



2022 NATIONAL FFA FLORICULTURE CDE

GENERAL KNOWLEDGE EXAM

Select the best answer for each question and mark your selection on the separate E-Rubric answer sheet provided. **Mark answers in the General Knowledge Exam section on the E-Rubric Answer Sheet.**

1. What period of Floral Design style was taken from surviving art, which was simplistic, repetitious, and highly stylized? During this period, flowers and fruits were placed in carefully alternating patterns. Chaplets, wreaths, garlands, and flower collars were portrayed, along with bowls of flowers carried or held a lot.
 - a. French Period
 - b. Colonial Period
 - c. Egyptian Period
 - d. Baroque Period
2. Rising wholesale prices of cut flowers and hard goods are due to which of the following market conditions?
 - a. Supply chain and transportation issues
 - b. Lack of appropriate temperatures in the environment
 - c. Poor growing conditions
 - d. Lack of stimulus payments
3. A plant that lives for more than two years, usually flowering every year.
 - a. Perennial
 - b. Biennial
 - c. Annual
 - d. Bulb

4. Flower _____ is the terminal phase of developmental processes that leads to the death of a flower, which includes flower wilting, shedding of flower parts and fading of blossoms.
- a. schizocarp
 - b. tendril
 - c. xerophyte
 - d. senescence
5. A _____, is a product applied as a spray or dip that slows the water loss from plant cells, reducing the speed of transpiration and extending the vase life of cut plant materials.
- a. acidifier
 - b. biocide
 - c. antitranspirant
 - d. glucose
6. The principles of design describe _____ as the area in, around, and between the components of the design, defined by the three-dimensional area occupied by the composition.
- a. space
 - b. pattern
 - c. line
 - d. form
7. A grouping of three adjacent hues on the 12-spoke color wheel is considered
- a. monochromatic
 - b. analogous
 - c. tetradic
 - d. triadic
8. The ease of visual movement that results from gradual degrees of change among one or more of the elements is _____.
- a. repetition
 - b. depth
 - c. unity
 - d. transition

9. The general rule to use to transplant seedlings is after:
 - a. A sufficient root system has developed
 - b. The first true leaves have developed
 - c. Four-Six leaves have developed
 - d. As soon as the plant emerges from the seed coat
10. Which is the most common form of sexual plant propagation?
 - a. Cuttings
 - b. Division
 - c. Grafting
 - d. Seeds
11. Acclimatization in plant production is:
 - a. Process where root development starts on a plant cutting.
 - b. Process of absorption of water into the plant.
 - c. Process in which plants adjust to a different growing environment.
 - d. Process where disease resistance is enhanced.
12. A clogged floral stem is caused by an air embolism. This is where:
 - a. A bubble of air enters the xylem
 - b. Air dries out the floral stem
 - c. A bubble of air enters the phloem
 - d. Air causes the rupture of the floral stem
13. The temperature to pre-cool potted azaleas to force them to bloom is:
 - a. 25-30 degrees F
 - b. 60-65 degrees F
 - c. 35-40 degrees F
 - d. 45-50 degrees F

14. Which of these groups contain the three secondary elements needed for plant growth?
 - a. Calcium, Manganese, and Zinc
 - b. Boron, Sulfur, and Carbon
 - c. Copper, Magnesium, and Iron
 - d. Calcium, Magnesium, and Sulfur

15. The breathing pore in the stem is called a:
 - a. Scar
 - b. Lenticel
 - c. Bud
 - d. Scale

16. Which plant hormone stimulates cell division?
 - a. Cytokinins
 - b. Inhibitors
 - c. Gibberellins
 - d. Auxins

17. In greenhouse operation, which of the following is not a fixed cost?
 - a. Taxes
 - b. Interest on an equipment loan
 - c. Labor
 - d. Insurance

18. Foliage turning purple on a greenhouse plant shows a deficiency of:
 - a. Nitrogen
 - b. Phosphorus
 - c. Magnesium
 - d. Sulfur

19. In a floral shop business, the difference between the cost of goods sold and the retail price is called the:
- a. Mark up
 - b. Price differential
 - c. Mark down
 - d. Profit
20. Gladiolus and snapdragon stems are geotropic. This means that the tip of the flower:
- a. Will turn down to the ground or gravity
 - b. Will bend toward the light
 - c. Will turn toward the hottest temperature area
 - d. Will bend away from the ground or gravity
21. IGR in horticulture is:
- a. Internal Growth Response
 - b. Industry Growth Response
 - c. Insect Growth Regulator
 - d. Inhibitor Ground Research
22. Which of the following statements are true about Carbon Dioxide and greenhouse plant growth?
- a. Carbon Dioxide is only needed in the plant respiration process
 - b. Carbon Dioxide has no bearing on plant growth in the greenhouse
 - c. The Carbon Dioxide level can never be a limiting factor in a greenhouse because it is used in such small amounts
 - d. Limited Carbon Dioxide in the greenhouse reduces photosynthesis and therefore plant growth
23. Some cut flowers can benefit from a pre-treatment of citric acid. Citric acid is an acidifier. An acidifier can cause what benefit to some cut flowers?
- a. It adjusts the acidity of the stem to a level that encourages the uptake of water and nutrients.
 - b. It adjusts the acidity of the stem to prevent deterioration of the flower color.
 - c. It adjusts the acidity in the stem, which will lead to an increase in photosynthesis
 - d. It adjusts the acidity in the stem to prevent disease formation.

24. Which of the following is considered a type of LINE that can be found in a floral design?
- a. Implied
 - b. Dynamic
 - c. Vertical
 - d. All of the above
25. The repetition of a form can lend unity to a design, whereas variation among the forms can generate interest or contrast.
- a. True
 - b. False
26. The portion of a composition or design which is physically occupied by something such as a flower, a branch, a container or some solid object is called _____.
- a. void space
 - b. positive space
 - c. negative space
 - d. none of the above
27. Which of the following are examples of ACHROMATIC colors?
- a. Red and green
 - b. Blue and orange
 - c. Black, White, and Gray
 - d. Pink and Purple
28. Not only does a floral design need to be physically balanced but also _____ balanced.
- a. axis
 - b. centrally
 - c. visually
 - d. vertically

29. Which of the following flowering plants react to pH levels with color variation?
- a. Lilies
 - b. Sunflowers
 - c. Hydrangeas
 - d. Carnations
30. Considering supply and demand, what would be the anticipated prediction for the effect on rose prices surrounding the February holiday of Valentine's Day?
- a. Rose prices would maintain steady and unaffected
 - b. Rose prices would drop
 - c. Rose prices would increase
 - d. Not applicable; roses are not available during that season
31. Close placement of one material directly behind the primary material, giving a three-dimensional appearance, is called _____.
- a. pave
 - b. grouping
 - c. tailoring
 - d. shadowing
32. Modifying or altering a material's appearance by trimming, gluing or stapling is called _____.
- a. tailoring
 - b. roping
 - c. lacing
 - d. All of the above
33. Transpiration is the process of a plant or flower losing what?
- a. Minerals
 - b. Food
 - c. Water
 - d. None of the above

34. A line that moves the eye in sharp alternative directions is called a _____ line.
- a. straight
 - b. curved
 - c. zigzag
 - d. implied
35. The presence of sticky 'honeydew' drops on the leaves of plants within a greenhouse production system could indicate which of the following pests:
- a. Whitefly
 - b. Aphid
 - c. Worms
 - d. Wasps
36. What do many spring flowering bulb crops require in order to flower?
- a. fertilization
 - b. pollination
 - c. transpiration
 - d. vernalization
37. What is a condition in which a leaf has a striped, margined, or mottled color rather than green, where green is normal?
- a. Chlorotic
 - b. Compounded
 - c. Striated
 - d. Variegated
38. Stunted and slow growth, yellowing of lower leaves of the plant, and a poor root system are symptoms of _____ deficiency.
- a. calcium
 - b. nitrogen
 - c. phosphorus
 - d. potassium

39. What is a miniature arachnid that sucks sap from plants?
- a. aphid
 - b. beetle
 - c. mite
 - d. nematode
40. Which watering system is commonly used in the propagation phase of production because it reduces water stress on cuttings?
- a. drip irrigation
 - b. capillary mats
 - c. overhead sprinklers
 - d. intermittent mist systems
41. What is the number one pest problem with poinsettias?
- a. aphids
 - b. mealy bugs
 - c. thrips
 - d. whiteflies
42. What is the best explanation for why bedding plant seeds are sown in rows?
- a. to ensure that developing seedlings have good light exposure
 - b. to keep different plant varieties from becoming intermingled
 - c. to maintain an organized, attractive seed germination room
 - d. to reduce the possible spread of disease across an entire flat
43. Which size ribbon is used for corsage work?
- a. #3
 - b. #5
 - c. #9
 - d. #40

44. Which flowers would be traditionally used for the spring holiday of Easter?
- a. Dozen Rose Vases
 - b. Single Red Rose Bud Vases
 - c. Potted Chrysanthemums
 - d. Potted Easter Lilies
45. What effect does the presence of fresh flowers and plants have on mental health?
- a. Flowers and plants have a positive impact; they improve mental health
 - b. Flowers and plants have a negative impact; they harm mental health
 - c. Flowers and plants have no impact; they die too quickly
 - d. Flowers and plants have a negative impact; they are too expensive
46. Which flowers would be traditionally used for Mother's Day?
- a. Cymbidium Orchid corsages
 - b. Cornucopias filled with fruits and vegetables
 - c. Rose boutonnieres
 - d. Evergreen Centerpieces
47. The growth of the parts of plants with respect to the force of gravity:
- a. Geotropism
 - b. Phototropism
 - c. Photoperiodism
 - d. Distortion
48. What are floral preservatives?
- a. A Clorox bleach solution
 - b. A mixture of sugars and lipids
 - c. A combination of sugars, a biocide, and an acidifier
 - d. A solution of vitamins, minerals, and sugars

49. What is the 'chain of life' levels of distribution for cut flowers according to the Society of American Florists?
- a. Grower, Shipper, Wholesaler, Retailer, Consumer
 - b. Grower, Wholesaler, Shipper, Retailer, Consumer
 - c. Wholesaler, Shipper, Grower, Consumer, Retailer
 - d. Retailer, Wholesaler, Grower, Shipper, Consumer
50. Tropical flowers require higher temperatures than a typical flower. What degree range is preferred?
- a. 42-55 Degrees F
 - b. 55-75 Degrees F
 - c. 80-95 Degrees F
 - d. 95-105 Degrees F