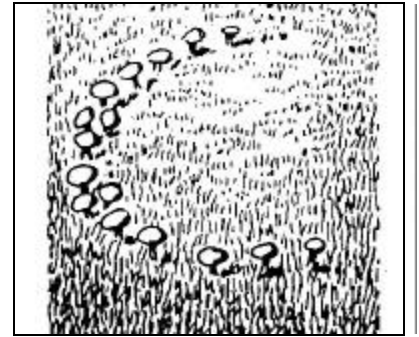


2003 State Nursery/Landscape CDE
General Knowledge Exam

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

1. If a leaf cell is plumb with water (not wilted) it is said to be:
 - A. Turgid
 - B. Maxed
 - C. Strutted
 - D. Extended

2. What turf problem is depicted in the drawing to the right of this question?
 - A. Circle Arch
 - B. Mushroom Arch
 - C. Fairy Ring
 - D. Toadstool Arch



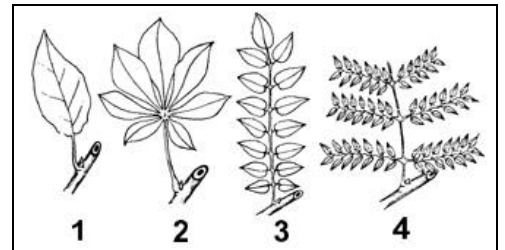
3. What part of the leaf opens and closes the stoma allowing the plant to breathe, transpire, give off moisture, and exchange gases?
 - A. Guard cells
 - B. Epidermis
 - C. Leafididimus
 - D. Petiole
4. If the first frost date is October 1 and the last frost date is May 15, which would be the least favorable time to prune Japanese Holly?
 - A. September 1
 - B. February 1
 - C. June 1
 - D. July 1
5. The factor used as an indication of grade and general vigor of Hybrid Tea Rose plants sold at retail is the number of good healthy:
 - A. Leaves below the petioles
 - B. Canes
 - C. Lateral roots
 - D. Terminal buds

6. Most plants grow best in soil with a pH of _____.
 - A. 6.0 to 7.0
 - B. 7.0 or higher
 - C. 4.0 to 5.5
 - D. 3.6 to 4.0

7. Which of the following insects would be most desirable to have in the landscape?
 - A. Ants
 - B. Praying mantis
 - C. White flies
 - D. Grubs

8. When partially decomposed sawdust is added to landscape soils, the plants often turn yellow. What is responsible for this condition?
 - A. The breakdown of nitrogen in the sawdust
 - B. The sawdust provided a habitat for insects and other animals which upset the physical make-up of the plant
 - C. The excess moisture and nutrients from the sawdust overwhelmed the plants
 - D. The sawdust adheres to the root system of the plants, causing the plants to turn yellow

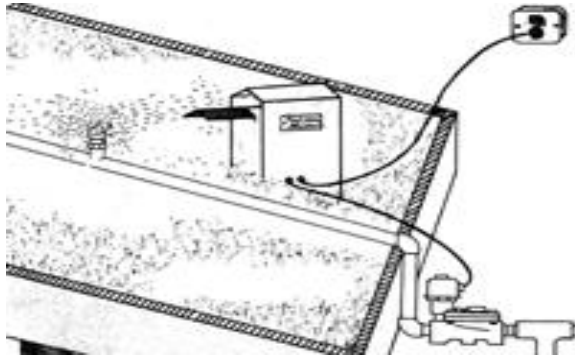
9. What is the leaf composition for each item in the drawing to the right of this question?
 - A. 1 simple; 2 palmate; 3 pinnate; 4 double pinnate
 - B. 1 pinnate; 2 palmate; 3 simple; 4 double pinnate
 - C. 1 complete; 2 palmate; 3 pinnate; 4 double pinnate
 - D. 1 simple; 2 double pinnate; 3 palmate; 4 compound



10. Balled and burlapped plants should be carried by the:
 - A. Stems
 - B. Top twigs
 - C. Rootballs
 - D. Side branches

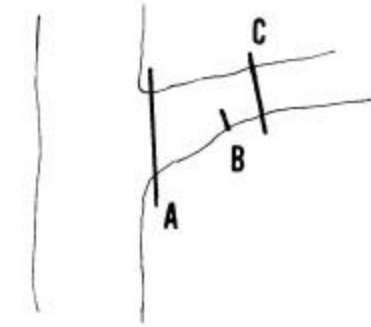
11. Which of the following tools cuts most like a pair of scissors?
 - A. Reel mower
 - B. Rotary mower
 - C. String trimmer
 - D. Bow saw

12. The device and setup pictured below is known in the trade as:



- A. An electric seed starter
 - B. A watering system
 - C. A micro-propagation watering system
 - D. A mist propagation unit
13. A person or company that is hired to do a specific portion of a landscape job is called a:
- A. Value-added sub-retailer
 - B. Client installer
 - C. Subinstallator
 - D. Subcontractor
14. Scientists who identify and classify plants are known as:
- A. Pomologists
 - B. Taxonomists
 - C. Horticulturists
 - D. Taxidermists
15. Which of the following 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. The heat given off from water sprinkled over plants may prevent frost from forming if the temperature is only slightly below freezing
 - C. Frost is more likely to form in low-lying area/pockets, when temperatures are at the freezing point
 - D. Frost is most likely to form when there is low, heavy cloud cover and a slight cool breeze
16. Pines, spruces, junipers, and yews are:
- A. Angiosperms
 - B. Cone-bearing angiosperms
 - C. Gymnosperms
 - D. Legumes

17. To prune the branch in the below drawing, in what order should the cuts be made?



- A. 1st C 2nd B 3rd A
 - B. 1st A 2nd B 3rd C
 - C. 1st B 2nd C 3rd A
 - D. 1st C 2nd A 3rd B
18. Topsoil containing nearly equal percentages of sand, silt, and clay is called:
- A. An organic soil
 - B. Loam
 - C. A muck soil
 - D. Sandy silt-clay
19. A method of establishing turf in which a mixture of seed, water, fertilizer, and a soil stabilizer is sprayed onto the soil is called:
- A. Hydroponics
 - B. Hydroseeding
 - C. Aquaseeding
 - D. Ammonium nitration
20. Which of the following is NOT an organic material?
- A. Bone meal
 - B. Manure
 - C. Compost
 - D. All of these are organic materials
21. If grass blades and stem clippings decompose rapidly between mowings, then _____ will probably not be a problem in turf.
- A. Insects
 - B. Disease
 - C. Water Penetration
 - D. Thatch

22. A _____ pesticide is absorbed into the plant and kills insects as they feed on plant parts.
- A. Repellent
 - B. Systemic
 - C. Drench
 - D. Transpired
23. Most seeds remain viable longer if:
- A. Kept warm and humid
 - B. Kept cool and dry
 - C. Stored after they have been scarified
 - D. Kept cool and humid
24. The best time to prune azaleas is:
- A. Just before they bloom
 - B. Just after they bloom
 - C. When they are dormant
 - D. In the late fall
25. Alan has 1.8 acres on which to grow potted shrubs. How many can he grow on this plot if each shrub is 2.5 square feet, and 8800 square feet will be needed for walks and drives?
- A. 13, 904
 - B. 17, 424
 - C. 27, 843
 - D. 31, 363
26. Lime should be added to soil:
- A. Every year
 - B. At 2 the rate of fertilizer
 - C. According to package instructions and only in the winter
 - D. Based on the soil test results
27. Which method of propagation can produce virus-free plants, even if the stock is infected?
- A. Tissue culture
 - B. Seeding
 - C. Budding
 - D. Air layering

28. Which of the following plants is most likely to suffer health damage if planted in a low, moist, semi-shaded area?
- A. Juniper
 - B. Dogwood
 - C. English Ivy
 - D. Maple
29. Traditional garden centers, in many cases, have been able to compete with chain department stores by providing:
- A. Lower prices
 - B. Better services
 - C. Better refund policies
 - D. Cleaner stores
30. On which section of the golf course is the grass usually cut the shortest?
- A. Green
 - B. Fairway
 - C. Fringe
 - D. Rough
31. Though not recommended, if 2 cycle engine fuel is actually used in a 4 cycle engine:
- A. The engine will not start, or will be hard to start
 - B. There is no problem, the engine will run just fine
 - C. The engine will be louder than normal
 - D. The engine will likely smoke a lot, but it will run
32. “Scalping” is a term used in:
- A. Turfgrass mowing
 - B. Pruning
 - C. Propagation
 - D. Landscape drawing
33. Which one of the following hardiness zones is warmer than Zone 5?
- A. Zone A
 - B. Zone 6-Y
 - C. Zone 4
 - D. Zone 6
34. Water _____ to help reduce disease in nursery crops.
- A. Late in the afternoon
 - B. Early in the day
 - C. At night
 - D. With overhead sprinklers

35. Of the following choices, which would be the best soil mix for potted nursery crop production?
- A. 1 loam: 1 sand
 - B. 1 peat: 1 sand: 1 perlite
 - C. 1 sand: 1 silt: 1 vermiculite
 - D. 1 vermiculite: 1 sand: 1 perlite
36. A plant which dies to the ground at the end of each growing season but comes back from the same rootstock year after year is most accurately described as a(n):
- A. Perennial
 - B. Biennial
 - C. Annual
 - D. Herbaceous perennial
37. PPM stands for:
- A. Performance pest management
 - B. Parts per million
 - C. Pints per mole
 - D. Pounds per meter
38. The soluble salt content of soil in plant containers can usually be reduced by:
- A. Stratification
 - B. Scarification
 - C. Leaching
 - D. Adding lime
39. Who is responsible for establishing the binomial system for naming plants?
- A. Aristotle
 - B. Linnaeus
 - C. Weinberg
 - D. Bernuli
40. The part of a newly grafted plant that will form the branch system is the:
- A. Scion
 - B. Shoot stock
 - C. Branch stock
 - D. Graft stock
41. Scientific names generally consist of two words, the first being the genus and the second being the:
- A. Species
 - B. Family
 - C. Order
 - D. Cultivar

42. Fire blight is caused by what type of organism?
- A. Bacteria
 - B. Virus
 - C. Insect
 - D. Fungus
43. IPM is the acronym for:
- A. Integrated pest management
 - B. Intensive pest measures
 - C. Intensive pest management
 - D. Integrated pest measures
44. A fertilizer of 45-0-0 would most often be used for:
- A. Lawns
 - B. Shrubs
 - C. Vegetable garden
 - D. Bulbs
45. 150 pounds of 6-9-27 has _____ pounds of Potassium.
- A. 13.5
 - B. 27
 - C. 40.5
 - D. 54
46. By law, all nursery employees must know where the _____ are located.
- A. Fire alarms
 - B. MSDS sheets
 - C. Pesticides
 - D. Safety glasses
47. Which pH reading is the least acid?
- A. 5.5
 - B. 6.0
 - C. 5.7
 - D. 4.9
48. When is the best time to prune a crepe myrtle?
- A. After new foliage appears
 - B. Before the first frost
 - C. During the summer
 - D. Before new foliage appears in the spring

49. *Roundup* is a _____ herbicide.
- A. Selective
 - B. Contact
 - C. Residual
 - D. Non-selective
50. The first thing you should do before using any pesticide is:
- A. Put on protective clothing
 - B. Read the label
 - C. Fill the spray tank
 - D. Wash all equipment