

2017 Iowa FFA Floriculture Test  
**DO NOT WRITE ON THE TEST**

1. In floral design which of the followings purpose is to draw attention to the design?
  - A) Proportion
  - B) Scale
  - C) Accent
  - D) Repetition
2. \_\_\_\_\_ is created when all of the arrangement flows together and is not segmented.
  - A) Rhythm
  - B) Harmony
  - C) Symmetry
  - D) Unity
3. Which of the following is NOT a purpose of filler flowers?
  - A) To tie the arrangement together
  - B) To fill in any voids in the arrangement
  - C) Provide greenery to cover the floral foam and container
  - D) Provide a focal point for the arrangement
4. Which of the following is NOT a part of the mechanics of a floral arrangement?
  - A) Flowers
  - B) Container
  - C) Floral foam
  - D) Shears
5. Oasis is \_\_\_\_\_.
  - A) Floral wire
  - B) Floral container
  - C) Floral foam
  - D) Floral shears
6. Which of the following is a “massing” flower?
  - A) Foxglove
  - B) Rose
  - C) Baby’s breath
  - D) Lily
7. What is a good rule of thumb regarding the height of a floral arrangement?
  - A) 3.5 times the height or width of the container
  - B) 1.5 to 2 times the height or width of the container
  - C) 2.5 to 3 times the height or width of the container
  - D) 1 times the height or width of the container

8. Which of the following is a “form” flower?
- A) Bird of paradise
  - B) Carnation
  - C) Bells of Ireland
  - D) Delphinium
9. \_\_\_\_\_ is achieved in a floral design when flower size and container flow together and complement each other.
- A) Accent
  - B) Balance
  - C) Scale
  - D) Unity
10. What is another term for a roll of ribbon?
- A) Bundle
  - B) Bunch
  - C) Buggy
  - D) Bolt
11. Which of the following material is, considered, the easiest to work with when making bows with ribbon?
- A) Velvet
  - B) Satin
  - C) Cotton
  - D) Flocked
12. Ribbon comes in several different sizes. Which number of ribbon is the widest?
- A) Number 1
  - B) Number 5
  - C) Number 9
  - D) Number 40
13. Which of the following is, a popular holiday arrangement, found on a table?
- A) Corsage
  - B) Boutonniere
  - C) Centerpiece
  - D) Bouquet
14. Which gauge of floral wire will be the thickest?
- A) 18
  - B) 22
  - C) 28
  - D) 32

15. Which of the following is NOT a wiring method utilized to make a corsage or boutonniere?
- A) Twisted
  - B) Hook
  - C) Clutchwire
  - D) Piercing
16. When constructing corsages and boutonnieres what is the most common width of floral tape?
- A)  $\frac{1}{4}$  inch
  - B)  $\frac{1}{2}$  inch
  - C)  $\frac{3}{4}$  inch
  - D) 1 inch
17. Which wiring method should be used to wire a rose for a corsage or boutonniere?
- A) Twisted
  - B) Hook
  - C) Clutchwire
  - D) Piercing
18. Which wiring method should be used to wire a chrysanthemum for a corsage or boutonniere?
- A) Twisted
  - B) Hook
  - C) Clutchwire
  - D) Piercing
19. A “Della Robbia wreath” is made completely of \_\_\_\_\_.
- A) White pine and blue spruce evergreen
  - B) Cones, pods, nuts, and fruits
  - C) Fresh flowers, evergreens, and cones
  - D) Only cloth
20. What is the male part of a flower?
- A) Sepal
  - B) Stem
  - C) Stamen
  - D) Pistil
21. The green color of the leaves is caused by tiny particles in the food producing cells called \_\_\_\_\_.
- A) Guard cells
  - B) Epidermis
  - C) Chloroplasts
  - D) Starch

22. What is the purpose of the xylem of a stem?
- A) Moves manufactured food down to the roots
  - B) Is green in color
  - C) Stores food
  - D) Moves water and minerals up to the leaves
23. What is the best soil pH for bulbs?
- A) 5.0
  - B) 6.0
  - C) 7.0
  - D) 8.0
24. When forcing bulbs, size of the bulbs is important when selecting. What size of bulbs are you looking for?
- A) Small
  - B) Medium
  - C) Large
  - D) Go with whatever you feel is best
25. You are utilizing a fertilizer of 10-15-5. What number represents phosphorus?
- A) 10
  - B) 15
  - C) 5
  - D) It can be any number you choose

## **Answer Key**

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

## 2017 Iowa FFA Floriculture CDE

### Floral Production & Management

When done, return this document with your answer sheet to the test proctor.

**DO NOT MARK ON THIS DOCUMENT**

1. Identify the piece of greenhouse equipment on the right:
  - a. 1020 Web Flat
  - b. 1204 Insert
  - c. Oasis Root Cube
  - d. 12 Inch Square Tray
  - e. ITML 306 Deep Market Pack



Photo credit:

<http://www.hummert.com/product-details/8919/oasis-rootcubes-horticubes#>

2. Identify the piece of greenhouse equipment on the right:
  - a. 1020 Web Flat
  - b. 1204 Insert
  - c. Oasis Root Cube
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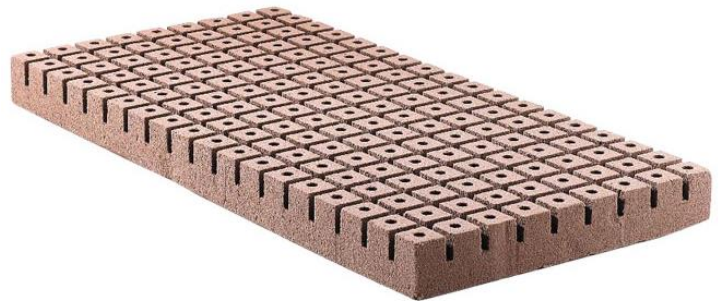




Photo Credit: <http://entnemdept.ufl.edu>

3. This picture is most likely showing a problem with what deficiency or pest?
  - a. Leafhopper
  - b. Leaf Spot
  - c. Phosphorus Deficiency
  - d. Aphid
  - e. Salt Damage
  
4. In reference to the above picture, what is a possible solution to this concern/problem?
  - a. Insecticide
  - b. Fungicide
  - c. Root Drenching
  - d. Fertilizer Application
  - e. More Light



Photo credit: <http://aggie-horticulture.tamu.edu>

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Photo Credit: <http://www.missouribotanicalgarden.org>

7. This picture is most likely showing a problem with what deficiency or pest?
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  - e. More Light



Photo Credit: <https://www.gardeningknowhow.com>

9. This picture is most likely showing a problem with what deficiency or pest?
- a. Powdery Mildew
  - b. Leaf Spot
  - c. Mealy Bug
  - d. Aphid
  - e. Salt Damage
10. In reference to the above picture, what is a possible solution to this concern/problem?
- a. Insecticide
  - b. Fungicide
  - c. Root Drenching
  - d. Fertilizer Application
  - e. More Light



Photo Credit: <http://www.aos.org>

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  - d. Fertilizer Application
  - e. More Light

**Answer Key:**

1. A
2. C
3. D
4. A
5. C
6. D
7. B
8. B
9. A
10. B
11. C
12. A

# 2017 Iowa FFA Floriculture CDE

## Phase V – Problem-Solving/Decision-Making (60 points)

### DO NOT WRITE ON THIS TEST

1. You have 100 canna bulbs coming in on February 1. You know that it takes 5 weeks for them to emerge and 12 weeks to grow to a saleable size for your customers. On which day would you need to plant the canna bulbs in order to have them ready to sell on Mother's Day (May 12<sup>th</sup>).
  - a. March 11
  - b. February 20
  - c. March 4
  - d. You must plant them immediately when they arrive.

January						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

March						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

April						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

May						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

June						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

2. You can't find finished ghost pepper starter plants, so you decide to grow your own for your retail store. You know that each plant costs \$1.25 to produce, but your germination rate is 75%. What is the material cost to produce 50 plants (assume you are direct seeding the plants into the soil/pots, so you must account for loss)?
  - a. \$83.75
  - b. \$58.25
  - c. \$46.85
  - d. \$62.50

3. You need to deliver mulch to a customer for their landscape beds. You know that they have 2 square beds that are 12 feet by 12 feet. In addition to the square beds, you have 2 circular beds that are 6 feet in diameter. If you are want to apply the mulch 3 inches deep, how many cubic yards would you need to deliver? You can only deliver in  $\frac{1}{4}$  yard increments. Note: 1 cubic yard = 27 cubic feet.
- 3.75
  - 6.0
  - 2.5
  - 4.50
4. You are trying to schedule your workers to plant your fall mums. You know that each worker can plant 300 mums per hour. Each 12" pot contains 3 mums each. If you need to plant 12,000 12" pots, how many workers do you need to schedule to finish planting in 3 days? Assume each day is 8 hours.
- 4 workers
  - 2 workers
  - 15 workers
  - 5 workers
5. You have a holding tank in which you mix your fertilizer. You need to add  $\frac{3}{4}$  of an ounce of fertilizer per gallon of water. Your tank is 3 foot across and 4 feet deep (cylinder shape). How many pounds of fertilizer should you add? Please note: there are 16 ounces in one pound & 1 cuft contains 7.48 fluid gallons
- 12.2 pounds
  - 21.1 pounds
  - 9.9 pounds
  - 45.4 pounds
6. You decide to re-open a small greenhouse in your community. You borrowed enough money to cover rent, utilities, soil, plant material, and advertising for one year. The loan amount is \$82,000. In the first year of business you have \$107,000 in gross sales and \$74,000 in total expenses. If you have similar profits in future years of business, approximately how many years will it take to pay off your loan? (Assume that all interest you owe on the loan is figured into your total expenses and use 100% of the net income toward the loan payment.)
- 2.5 years
  - 1 year
  - 5 years
  - 3.5 years

7. You are packaging lettuce seeds – 500 seeds per packet. Before packaging them you conducted a germination test. You sowed 250 seeds and 215 seeds germinated. What germination rate will you post on the outside of the seed packet?
- 75%
  - .90%
  - 86%
  - 42%
8. You're ordering potting mix for your greenhouse operation. Your pots are 4.5 inch squares and are 4 inches tall. How many full pots will you get out of one 2.4 cuft bag of potting mix?
- 52
  - 75
  - 51
  - 42
9. You are ringing through an employee that gets a 20% discount. Your register suddenly goes down and you must calculate the ticket by hand. The employee wants to purchase the following:

QTY	ITEM	Retail Price
5	Flowering Shrubs	\$29.99
2	Premium Annuals	\$ 5.29
1	Bag of Fertilizer	\$11.99

What would the ticket be with their discount and a 7% tax?

- \$172.52
  - \$147.68
  - \$184.60
  - \$47.27
10. You are spacing out your fall mum crop. Each 12" pot needs to be spaced on 30" centers. How many square feet will you need to space your 12,000 pots?
- 60,000 sqft
  - 72,000 sqft
  - 75,000 sqft
  - 150,000 sqft

11. You own a greenhouse that is 96' in length and 36' wide. The greenhouse has on each side 3' wide benches that extend the entire 96' length of the greenhouse. There are also 3 benches that are 6' wide but are 3' short at each end (90' in length) to allow entrance to the greenhouse. There are 4 aisles that are 4' wide. What percentage of the space under cover is not being used for production?

- a. 42%
- b. 36%
- c. 63%
- d. 28%

12. You need to find out the average cost of your perennial plugs. You have the following information below. What is the average cost of all your perennial plugs?

QTY	ITEM	Plug Cost
25	Phlox	\$1.75
20	Hosta	\$1.00
100	Daylily	\$1.15

- a. \$1.23
- b. \$1.50
- c. \$1.12
- d. \$1.29



## Answer Key

1. B
2. A
3. D
4. D
5. C
6. A
7. C
8. A or C
9. B
10. C
11. B
12. A

## 2017 FFA State Floriculture Team Event

It is a beautiful June day in Iowa, at Flowers by Nature's Corner, the flower shop that you work at. Today has been a busy one, as orders keep coming in, and phones keep ringing.

Some orders that must be done first are:

-A dozen carnations done all the way around in a tall vase with baby's breath, and a bow. With an enclosure card to read "Happy Birthday Britt! Love, Cody"

-An all the way around fresh mixed flower arrangement with some daisies, in a shorter vase with the card reading "Have a great day Grammy, love you! -Kyle"

-A one sided 3 carnation bud vase with baby's breath and a bow

-A one sided fresh mixed arrangement done in a coffee mug

-And a Peruvian Lily boutonniere with no ribbon, in a bag

You have 40 minutes until your customers are coming to pick up their orders. Work quickly, work together, and good luck!