



## Cypress Creek FFA Invitational Nursery / Landscape Exam

1. Which type of insecticide would be most effective against sucking-type insects?
  - A Aerosol
  - B Dust
  - C Contact
  - D Systemic
  
2. In the name *Acer palmatum* 'October Glory', 'October Glory' is a \_\_\_\_\_ if it did not occur as a natural mutation
  - A Variety
  - B Genus
  - C Cultivar
  - D Species
  
3. Which LD-50 rating listed is the most potentially lethal to a human, based on animal studies?
  - A 10000
  - B 84
  - C 1750
  - D 945
  
4. A landscape designer uses many \_\_\_\_\_ in developing the preliminary design for a project.
  - A Problem statements
  - B Perfect plans
  - C Bubble diagrams
  - D Site surveys
  
5. The optimum germination temperature for most bedding plant seeds is:
  - A 75°F - 85°F
  - B 65°F - 75°F
  - C 50°F - 55°F
  - D 60°F - 65°F
  
6. Which of the following is not an important environmental requirement for germination to occur?
  - A Moisture
  - B Oxygen
  - C Proper temperature
  - D Carbon dioxide
  
7. A systemic insecticide refers to an insecticide that
  - A is absorbed through the roots and leaves of a plant
  - B is applied as a fumigant
  - C kills on contact
  - D does not come in a granular form

8. The basic underlying principle of using a mist propagation system is that it\_\_\_\_\_.
- A Keeps the propagation medium uniformly moist and supplies moisture to the base of the cuttings
  - B Increases humidity around the cutting and reduces transpiration
  - C Cools the propagation medium to promote root formation and development
  - D Keeps the plant material cool
9. Which of the following is the proper recommendation for pruning trees at planting:
- A Pruning should be limited to shaping the plant by removing dead or damaged limbs
  - B Trees should be cut back to at least one-half their size to prevent stress on root systems
  - C Trees should not be pruned at all ± the latest trend is to let them develop naturally
  - D Trees should not be pruned until the third year after planting
10. Which of the following is an indication of a fertile soil?
- A small brown pebbles
  - B earthworms
  - C grubs
  - D a grey or yellow subsoil
11. Functional roles of plants in the landscape do not include:
- A Enclosing
  - B Screening
  - C Developing the structural framework of the design
  - D Greening up
12. A group of plants located along the perimeter of a landscape use area is called a \_\_\_\_\_ planting.
- A Corner
  - B Border
  - C Foundation
  - D Foreground
13. The factor used as an indication of grade and general vigor of Hybrid Tea Rose plants sold at retail is the number of healthy
- A leaves below the petioles
  - B terminal buds
  - C lateral roots
  - D canes
14. When installing a landscape, which step (from the following list) should be completed FIRST:
- A Plant the trees and shrubs
  - B Build retaining walls and garden walkways
  - C Install the drainage system
  - D Add amendments to the soil
15. Fred was about to drive the tractor down the street to another landscape job when Alan said, 'Hey, you had better put that orange triangle on the back of that tractor before you get run-over.' Alan was referring to the:
- A Wide-load sign
  - B Slow-moving vehicle sign
  - C Emergency vehicle sign
  - D Farm vehicle sign
16. Which of the following is a group of small-growing trees?
- A Red Oak, Bald Cypress, Live Oak
  - B Sweet Gum, Sycamore, Southern Magnolia
  - C Crape myrtle, Eastern redbud, Japanese black pine
  - D Pecan, Sweet Gum, Ginkgo

- 17. When propagating woody cuttings, a growth promoting substance is sometimes applied to the base of the cuttings in order to**
- A conserve moisture in the cuttings
  - B all of these
  - C speed the healing process
  - D speed the development of roots on the cutting
- 18. Freshly cut bark chips and sawdust should not be used as a soil amendment because they**
- A hold too much water around the plant
  - B are infested with disease
  - C rob the soil of nitrogen during decomposition
  - D release toxic elements into the soil
- 19. The best definition of a surfactant is a:**
- A Material to protect leaf surfaces from pesticides by creating a waxy seal over the leaf
  - B Material added to a liquid spray solution to reduce surface tension between the liquid and leaf surface
  - C Type of pesticide formulation with an oily consistency for protecting high pressure spray nozzles from wear
  - D Type of soap used to wash off pesticide residue by increasing surface tension between the leaf and residue
- 20. The best time to prune azaleas is**
- A when they are dormant
  - B in spring before leaves appear
  - C just after they bloom
  - D just before they bloom
- 21. The loss of water in the form of vapor from the surface of plant leaves is referred to as:**
- A Respiration
  - B Transpiration
  - C Condensation
  - D Oxidation
- 22. Fireblight is a disease that most often affects susceptible plants:**
- A During the winter
  - B In recently installed landscapes
  - C In landscapes over four years old
  - D During periods of rapid succulent growth
- 23. The most commonly used lawn grasses used in the U.S. can be divided into \_\_\_ or \_\_\_ types.**
- A Perennials or annuals
  - B grasses or broadleaved
  - C warm season or cool season
  - D spring or summer
- 24. Which of the following is not a rule-of-thumb traditionally followed by landscapers?**
- A Landscape plants should be dry at night, if possible.
  - B Shrubs should be planted 6-12' from the foundation
  - C Home walkways should be wide enough for 2 people to walk side by side
  - D Shrubs should be no closer than 2.5-3 feet from the foundation
- 25. Callus is a term usually referring to:**
- A A disease of plant leaves and limbs
  - B Deformed growth on plant limbs
  - C The tissue on the collar of a limb
  - D The first tissue to develop on a cutting just before the roots form

**26. Plowing or tilling a bed or lawn when it is excessively wet may:**

- A Stratify the soil
- B Kill beneficial organisms in the soil
- C Damage the structure of the soil
- D Change the soil texture

**27. Scientific names generally consist of two words, the first being the genus and the second being the:** A

- Specific epitaph
- B Cultivar
- C Family
- D Order

**28. Three types of ground patterns used in landscape design are**

- A Curved-line, arc-and-tangent, squiggle-line
- B Curved-line, arc-and-tangent, straight-line
- C Curved-line, straight-line, squiggle-line
- D Straight-line, squiggle-line, arc-and-tangent

**29. The four life cycle stages of beetles such as the Japanese beetle are:**

- A Grub, pupae, juvenile, adult
- B Egg, grub, pupae, adult
- C Moth, egg, grub, adult
- D Egg, nymph, pupae, adult

**30. Which of the following statements is NOT true?**

- A Frost may form if the sky is clear, the air is calm and the night temperature is only slightly below freezing?
- B Frost is more likely to form in low lying areas or pockets, when temperatures are at the freezing point
- C The heat given off from water sprinkled over plants may prevent frost from forming if the temperature is only slightly below freezing.
- D Frost is most likely to form when there is low, heavy cloud cover and a slight cool breeze.

**31. Lowering the soil grade around a tree removes many of the tree's \_\_\_\_\_ roots.**

- A Feeder
- B aquatic
- C Aerial
- D Tap

**32. A pre-emergence herbicide is applied**

- A to grasses only
- B after the weeds have germinated and emerged from the soil
- C to broadleaf weeds only
- D before the weed seeds germinate

**33. A propagator in a nursery business is responsible for:**

- A Carrying out an extensive plant breeding program and applying for plant patents
- B Increasing new accounts by spreading propaganda
- C Starting new plants from seeds, cuttings, grafting, or other means and planning the propagation schedule
- D Making sure the area used for pulling orders of container grown landscape-size plants is well stocked

**34. Damping-off is caused by:**

- A Nematodes
- B Fungi
- C Bacteria
- D Viruses

35. Which of the following serves as a food reservoir for the developing embryo within the seed of a monocot?
- A Testa
  - B Plumule
  - C Radical
  - D Endosperm
36. A glyphosate is a non-selective herbicide that will kill:
- A Both annual and perennial weeds
  - B Any green plant that it contacts
  - C Annual weeds
  - D Perennial weeds
37. Plants that evolve and grow naturally in an area are termed \_\_\_\_\_ plants
- A Accent
  - B Specimen
  - C Exotic
  - D Native
38. In most plants, a hormone called auxin is produced by the terminal bud. It moves downward into the shoot and inhibits the growth and development of lateral buds. This is called:
- A The apex auxin complex
  - B Apical dominance
  - C Terminal bud inhibition
  - D Lateral dominance
39. Plants sold in the landscape trade are sold by the \_\_\_\_\_ name.
- A Order and genus
  - B Botanical
  - C Family
  - D Order and family
40. When planting a bare-rooted tree, the tree should be planted:
- A At 6 inches below the original soil level
  - B Directly even with the original soil level
  - C At 2 inches above the original soil level
  - D at 6 inches above the original soil level
41. Which of the following is a deciduous vine?
- A English Ivy
  - B Rosemary
  - C Mandevilla
  - D Chinese wisteria
42. A shade loving border plant is:
- A Zinnia
  - B Marigold
  - C Impatiens
  - D Chrysanthemum
43. When Alan finished sharpening his rotary mower blade, he noticed that his mower vibrated and shook so bad that he could hardly control it. What was wrong?
- A The blade was out of balance
  - B The blade was made from inferior metal
  - C The spark plug was loose
  - D The blade has been overheated, affecting its temperament

**44. Which of the following is true about lady bug beetles? They:**

- A Often feed on vegetable plants
- B Sometimes sting gardeners
- C Are bright green and blend-in with the foliage
- D Eat aphids

**45. Which of the following can be said about applying an herbicide to a lawn in granular form rather than as a liquid spray?**

- A The liquid form is much more expensive
- B Most broadleaf weeds have developed resistance to liquid herbicide sprays
- C The amount of active ingredients needed is greatly reduced with the granular form
- D There is little or no drift from the granular form

**46. Most landscape plants like the soil pH:**

- A Slightly acidic
- B Strongly acidic
- C Slightly alkaline
- D Strongly alkaline

**47. An important step in properly composting landscape refuse is to:**

- A Treat each layer with pesticide to control insects and weeds
- B Thoroughly moisten each layer of material
- C Make only small piles to keep the material cool
- D Exclude as much air as possible from the compost pile

**48. Which landscape tool is used to prune branches an inch or larger in diameter**

- A ax
- B hand pruner
- C pruning knife
- D pruning saw

**49. For maximum effectiveness, mulches should be applied about \_\_\_\_\_ deep.**

- A 8-10 inches
- B 1 inch
- C 3-4 inches
- D 10-12 inches

**50. Plant diseases caused by rain splashed microorganisms from the ground can be reduced by**

- A using only clean topsoil as backfill
- B applying mulch around and underneath plants
- C removing all mulch outside the dripline
- D removing all mulch from around and underneath the plant