underground utility lines.
- A. 411
 - * B. 811
 - C. 888
 - D. 977

21. Patented plants cannot legally be propagated without _____ being paid to the patent holder.
- A. development taxes
 - B. patent rentals
 - C. hybrid taxes
 - * D. royalties
22. Which of the following would be the most likely to survive being planted into the landscape during the hot summer months?
- A. bare root deciduous plants
 - * B. containerized plants
 - C. bare root evergreens
 - D. balled and burlapped trees
23. The gap on a spark plug must be a specified width in order to:
- A. provide for the proper flow of gasoline into the cylinder.
 - B. allow air flow into the cylinder, which vaporizes the gasoline.
 - C. regulate the mixture of air and gasoline.
 - * D. allow electricity to jump the gap, creating a spark to ignite the fuel.
24. In most landscape plants, pruning stimulates:
- * A. regrowth of shoots near the cut.
 - B. development of V-shaped crotches.
 - C. root growth.
 - D. internode growth near the cut.
25. USDA Plant Hardiness Zones are based on the _____ for an area.
- * A. lowest expected temperatures
 - B. highest expected temperatures
 - C. rainfall and soil characteristics
 - D. all the above
26. Which of the statements below is true concerning the turfgrass species specified?
- * A. Annual Ryegrass is sometimes used as a nurse grass to hold soil in place until a permanent turfgrass is established.
 - B. Bermudagrass is always grown from seed and is one of the most shade tolerant turfgrasses.
 - C. Bentgrass is a noxious weed that invades lawns and golf greens in USDA Hardiness Zones 7 to 12.
 - D. Annual Bluegrass is often used on putting greens due to its cold hardiness and fine texture.
27. Astilbe, Purple Coneflower, Shasta Daisy, and Day Lily are all classified which of the following?
- A. bulbous
 - B. annuals
 - * C. perennials
 - D. biennials
28. In pruning shrubs, heading back cuts should be made:
- A. just below a bud, and as close to the bud being removed as possible
 - B. just above a bud in the middle of the internode
 - C. diagonally across the center of a node
 - * D. just above a node, about one fourth of an inch above a bud

29. Plants that are unusually colorful or have striking growth habits, as well as fountains and statuary, are often used in the landscape as which of the following?
- * A. focalization points
 - B. convex balance points
 - C. silhouettes for balance
 - D. mass materials for rhythm
30. Which of the following is the recommended type of turf aeration that allows for maximum penetration of air and water into the soil?
- * A. core
 - B. triangular
 - C. spike
 - D. square
31. In general, when pruning trees which of the following should be removed?
- A. crossing branches
 - B. branches that grow toward the center of the plant
 - C. water sprouts
 - * D. all the above
32. Which of the following should NOT generally be added to a potting mix for azaleas?
- A. perlite
 - * B. lime
 - C. peat moss
 - D. sand
33. The signal word “caution” on a pesticide label indicates:
- * A. the lowest level of toxicity
 - B. the highest level of toxicity
 - C. extreme danger to vertebrates
 - D. a highly restrictive pesticide
34. To help prevent plants from growing too close to a building at maturity, most shrubs in the foundation planting should be planted:
- A. about 6 to 12 feet from the foundation.
 - B. between 1 to 2 feet from the foundation.
 - * C. no closer than 3 feet from the foundation.
 - D. no closer than 6 feet from the foundation.
35. An organism capable of causing a disease is called a(n):
- A. enzyme.
 - B. systemic.
 - * C. pathogen.
 - D. carcinogen.
36. Which of these grasses cannot generally be established from seed and is most successfully established by plugs, sod, or sprigs?
- * A. Hybrid Bermudagrass
 - B. Kentucky Bluegrass
 - C. Kentucky 31 Fescue
 - D. Annual Ryegrass

37. Which of the following is one strategy that small retail nurseries often use to successfully compete with big box stores and chain garden centers?
- A. selling products at a lower price.
 - * B. providing better service.
 - C. advertising negatively against big box stores and chain garden centers.
 - D. advertising on TV.
38. On which area of a golf course is the care of turfgrass most intense and most important?
- * A. green
 - B. fairway
 - C. rough
 - D. fringe
39. Which tree does NOT provide good fall color?
- A. Red Maple
 - B. Sugar Maple
 - C. Ginkgo
 - * D. Norway Spruce
40. Changing the color of blooms on certain *Hydrangea macrophylla* varieties from pink to blue or from blue to pink is controlled by the availability of _____ in the soil.
- A. nitrogen
 - * B. aluminum
 - C. phosphorus
 - D. iron
41. Which of these is NOT a common type of night lighting for the landscape?
- A. shadow
 - B. silhouette
 - C. up
 - * D. crescent
42. Which of these plants has the finest leaf texture?
- A. Chinese Holly
 - * B. Japanese Holly
 - C. Oregon Grape Mahonia
 - D. Red Maple
43. Extra fuel for easier starting of a small engine is often supplied by pressing the _____.
- * A. primer bulb
 - B. flywheel
 - C. fuel cell
 - D. float valve
44. When is the optimum time to prune Azaleas?
- A. shortly before bud break in the spring.
 - * B. shortly after blooming in the spring.
 - C. in the late fall.
 - D. between January 1 and March 1.

45. A fuel/oil mix ranging from 16:1 to 50:1, depending on the manufacturers' recommendation, is required in:
- * A. two-cycle engines
 - B. three-cycle engines
 - C. four-cycle engines
 - D. diesel engines.
46. Which of these ornamental trees is commonly sold in either white or pink blooming varieties?
- A. Ginkgo
 - B. Japanese Maple
 - C. European Beech
 - * D. Dogwood
47. Which plant disease organism is the most difficult to control with chemicals once the plant is infected?
- A. bacteria
 - B. fungus
 - * C. virus
 - D. mildew
48. IPM is an acronym for which of the following?
- A. interrelated pest management.
 - * B. integrated pest management.
 - C. intensive pest management.
 - D. intensive pest material.
49. During a recession, businesses often have to cut costs to stay in business as sales decline. If sales fall for a production nursery, which cost can be reduced most effectively in the short-run to help preserve the business?
- A. overhead costs
 - * B. variable costs
 - C. fixed assets
 - D. property taxes
50. Which of the following is false statement?
- A. Generally, shrubs in the landscape should be within bed lines.
 - B. Shrubs of the same species that are grouped together should generally be used in odd numbers.
 - * C. Tall growing trees should be planted on the sides of the home with short trees in the back and medium sized trees in the front.
 - D. *Cornus florida* prefers partial shade.