

2019 MN FFA Floriculture Exam

Place the most correct answer to the question on the Exam section on the front side of your scantron.

- _____ plants are plant material kept specifically for the purpose of propagation.
 - stock
 - Parent
 - Cutting
 - Hardwood
- Grasshoppers begin their life cycle as an egg, transition into a larva, and change into an adult. This would be classified as _____ metamorphosis.
 - complete
 - incomplete
 - holometabolous
 - ametabolous
- Plants that have two _____ are known as dicots.
 - nucleus
 - cells
 - flowers
 - cotyledons
- Chloroplasts contain chlorophyll that _____ green light giving plants their green color.
 - reflect
 - absorb
 - produce
 - create
- _____ insecticides are pesticides that are translocated throughout the plant and kill any insects that feed on the plant.
 - Insecticidal Soaps
 - Horticulture Oils
 - Botanical
 - Systemic
- Floral preservatives for cut flowers should contain all of the following except _____:
 - nitrogen fertilizer
 - a sugar source
 - an acidifier
 - a microbiocide
- What type of environment do chrysanthemums require to produce flowers?
 - a short day photoperiod
 - a long day photoperiod
 - cool day temperature regime
 - cool night temperature regime
- The process of _____ is when a plant loses water through stomates.
 - transpiration
 - translocation
 - transduction
 - acclimatization.

9. Which glazing material for greenhouses allows the lowest light transmittance?
- fiberglass
 - polyethylene
 - double-layer polyethylene
 - polycarbonate
10. A tissue in a seed that provides stored food for the embryo is _____.
- endosperm
 - zygote
 - seed coat
 - hypocotyl
11. The process of propagating plants on an agar gel or nutrient medium is known as _____.
- grafting
 - budding
 - micropropagation
 - none of the above
12. A florists' wire with a gauge of 18 will be _____ than florists' wire with a gauge of 28.
- shorter
 - longer
 - thinner
 - thicker
13. On a financial planning sheet, the costs of the plant materials (i.e. purchase cost of seeds, cuttings, bulbs, etc.) would be examples of _____.
- wholesale costs
 - overhead costs
 - direct costs
 - fixed costs
14. A solenoid valve is used in greenhouses:
- as an electrical device used to control the flow of water in greenhouses
 - as a valve controlled totally by water pressure to cut water on and off
 - as a valve controlled by temperature to cut heat on and off
 - as an electrical shut on and off system for ventilation fans
15. A manometer is used in a greenhouse to measure:
- water pressure in an irrigation system line
 - difference between low and high temperature
 - air pressure between layers of plastic
 - gas pressure in a gas heater
16. In greenhouse plant growing a zero DIF will results in:
- shorter plants compared to plants grown with a positive DIF
 - taller plants compared to plants grown with a positive DIF
 - a decrease in how much light a plant receives each day
 - a wide range between daytime and nighttime temperatures in a greenhouse
17. The three secondary colors in flower arrangements are:
- red, yellow and blue
 - orange, green, and violet
 - purple, yellow, and blue
 - green, purple, and red

18. The nutrient iron is essential in plants because:
- A. Iron is required for strong stems
 - B. Iron is required for leaf formation
 - C. Iron is required for root development
 - D. Iron is required to produce chlorophyll
19. _____ buds are found at the base of a leaf petiole and next to the stem.
- A. apical
 - B. axillary
 - C. dominant
 - D. epidermal
20. You work for a retail flower shop in Bloomington, Minnesota. You are figuring a bill for a customer. In Bloomington the state sales tax is 5%, the city sales tax is 0.5%, and the county sales tax is 1%. The cost of the arrangement for the customer is \$72.45. What is the total of the customer's bill?
- A. \$72.45
 - B. \$72.81
 - C. \$77.16
 - D. \$76.07
21. In growing potted chrysanthemums, the desirable temperature range for flower bud initiation is:
- A. 62 to 65 degrees F at night
 - B. above 68 degrees F at night
 - C. 60 to 62 degrees F at night
 - D. 65 to 68 degrees F at night.
22. The recommended daytime temperature range for indoor plants is _____.
- A. 60-70 degrees F
 - B. 55-80 degrees F
 - C. 60-85 degrees F
 - D. 50-85 degrees F
23. _____ is one of the basic floral design shapes.
- A. fan
 - B. diagonal
 - C. oval
 - D. circular
24. In the list of flowers/materials below, which list is not all line flowers?
- A. Liatris, gladiolus, snapdragons cattails
 - B. Bells of Ireland, carnations, branches, snapdragons
 - C. Liatris, delphinium, gladiolus, Bells of Ireland
 - D. Foxglove, branches, lupine, cattail
25. Floral foam should be hydrated before use in a flower arrangement. Which of these methods is the best for accomplishing the soaking of the foam?
- A. the foam is forced by weight to be totally immersed in the water
 - B. the foam is pushed down into the water by hand
 - C. the foam is allowed to float on the surface until it is soaked
 - D. the foam is placed on the bottom of a water reservoir one-half of the height of the block of foam.

26. _____ exists when the terminal bud produces hormones that inhibit or prevent the growth of axillary buds on the same shoot.
- A. cell dominance
 - B. root dominance
 - C. atypical dominance
 - D. apical dominance
27. _____ seeding is when seeds are sown in a separate place from where the plants will eventually grow to maturity.
- A. direct
 - B. sideways
 - C. indirect
 - D. top
28. _____ is used to accentuate the flowers and colors used in a design.
- A. harmony
 - B. unity
 - C. accent
 - D. repetition
29. _____ are chemicals used to control snails and slugs.
- A. fungicides
 - B. rodenticides
 - C. molluscicides
 - D. nematocides
30. Small green insects with piercing mouth parts are _____.
- A. aphids
 - B. mealybugs
 - C. scale
 - D. mites
31. A circular design does not have _____.
- A. balance
 - B. filler flowers
 - C. a focal point
 - D. massing flowers
32. Most fungal diseases grow best in _____.
- A. dry, arid air
 - B. low moisture conditions
 - C. high moisture conditions
 - D. seasons with drought
33. Mums are considered a short-day crop: that is, the plant sets flower buds and blooms only when _____.
- A. nights and days are long
 - B. nights are long and days are long
 - C. nights are short and days are long
 - D. nights and days are short

34. During respiration, plants _____.
- A. use the sun's energy
 - B. produce sugars
 - C. use oxygen
 - D. form complex compounds
35. If green plants show a _____ color, this suggests a nitrogen deficiency.
- A. white
 - B. yellow
 - C. dark green
 - D. purple
36. The _____ transports water and nutrients from the roots to other parts of the plant.
- A. phloem
 - B. xylem
 - C. pith
 - D. cambium
37. Which of the following flower parts is contained in the pistil?
- A. sepal
 - B. receptacle
 - C. anther
 - D. style
38. In order to lower the pH of a soil, materials containing _____ are used.
- A. dolomite
 - B. lime
 - C. hydrated lime
 - D. sulfur
39. Which of the following nutrients would be retained more by a root medium with high cation exchange capacity (CEC)?
- A. Potassium
 - B. Phosphate
 - C. Nitrate
 - D. Sulfate
40. Soilless medium can be amended with which of the following materials prior to potting to provide magnesium?
- A. Epsom salt
 - B. Gypsum
 - C. Micronutrients mix
 - D. Triple superphosphate
41. Which of the following is not an advantage of hydroponics?
- A. plant nutrition is completely controlled through prepared nutrient solutions.
 - B. yield per unit area is reduced since plants may be planted closer together
 - C. roots do not spread as much because H₂O and nutrients are pumped directly to the plant.
 - D. the need for weed, disease, and insect control is greatly reduced due to the absence of soil.
42. Tulle in florist work is:
- A. the ribbon added to any floral piece being created
 - B. florist netting that can add color, texture, and support for some flowers
 - C. Silk leaves used instead of fresh foliage in corsages
 - D. other accessories used in corsages such as pearl sprays, rhinestones, butterflies, or chenille letters

43. The country that is the leading exporter of cut flowers to the United States floral industry is:
- A. Holland
 - B. Ecuador
 - C. Mexico
 - D. Columbia
44. A 6 inch 'azalea pot' has an inside rim diameter of _____ inches and a depth of _____ inches.
- A. 6 and 8
 - B. 6 and 6
 - C. 6 and 4.5
 - D. 6 and 3
45. What type of environment do poinsettias require to produce red bracts?
- A. short day photoperiod
 - B. long day photoperiod
 - C. cool day temperature regime
 - D. cool night temperature regime
46. Botanical names are written in:
- A. English
 - B. Latin
 - C. Greek
 - D. German
47. A guideline for estimating the size for a floral design for a defined space is known as:
- A. Rule of Thirds
 - B. Third Rule
 - C. The Golden Ratio
 - D. The Golden Rule
48. _____ is the single most important element to keep flowers fresh after delivery from a supplier.
- A. Air/Ventilation
 - B. Water
 - C. Light
 - D. Cool temperatures
49. The sense of stability in a design both physically and visually is known as
- A. rhythm
 - B. balance
 - C. scale
 - D. unity
50. A floral design with a strong sense of _____ shows an organization of elements so they appear to belong together.
- A. rhythm
 - B. balance
 - C. scale
 - D. unity

2019 MN FFA Floriculture Exam Key

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

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