

2016 Invitational Nursery/Landscape Contest

Tarleton State University

1. PVC irrigation pipe is joined by connectors/couplings that are _____ to the pipe.
 - A. Welded
 - B. Solvent Welded
 - C. Soldered
 - D. Clamped

2. Fireblight is a disease that most often affects susceptible plants:
 - A. During periods of rapid succulent growth
 - B. In recently installed landscapes
 - C. During the winter
 - D. In landscapes over four years old

3. The soil pH level primarily controls:
 - A. Soil temperature
 - B. Availability of essential plant nutrients
 - C. Moisture absorption by roots
 - D. Activity of soil-borne diseases

4. The approximate range of average annual minimum temperature for Plant Hardiness Zone 8 is:
 - A. -20 to -10 degrees
 - B. -30 to -20 degrees
 - C. 10 to 20 degrees
 - D. 20 to 30 degrees

5. Fertilizer recommendations are often given in pounds of nitrogen per thousand square feet. How many 50pound bags of 10-10-10 fertilizers should be applied to an area 50 X 100 ft. if the recommendation is for 2 pounds of nitrogen per 1000 sq. ft.?
 - A. 1
 - B. 2
 - C. 4
 - D. 7

6. Plants that have been clipped or pruned into two-dimensional forms are:
 - A. Balanced
 - B. Topiary
 - C. Espalier
 - D. Dynamic

7. Which of the following is true about lady bug beetles? They:
 - A. Eat aphids
 - B. Sometimes sting gardeners
 - C. Often feed on vegetables plants
 - D. Are bright green and blend-in with the foliage

8. The Oak Leaf Nursery advertised a group of trees with a trunk caliper of 3 inches. In the trade, it is assumed that this measurement was taken:
- A. 18 inches above ground level
 - B. At the base of the rootball
 - C. 6 inches above ground level
 - D. At breast height (4½ feet above the rootball)
9. A friable soil is one that:
- A. Is loose and of good structure and texture
 - B. Is rich in N, P, and K
 - C. Is high in clay particles
 - D. Requires humus and fertilizer to be productive
10. Plants usually do not grow well in poorly drained soils because:
- A. Plant roots become engorged with water in poorly drained soils
 - B. The organic matter content of poorly drained soils is too high
 - C. Poorly drained soils warm too quickly in spring
 - D. Oxygen content is low in poorly drained soils
11. Which of the following turf areas is mowed to the lowest height?
- A. Commercial lawn
 - B. Golf fairway
 - C. Golf green
 - D. Home lawn
12. A landscape designer uses many _____ in developing the preliminary design for a project.
- A. Perfect plans
 - B. Bubble diagrams
 - C. Site surveys
 - D. Problem statements
13. Fairy ring is caused by:
- A. Grubs
 - B. Fungi
 - C. Pollen
 - D. Nematodes
14. An example of an organic material is_____.
- A. Pea gravel
 - B. Perlite
 - C. Leaf mold
 - D. Vermiculite

15. Which of the following is microscopic?
- A. Thrips
 - B. Spider mites
 - C. Aphids
 - D. Nematodes
16. _____ is an example of a parasitic plant.
- A. Bacteria
 - B. Rust
 - C. Mistletoe
 - D. Mildew
17. Soft pencil leads are indicated by the letter _____ .
- A. H
 - B. B
 - C. H1
 - D. F
18. A plant pathologist studies plant:
- A. Insects
 - B. Physiology
 - C. Morphology
 - D. Diseases
19. Two basic types of pruning are heading-back and thinning-out. Which of the following is true about these pruning methods?
- A. Thinning cuts leave behind a good portion of the stem and many axillary buds.
 - B. Thinning cuts are made close to a main branch or ground and few axillary buds are left.
 - C. Heading cuts usually remove entire branches and leave no buds.
 - D. Heading cuts remove a portion of the stem and only terminal buds are left.
20. The four life cycle stages of beetles such as the Japanese beetle are:
- A. Grub, pupae, juvenile, adult
 - B. Moth, egg, grub, adult
 - C. Egg, grub, pupae, adult
 - D. Egg, nymph, pupae, adult
21. Lawn sprinkler systems are installed so they provide even coverage. This is accomplished by:
- A. Using sprinkler heads with a square pattern throughout the landscape
 - B. Spacing the heads so that each sprinkler sprays to the next sprinkler
 - C. Spacing sprinklers based on needs specified in the soil test
 - D. Using one size pipe throughout the landscape

22. Callus is a term usually referring to:
- A. The tissue on the collar of a limb
 - B. The first tissue to develop on a cutting just before the roots form
 - C. Deformed growth on plant limbs
 - D. A disease of plant leaves and limbs
23. A _____ is a woody perennial that has more than one main trunk.
- A. Tree
 - B. Flower
 - C. Weed
 - D. Shrub
24. What part of a lawn mower prevents dust from entering the carburetor?
- A. Exhaust chute
 - B. Air cleaner
 - C. Crankcase
 - D. Hydraulic system
25. Paul had 400 containers of mature Salvia to wholesale to a landscaper. His cost of producing the plants, including labor, was \$832. If he adds 30% to the cost of production as his profit, how much will he charge the landscaper per container?
- A. \$0.27
 - B. \$2.14
 - C. \$2.70
 - D. \$4.81
26. The classifications of soil particles based on size are sand, silt, and:
- A. Gravel
 - B. Loam
 - C. Shale
 - D. Clay
27. Which fuel is used in chainsaws, string trimmers, and other 2-cycle engines?
- A. Gasoline
 - B. Fuel oil
 - C. Diesel fuel
 - D. Gasoline and oil mix
28. Which of the following is a group of small-growing trees?
- A. Sweet gum, Sycamore, Southern magnolia
 - B. Red oak, Bald cypress, Live oak
 - C. Crape myrtle, Eastern redbud, Japanese black pine
 - D. Pecan, Sweet gum, Ginkgo

29. When referring to the USDA Plant Hardiness Zone map, one can determine the:
- A. Soil characteristics for an area
 - B. Maximum expected temperature for an area
 - C. Minimum expected temperature for an area
 - D. Humidity and microclimatic changes for an area
30. Leaf miners lay their eggs:
- A. Inside the leaves
 - B. On top of leaves
 - C. On the main stem
 - D. On flower buds
31. When trying to save trees on a construction site, cut and fill under the drip line of the trees should be limited to a depth of inches.
- A. 6
 - B. 8
 - C. 18
 - D. 0 (Never cut or fill under the drip line of trees.)
32. Once they are beneath the bark surface, _____ are difficult to control.
- A. Aphids
 - B. Thrips
 - C. Borers
 - D. Mealybugs
33. Which of the following describes plants that lose their leaves during the winter?
- A. Evergreen
 - B. Deciduous
 - C. Coniferous
 - D. Herbaceous
34. Which one of the following plant hardiness zones is colder than Zone 6?
- A. Zone 3
 - B. Zone 8
 - C. Zone 7
 - D. Zone 10
35. The best definition of a surfactant is a:
- A. Material added to a liquid spray solution to reduce surface tension between the liquid and leaf surface
 - B. Type of soap used to wash off pesticide residue by increasing surface tension between the leaf and residue
 - C. Material to protect leaf surfaces from pesticides by creating a waxy seal over the leaf
 - D. Type of pesticide formulation with an oily consistency for protecting high pressure spray nozzles from wear

36. The scientific name for Heavenly Bamboo is:
- A. *Ligustrum japonicum*
 - B. *Nandina domestica*
 - C. *Pyracantha coccinea*
 - D. *Raphiolepis indica*
37. The turfgrass least tolerant of shade is:
- A. Zoysia
 - B. Bermudagrass
 - C. St. Augustine
 - D. Fescue
38. There are five common methods of night lighting for landscapes. They are:
- A. Bright, dim, subdued, marginal, and transparent lighting
 - B. Cross, down, up, reverse, and slope lighting
 - C. Moderate, bright, dim, regular, and flash lighting
 - D. Walk, silhouette, shadow, up, and down lighting
39. The road in front of Steve's house has become traffic congested in recent years. The view, and especially the noise, bothers the family. When Steve discussed this problem with a landscaper, the landscaper mentioned berms. What was the landscaper talking about?
- A. A special type of wall to block the noise and view of traffic on the road
 - B. His recent fishing trip where he caught several berms
 - C. Trees planted in multiple rows between the house and road
 - D. Tall mounds of soil placed between the house and road to block the noise and view
40. A propagator in a nursery business is responsible for:
- A. Starting new plants from seeds, cuttings, grafting, or other means and planning the propagation schedule
 - B. Increasing new accounts by spreading propaganda
 - C. Carrying out an extensive plant breeding program and applying for plant patents
 - D. Making sure the area used for pulling orders of container grown landscape-size plants is well stocked
41. When selecting ginkgo trees for the home landscape, you should choose:
- A. Male and female trees
 - B. Mature female trees only
 - C. Female trees only
 - D. Male trees only
42. Plowing or tilling a bed or lawn when it is excessively wet may:
- A. Kill beneficial organisms in the soil
 - B. Change the soil texture
 - C. Damage the structure of the soil
 - D. Stratify the soil

43. In the plant name *Ilex x meserveae* 'Blue Princess':
- A. The genus is *Ilex*, the "x" means it is a hybrid, the species is *meserveae*, and the cultivar is Blue Princess.
 - B. The family is *Ilex*, the "x" means it is a tetraploid, the genus is *meserveae*, and the species is Blue Princess.
 - C. The species is Blue Princess, the "x" means that its origin is unknown, the variety is *meserveae*, and the genus is *Ilex*.
 - D. The genus is *Ilex*, the "x" means that it is patented, the species is *meserveae*, and Blue Princess is the variety.
44. Larger nursery pots are measured by the:
- A. Inch
 - B. Ounce
 - C. Gallon
 - D. Height
45. Plants sold in the landscape trade are sold by ____ name.
- A. Family
 - B. Botanical
 - C. Order and genus
 - D. Order and family
46. Plants which evolve and grow naturally in an area are termed ____ plants.
- A. Exotic
 - B. Specimen
 - C. Accent
 - D. Native
47. If a business has assets of \$ 500,000; total expenses of \$ 95,000 and \$ 210, 000 in total revenue, what is the net profit?
- A. \$290,000
 - B. \$210,000
 - C. \$115,000
 - D. \$305,000
48. Plants need _____ essential elements for proper growth and development.
- A. 16
 - B. 8
 - C. 3
 - D. 32
49. Which of the following grasses has the longest winter dormancy period?
- A. Aphids
 - B. Scale
 - C. Zoysia
 - D. Bluegrass

50. A post emergence herbicide is applied _____.
- A. to broadleaf weeds only
 - B. after the weeds have germinated and emerged from the soil
 - C. before the weed seeds germinate
 - D. just as the weed seeds are germinating