

# 2017 Minnesota FFA Floriculture CDE Exam

Multiple Choice: Please bubble in the most correct answer on your scantron sheet.

1. New businesses should realize that it usually requires \_\_\_\_\_ for the business to show a profit and owners should plan accordingly.
  - a. 3 to 5 months
  - b. 1 to 3 years
  - c. 15 to 24 months
  - d. 3 to 5 years
2. What is the proper term to describe the cold treatment, which lasts several weeks and precedes initiation of flower buds?
  - a. Pot cooling
  - b. Vernalization
  - c. Case cooling
  - d. CTF cooling
3. Lily bulb production requires \_\_\_\_\_ to \_\_\_\_\_ growth in the field, depending on size and whether scale production is used to plants are started from bulblets (small bulbs formed around the below ground stem above the bulb).
  - a. one, three months
  - b. two, four years
  - c. two, four months
  - d. five, seven years
4. Nature provides protection for plants to prevent them from becoming top heavy and unstable. \_\_\_\_\_ is the principle that provides this protection; it describes the hierarchy that has evolved in the plant world that makes certain that a plant's architecture is sound.
  - a. Pinching
  - b. Apical dominance
  - c. Lateral branching
  - d. Tertiary branching
5. An S-shaped line mass design is a \_\_\_\_\_ curve.
  - a. crescent
  - b. oval
  - c. naturalistic
  - d. Hogarth
6. A \_\_\_\_\_ is an area located in the lower half of the design that ties or visually pulls an arrangement together.
  - a. center of interest
  - b. candelabra design
  - c. conical centerpiece
  - d. calyx
7. The cornucopia, or horn of plenty, has been used for centuries as a symbol of \_\_\_\_\_.
  - a. fruitfulness
  - b. abundance
  - c. distinction
  - d. love

8. The right-triangular, or asymmetrical, floral design is constructed in a manner similar to the \_\_\_\_\_ design.
- asymmetrical balance
  - equilateral-triangle
  - mechanical balance
  - triad
9. \_\_\_\_\_ makes an excellent centerpiece because it is attractive when viewed from either the front or the back.
- Horizontal design
  - Right triangle
  - Asymmetrical balance
  - Tuzzy-muzzy
10. Filler flowers add a finishing touch to an arrangement. The two types of filler flowers used in flower arrangements are \_\_\_\_\_ and \_\_\_\_\_.
- feather, wax
  - bunch, feather
  - wax, bunch
  - none of the above
11. The acceleration of flowering by manipulation of environmental conditions is known as:
- Pulsing
  - Forcing
  - Leaching
  - After-ripening
12. The soil pH level primarily controls:
- Soil temperature
  - Activity of soil-born diseases
  - Moisture absorption by roots
  - Availability of essential plant nutrients
13. A good substitute for sand, this material provides aeration in the root media.
- Peat moss
  - Perlite
  - Vermiculite
  - Rock wool
14. The following oral pesticide toxicity rating is the most toxic of the four listed:
- LD 50 5 mg/kg
  - LD 50 83 mg/kg
  - LD 50 800 mg/kg
  - LD 50 4240 mg/kg
15. A method of applying pesticides to plants that can be effectively used in greenhouses, but not outdoors is:
- spraying
  - fumigation
  - dusting
  - soil drenching

16. The most important environmental factor regulating flower initiation in bulbous species is:
- Light
  - Temperature
  - Moisture
  - Ventilation
17. \_\_\_\_\_ describes the evaporation of water from the plant leaf.
- Turgidity
  - Precipitation
  - Transportation
  - Transpiration
18. Two main functions of stems are
- to store food and move water up to the flowering parts of the plant
  - movement of water and minerals and support plant parts
  - to manufacture food and store it for future use
  - to furnish food for human beings and other animals
19. Parallel leaf venation, lack of annular rings, and floral parts in multiples of three, are distinguishing characteristics of:
- Gymnosperms
  - Pteridophytes
  - Monocots
  - Dicots
20. The green color of leaves is caused by tiny particles in the food-producing cells called
- guard cells
  - epidermis
  - chloroplasts
  - starch
21. Leaf petiole cuttings can be used to propagate
- marigolds.
  - chrysanthemums.
  - boston ferns.
  - african violets
22. A group of vegetatively propagated plants from a single parent is known as a...
- clone
  - genus.
  - node.
  - sport.
23. Which of the following plant pairs require long night (short day) conditions for flowering?
- Azalea and Rose
  - Carnation and Poinsettia
  - Poinsettia and Chrysanthemum
  - Chrysanthemum and Azalea

24. The optimum pH for azaleas is:
- 6.5 to 7.5
  - 9.0 to 10.0
  - 4.5 to 5.5
  - 7.0 to 8.0
25. The use of tints, tones, and shades of the same hue is termed:
- Split complementary
  - Monochromatic harmony
  - Analogous harmony
  - Direct complementary
26. When using spray Chrysanthemums for a corsage, the appropriate wiring technique is called:
- spiral
  - piercing
  - hookwire
  - clutchwire
27. The ideal percentages of solids, air, and water in a growing medium are
- 25% solid, 50% air, 25% water.
  - 33 1/3% solid, 33 1/3% air, 33 1/3% water.
  - 50% solid, 25% air, 25% water.
  - 25% solid, 25% air, 50% water.
28. Which flower would be most appropriate for establishing the lines for a symmetrical arrangement?
- Carnation
  - Gladiolus
  - Gardenia
  - Daisy
29. After removing bedding plants from the greenhouse they should be \_\_\_\_\_ before planting outside.
- pruned
  - fertilized
  - hardened off
  - pinched
30. How many pounds of potassium are in a 50-pound bag of 10-20-20?
- 5
  - 10
  - 20
  - 50
31. \_\_\_\_\_ is a process of events whereby the seed embryo goes from a dormant state to an active growing state.
- Transpiration
  - Germination
  - Propagation
  - Marginalization

32. A \_\_\_\_\_ is the entire whorl of petals.

- a. A. receptacle
- b. calyx
- c. sepal
- d. corolla

33. Which of the following is considered to be a *cool color* in a floral design?

- a. A. yellow
- b. red
- c. orange
- d. green

34. The ability of a plant to withstand colder temperatures is known as \_\_\_\_\_.

- a. toughness
- b. strength
- c. temperate
- d. hardiness

35. A flower containing both stamens and pistils is known as a \_\_\_\_\_ flower.

- a. perfect
- b. incomplete
- c. imperfect
- d. pistilate

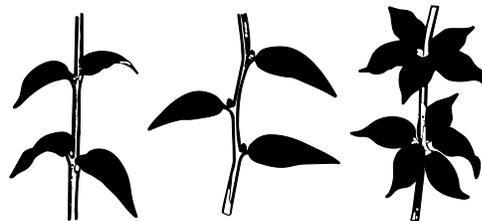
36. The showy red, pink, or white portion of the poinsettia are:

- a. Flowers
- b. Bracts
- c. Petals
- d. Sepals

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37. Which of the following leaf arrangement sequence is correct?

- a. Opposite, Alternate, Whorled
- b. Whorled, Alternate, Opposite
- c. Alternate, Whorled, Opposite
- d. Alternate, Opposite, Whorled



38. Which of the following is not a part of the pistil of a flower?

- a. stigma
- b. style
- c. anther
- d. ovary

39. The advantage of single-eye (leaf-bud) cuttings is that:

- a. They produce flowers more quickly.
- b. They grow faster than stem cuttings.
- c. They are less likely to become infected with diseases.
- d. From the same amount of propagation material, they give more plants.

40. In a triangular rose corsage, the smaller rose buds are:
- not used
  - placed near the lower portion of the design
  - placed near the upper portion of the design
  - are mixed with more open blooms
41. The skin of the leaf, called the \_\_\_\_\_, is a single layer of cells.
- stoma
  - chloroplasts
  - epidermis
  - guard cells
42. A greenhouse producer of young seedlings for shipping for finishing by others is referred to as a \_\_\_\_\_ producer.
- finisher
  - seed
  - plug
  - knot
43. Percolation is...
- preparing coffee for your teacher
  - downward movement of water in the soil
  - movement of nutrients in a plant
  - physical arrangement of soil particles
44. Transports water and nutrients from roots to other parts of the plant...
- xylem
  - phloem
  - pith
  - cambium
45. Pot mums in 6-inch pots should average flowering shoots per pot.
- 5 to 10
  - 20 to 30
  - 60 to 80
  - 80 to 100
46. There are three primary ways that heat is lost in a greenhouse. Which of the following is not correct?
- Air leakage
  - Solarization
  - Conduction
  - Radiation
47. There are three basic types of pots that are commonly used in the greenhouse industry. Which of the following is not one of the basic types?
- Designer pot
  - Standard pot
  - Azalea pot
  - Bulb pot or pan
48. A process used by growers to produce well branched, compact plants with many flowers is called?
- Stunting
  - Compacting
  - Pinching
  - Potting

49. Cut carnations are classified into two groups:
- A. Floral and greenhouse
  - B. Standards and miniatures
  - C. Premium and discount
  - D. None of the above
50. Your foliage plants are facing a pest problem. The buds, flowers, and tender new growth are pitted or stunted. Tiny insects are often invisible. A sticky fluid secreted by the insects provides a medium for growth of sooty mold and attracts ants. The most likely candidates are:
- A. Spider mites
  - B. Aphids
  - C. Mealybugs
  - D. Snails and slugs
51. A type of propagation in which the propagule remains attached to the parent plant is termed:
- A. Layering
  - B. Stem cutting
  - C. Root cutting
  - D. Division
52. In order to create successful arrangements, one must understand the range of acceptable color combinations called color schemes. One of the following is not among this frequently used color schemes:
- A. Monochromatic
  - B. Analogous
  - C. Triad
  - D. Quadraplex
53. A hue with white added is termed a:
- A. Tint
  - B. Tone
  - C. Chroma
  - D. Accent
54. Light energy, carbon dioxide and water enter into the process of photosynthesis, through which:
- A. Respiration results
  - B. Carbohydrates are formed
  - C. Chlorophyll is formed
  - D. Amino acids are formed
55. These insects are identified by the cottony material found on stems and along leaf veins:
- A. Aphids
  - B. Mealybugs
  - C. Spider mites
  - D. Whiteflies
56. Where in a floral arrangement should light-colored flowers be placed?
- A. near the top of the flower arrangement.
  - B. near the center of the flower arrangement.
  - C. towards the bottom of the flower arrangement.
  - D. light-colored flowers should not be used as a rule.

57. The reason for putting irregularly shaped stones, or broken pieces of pottery into the bottom of a pot containing flowering plants is:
- A. they let air into the pot from the bottom
  - B. they allow the roots to grow out the bottom of the pot
  - C. it helps the soil to drain after being watered
  - D. it is just an old tradition passed down from person to person and does not help the plants.
58. Which flowers are used to add mass?
- A. Baby's breath
  - B. Carnations
  - C. Gladiolus
  - D. Orchids
59. If the container is 10 inches high, the height of the floral design should be:
- A. 6 inches.
  - B. 10 inches
  - C. 18 inches
  - D. 30 inches
60. The binomial name for a plant includes the:
- A. Order and family
  - B. Genus and species
  - C. Class and subclass
  - D. Division and class

# 2017 Minnesota FFA Floriculture CDE Exam Key

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

31. B
32. D
33. D
34. D
35. A
36. B
37. A
38. C
39. D
40. C
41. C
42. C
43. B
44. A
45. B
46. B
47. A
48. C
49. B
50. B
51. A
52. D
53. A
54. B
55. B
56. A
57. C
58. B
59. C
60. B