

2018 MN FFA Nursery/Landscape CDE Exam

Place your answers for Questions 1-50 on the Exam portion of your scantron.

1. The order of the elements in a 5-10-5 fertilizer analysis is:
 - A. NKP
 - B. NPK
 - C. KPN
 - D. PNK

2. A person is exposed to the highest concentration of a pesticide during:
 - A. clean equipment
 - B. reading directions
 - C. mixing
 - D. application

3. When transplanting bedding plant seedlings: they should be handled by the:
 - A. roots
 - B. stems
 - C. leaves
 - D. cotyledons

4. Propagation schedules for bedding plants, (anywhere in the U.S.) are based on a sales period just after:
 - A. Memorial Day
 - B. the last spring frost
 - C. the first fall frost
 - D. Labor Day

5. Systemic pesticides control the pest by:
 - A. the use of progressively stronger applications of the material
 - B. dissolving into and being moved by the plant sap
 - C. systematically killing younger to older pests
 - D. preventing insects from molting

6. The optimum pH for azaleas is:
 - A. 6.5-7.5
 - B. 9.0-10.0
 - C. 4.5-5.5
 - D. 7.0-8.0

7. This fungus attacks a wide variety of ornamental plants, probably causing more losses than any other single pathogen.
 - A. Pythium root rot
 - B. Botrytis cinerea
 - C. Alternaria
 - D. Phytophthora

8. To obtain blue flowers on hydrangeas, the pH of the growth media should be:
 - A. 5.0-5.5
 - B. 6.0-6.5
 - C. 7.0-7.5
 - D. 4.0-4.5

9. The type of plant that lives for more than two years is:
- A. annuals
 - B. biennials
 - C. perennials
 - D. cuttings
10. The best way to design a border is to:
- A. mix all plant heights evenly in the border
 - B. plant the tallest plants in the middle and gradually plant shorter plants toward the edges
 - C. plant the tallest plants in front, medium height plants in the middle and shortest in the back
 - D. plant the short plants in front, medium height plants in the middle and tall plants in the back
11. When planning on which plants to plant in your garden, you need to know which climate zones a plant will grow in. Which climate zone is the Minneapolis, MN area in?
- A. 4
 - B. 6
 - C. 8
 - D. 10
12. A soil that drains too fast or too slow can best be improved by:
- A. adding organic matter, such as manure, leaf mold or peat moss
 - B. adding sand
 - C. adding gypsum
 - D. nothing can fix this kind of soil
13. Most perennial plants grow best in:
- A. very acid soils
 - B. alkaline soils
 - C. rocky soils
 - D. neutral or slightly acid soils
14. If your soil is too acid, you can correct it by:
- A. adding garden sulfur
 - B. adding ground limestone
 - C. ammonium sulfate
 - D. ferrous sulfate
15. Most bulbs are planted in the:
- A. Spring
 - B. Summer
 - C. Fall
 - D. Winter
16. When seedlings grown indoors are moved outdoors, they must be _____ to be able to survive in their new environment.
- A. pinched
 - B. deadheaded
 - C. transplanted
 - D. hardened off

17. Which of the following is a purpose of mulch?
- A. mulch keeps the ground cool
 - B. mulch limits the growth of weeds
 - C. mulch conserves moisture
 - D. all of the above
18. Most bulbs are best planted:
- A. in areas with afternoon sun
 - B. in areas with constant sunlight
 - C. in the heavy shade of buildings, trees and shrubs
 - D. in very moist soil
19. Parallel leaf venation, lack of annular rings, and floral parts in multiples of three, are distinguishing characteristics of:
- A. Gymnosperms
 - B. Pteridophytes
 - C. Monocots
 - D. Dicots
20. Damping-off disease of seedlings is caused by:
- A. Bacteria
 - B. Virus
 - C. Fungus
 - D. Fertilizer
21. If a customer you are serving has a complaint, the first thing you should do is:
- A. Listen very carefully
 - B. Refer it to your supervisor
 - C. Write down his/her name and address
 - D. Ask the customer to wait while you check on what to do
22. Overhead costs include everything not accounted for in:
- A. Taxes
 - B. Rebates
 - C. Indirect costs
 - D. Direct costs
23. The best time to water a lawn is:
- A. in the morning
 - B. in the middle of the day
 - C. in the evening
 - D. at night
24. Which of the following is NOT a principle of landscape design?
- A. balance
 - B. simplicity
 - C. comfort
 - D. focalization

25. To avoid oak wilt disease DO NOT prune oaks during _____ if oaks are wounded or must be pruned during these months, apply wound dressing to mask the odor of freshly cut wood so the beetles that spread oak wilt will not be attracted to the trees.
- A. January, February or March
 - B. April, May or June
 - C. July, August, or September
 - D. October, November, or December
26. A shrub should be planted at a depth of:
- A. the same in which it was growing before
 - B. 1-2 inches deeper than it was in its container
 - C. 3-4 inches deeper than it was before to allow for mulch
 - D. slightly shallower than it was before
27. To determine the amount of thatch accumulation in a lawn, remove a two-inch deep, pie-shaped wedge from the lawn and measure the amount of thatch between the soil surface and green vegetation. If the layer is _____ it usually is not a problem.
- A. one-half inch or less
 - B. more than one-half inch but less than one inch
 - C. dark brown
 - D. dark green
28. Most newly planted trees:
- A. should be staked for the first three years
 - B. need to be staked for one year
 - C. need to be staked for 6 weeks
 - D. do better without staking
29. The male parts of a flower are the:
- A. Pistil
 - B. Stamen
 - C. Sepals
 - D. Ovule
30. The part of the root that increases the surface area exposed to the soil for water and nutrient absorption is the:
- A. root hairs
 - B. tap roots
 - C. branch roots
 - D. root tip
31. A leaf apex refers to which part of the leaf?
- A. leaf edge
 - B. leaf tip
 - C. leaf base
 - D. type of veining
32. Only one form of deciduous tree purchased is to be planted when the tree is dormant, which one is it?
- A. bare root
 - B. containerized
 - C. balled and bur lapped
 - D. none of the above

33. The optimum time to complete a graft is:
- A. spring when new growth is occurring
 - B. summer as the plant is maturing
 - C. fall after a freeze
 - D. winter when the snow is on the ground
34. Soil tests for available nitrogen in lawns are not very meaningful and are generally not performed because:
- A. nitrogen is not important for lawns
 - B. nitrogen is adequately provided by the thatch breaking down
 - C. nitrogen can move rapidly out of the root zone with percolating water
 - D. nitrogen can be fertilized at the same rate as the Phosphorous is fertilized
35. Apple scab, caused by the _____ *Venturia inaequalis*, occurs on apples and crabapples.
- A. bacteria
 - B. fungus
 - C. insect
 - D. virus
36. To draw a 60 foot diameter tree to scale of 1 inch = 8 feet, the symbol should be _____ inches wide.
- A. 4.5
 - B. 6
 - C. 7.5
 - D. 8
37. All of the following are considered MINOR plant nutrients EXCEPT:
- A. Phosphorous
 - B. Calcium
 - C. Iron
 - D. Magnesium
38. The smallest soil particle is:
- A. silt
 - B. sand
 - C. clay
 - D. all the same size
39. An individual looking to pursue a career in the nurse industry would benefit from the following ability:
- A. to identify plants
 - B. how to properly care for landscape plants
 - C. having knowledge of how plants are used in a landscape
 - D. all of the above
40. When sodding a lawn with heavy clay soils:
- A. the soil doesn't need to be rolled since it is a fine soil
 - B. adding peat will allow better air and water movement
 - C. you will need to add extra nitrogen before sodding
 - D. the soil needs to be packed twice to get a firm bed

41. A tool used to make holes in media for transplanting seedlings or cuttings is a:
- A. dibble
 - B. dowel
 - C. planting bar
 - D. trowel
42. The pH of alkaline soil may be lowered by adding:
- A. calcium
 - B. gypsum
 - C. lime
 - D. sulfur
43. Annuals for shady situations might include:
- A. sunflower and rose moss
 - B. zinnia and marigolds
 - C. petunia and verbena
 - D. coleus and impatiens
44. Irregularly shaped holes with smooth edges appear in Hosta leaves. Some leaves are missing. The plants should be treated for:
- A. Aphids
 - B. Leaf cutter bees
 - C. Slugs and snails
 - D. Leafhoppers
45. Phosphorus fertilizer for lawns:
- A. produces vigorous growth
 - B. is important in the synthesis of some plant components and in the regulation of many physiological processes.
 - C. is important for green color
 - D. is important in stimulating early root growth and promoting early plant vigor
46. What profession below requires the greatest number of years of schooling?
- A. Landscape architect
 - B. Landscape designer
 - C. Landscape nurseryman
 - D. Landscape contractor
47. Which of the following is NOT needed for successful germination of seed:
- A. moisture
 - B. temperature
 - C. soil
 - D. oxygen
48. In the name *Acer rubrum* 'October Glory', 'October Glory' is a:
- A. species
 - B. cultivar
 - C. genus
 - D. variety

49. Which of the following is generally true about shrubs that bloom in the early spring?
- A. they bloom on new wood
 - B. they bloom on old wood
 - C. they bloom on spurs generated in late winter
 - D. the earlier they bloom, the more profuse the bloom
50. The margin of a leaf that has sawtooth projections around the margin is said to be:
- A. entire
 - B. serrate
 - C. smooth
 - D. rough

2018 MN FFA Nursery/Landscape CDE Exam KEY

1. B
2. C
3. C
4. B
5. B
6. C
7. B
8. A
9. C
10. D
11. A
12. A
13. D
14. B
15. C
16. D
17. D
18. A
19. C
20. C
21. A
22. D
23. A
24. C
25. B

26. A
27. A
28. D
29. B
30. A
31. B
32. A
33. A
34. C
35. B
36. C
37. A
38. C
39. D
40. B
41. A
42. D
43. D
44. C
45. D
46. A
47. C
48. B
49. B
50. B