

2011 National FFA Floriculture  
Career Development  
General Knowledge Exam

- Plants convert chemical energy into light energy which results in plant growth.  
a. true                      b. false
- Wavelengths are measured in \_\_\_\_\_ with specific wavelengths corresponding to specific \_\_\_\_\_.  
a. nanometers, color                      b. kilometers, size  
c. centimeters, weight                      d. pedometers, width
- Photoperiodism is a phytochrome-mediated response.  
a. true                      b. false
- Modern \_\_\_\_\_ cultivars come in an astonishing variety of colors, color combinations and petal styles (spoon, quill, and flat).  
a. dianthus caryophyllus (carnations)                      b. Helianthus annus L. (sunflower)  
c. chrysanthemum (daisy)                      d. dahlias
- Dahlias are native to the mountains of \_\_\_\_\_.  
a. Mexico                      b. Switzerland  
c. Ireland                      d. New England
- Growth is best for Helianthus annus L. between \_\_\_\_\_ and \_\_\_\_\_ sun is always preferred.  
a. 75 to 85 F, full                      b. 45 to 65 F, partial  
c. 55 to 75 F, partial                      d. 65 to 75 F, full\_
- \_\_\_\_\_ is an example of a species that is commercially cultivated.  
a. Seed hydration                      b. Exacum affine  
c. Stratification                      d. Scarification
- When spores germinate, they form a small \_\_\_\_\_ leaf like structure known as the prothallus.  
a. black                      b. yellow  
c. green                      d. brown
- \_\_\_\_\_ is any method of breaking through hard, water-impermeable seed coats to allow water to penetrate.  
a. Seed hydration                      b. Exacum affine  
c. Stratification                      d. Scarification

10. Disadvantages to Pregermination are limited shelf life of \_\_\_\_\_, limited selection, and cost.
- a. 6 to 8 weeks
  - b. 4 to 5 days
  - c. 4 to 5 weeks
  - d. 6 to 8 days
11. Floral supply companies focus their inventories on hard goods and tools but primarily on fresh flowers and foliage.
- a. true
  - b. false
12. \_\_\_\_\_ were historically the first people to use flowers for decorative purposes.
- a. Egyptians
  - b. Japanese
  - c. Europeans
  - d. Greeks and Romans
13. The strewing of flowers and loose petals at banquets and festivals was typical of the \_\_\_\_\_ period.
- a. Egyptian
  - b. Greek and Roman
  - c. Japanese
  - d. Italian Renaissance
14. The \_\_\_\_\_ period is considered the beginning of the flower arranging as it is known today.
- a. Egyptian
  - b. Greek and Roman
  - c. Japanese
  - d. Italian Renaissance
15. The point at which the plant is receiving as much light energy as it can use is the \_\_\_\_\_ point.
- a. light completion
  - b. light saturation
  - c. light compensation
  - d. light fabrication
16. The *Euphorbia pulcherrima* a \_\_\_\_\_ day plant, is induced to flower by providing \_\_\_\_\_ nights and \_\_\_\_\_ days.
- a. long, short, long
  - b. short, short, long
  - c. short, long, short
  - d. long, long, short
17. The floral industry is an international, multitrillion dollar industry.
- a. true
  - b. false

18. The floral design of the \_\_\_\_\_ influence emphasizes careful and significant placement of every flower, branch or leaf.
- a. Egyptians
  - b. Greeks and Romans
  - c. Japanese
  - d. Italians
19. Consumers encounter Alstroemeria frequently in the retail marketplace, as it is one of the World's top \_\_\_\_\_ cut flowers.
- a. fifteen
  - b. five
  - c. fifty
  - d. ten
20. The *Antirrhinum majus* is also known as the \_\_\_\_\_.
- a. Snapdragon
  - b. Poinsettia
  - c. Daisy
  - d. Carnation
21. Alstroemeria hybrids are also known as \_\_\_\_\_.
- a. Princess Lily
  - b. Iris
  - c. Snapdragon
  - d. Oriental Lily
22. *Zantedeschia rehmannii*, *Z. elliotiana*, *Z.* hybrids also known as \_\_\_\_\_.
- a. Christmas Lily
  - b. Peace Lily
  - c. Easter Lily
  - d. Calla Lily
23. Iron deficiency, identified by blackening or interval chlorosis of young leaves, is the primary problem for plants growing in a low pH medium.
- a. true
  - b. false
24. Seed grown tubers generally produce \_\_\_\_\_ eyes, which mean plants will have a \_\_\_\_\_ number of flowers and leaf spouts.
- a. fewer, higher
  - b. more, higher
  - c. more, lower
  - d. fewer, lower
25. Most Callas sold today from the United States are three year old true seed hybrids.
- a. true
  - b. false
26. Floriculture is defined literally as " \_\_\_\_\_ " but includes florist shops, flower retailers, wholesale florist, production greenhouses and floral supply companies.
- a. culture of flowers
  - b. industry of flowers
  - c. culture of horticulture
  - d. culture of floral arranging

27. \_\_\_\_\_ provides even faster seedling production than other hydration methods and results in 100% usable seedlings.
- seed hydration
  - mechanization treatments
  - matricconditioning
  - Pregermination
28. The \_\_\_\_\_ point is the light intensity at which the plant is receiving as much energy from the light during photosynthesis as it is during respiration.
- light completion
  - light saturation
  - light compensation
  - light fabrication
29. Although general plant growth usually requires light with all wavelengths \_\_\_\_\_ and \_\_\_\_\_ wave lengths result in the greatest plant growth response.
- yellow (580nm), green (530nm)
  - green (530), purple (530)
  - red (700), blue (470)
  - yellow (580), blue (280)
30. The Italian Renaissance was significant during the \_\_\_\_\_ centuries.
- 17<sup>th</sup> and 18<sup>th</sup>
  - 15<sup>th</sup> and 16<sup>th</sup>
  - 12<sup>th</sup> and 13<sup>th</sup>
  - 14<sup>th</sup> and 15<sup>th</sup>
31. According to Ikebana, the placement of three main flowers or branches signifies \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
- man, woman, child
  - earth, love, family
  - emotion, wealth, family
  - heaven, man, earth
32. Place cut Antirrhinum majus stems vertically as soon as possible after harvest; stems placed horizontally may begin to bend upward in as little as \_\_\_\_\_.
- 30 minutes
  - 5 hours
  - 2 hours
  - 60 minutes
33. When the source of \_\_\_\_\_ is removed, the concentration of the \_\_\_\_\_ drops quickly, thereby releasing lateral branches from \_\_\_\_\_ dominance and allowing them to develop.
- auxin, inhibitory, apical
  - tunic, potassium, atypical
  - tunic, hormone, atypical
  - auxin, hormone, apical
34. \_\_\_\_\_ is similar to seed hydration except the process is allowed to progress further until the seed coat splits and the radical becomes visible.
- micropropagation
  - mechanization treatments
  - stratification
  - Pregermination

35. \_\_\_\_\_ is a technique used by seed suppliers to imbibe the seed and begin germination, but then stop the process before the radical (root) emerges.
- a. seed hydration
  - b. mechanization treatments
  - c. matricconditioning
  - d. Pregermination
36. Stratification is the application of a moist chilling treatment of 32 to 50 F (0 to 10 C) to seeds.
- a. true
  - b. false
37. The \_\_\_\_\_ fuzzy fungal growth of Botrytis often begins with injured or necrotic areas and then infects healthy tissue.
- a. white
  - b. black
  - c. gray
  - d. brown
38. Measuring light requires the use of \_\_\_\_\_ factor(s).
- a. 1
  - b. 5
  - c. 4
  - d. 3
39. Light has \_\_\_\_\_ function(s) in plant growth.
- a. one
  - b. three
  - c. two
  - d. four
40. *Helianthus annuus* L. is the most commonly grown \_\_\_\_\_ species.
- a. carnations
  - b. snapdragons
  - c. poinsettia
  - d. sunflowers
41. *Dianthus caryophyllus* is a native of the \_\_\_\_\_ area, originally flowering only in the early spring.
- a. Mediterranean
  - b. Bahamas
  - c. South America
  - d. Central America
42. Dahlias flower morphology is complex and flower size varies from larger than \_\_\_\_\_ to less than \_\_\_\_\_ in diameter.
- a. 10.25 in., 9 in.
  - b. 8.25 in., 4 in.
  - c. 9.25 in., 6 in.
  - d. 7.75 in., 3.75in.
43. Plants grown under light high in \_\_\_\_\_ wavelengths will be short, dark green, and well branched.
- a. blue
  - b. green
  - c. red
  - d. yellow

44. Sunflowers require low nutritional levels.  
a. true                      b. false
45. Treated seed virtually \_\_\_\_\_ viral, fungal, and bacterial disease at the time of planting, greatly \_\_\_\_\_ disease in professional grower products.  
a. creates, eliminating                      b. initiates, increasing  
c. creates, increasing                      d. eliminates, reducing
46. There are two different purposes for using artificial lighting. First, lamps can be used to provide additional light to increase photosynthesis and plant growth. This is termed \_\_\_\_\_ lighting. Second, lamps can be used to alter the photoperiod perceived by the plants. This is termed \_\_\_\_\_ lighting.  
a. high, frame                      b. secondary, illusion  
c. supplemental, photoperiodic                      d. synthetic, capturing
47. Many growers apply a shading compound or shade cloth from \_\_\_\_\_ to \_\_\_\_\_ to reduce heat stress that results from high light levels entering the greenhouse.  
a. late spring, early fall                      b. early fall, early spring  
c. late summer, late fall                      d. late winter, early summer
48. Alstroemeria produce two types of shoots \_\_\_\_\_ and \_\_\_\_\_.  
a. nonflowering, vegetative                      b. staggered, flowering  
c. flowering, vegetative                      d. upright, nonflowering
49. Botrytis blight is also known as \_\_\_\_\_.  
a. Calla delight                      b. tulip fire  
c. Rose Midge                      d. daffodil delight
50. Sympathy flowers are important to \_\_\_\_\_ the deceased and \_\_\_\_\_ the living.  
a. grieve, inspire                      b. grieve, express  
c. express, remind                      d. honor, comfort