

2006 STATE FFA FLORICULTURE PROBLEM SOLVING TEST

Contestant Number: _____ Name: _____

Chapter Name: _____ Score: _____

Directions: Read each question carefully and choose the best possible answer. If provided with Scantron sheets, bubble in the answer. Otherwise, write the answer in the blank to the left of each number. Each correct answer is worth ten (10) points. The maximum score is 100.

- _____ 1. Tasha wants to sell 1,500 geraniums from her greenhouse. If the germination rate for geraniums is 85%, how many seeds will she need to sow?
- a. 1,600
 - b. 1,700
 - c. 1,800
 - d. 1,900
- _____ 2. A poinsettia grower wants to grow 2,000 poinsettias. Each plant requires 15 inches x 15 inches of bench space. How many square feet of bench space will be required?
- a. 450,000
 - b. 3,120
 - c. 18,750
 - d. 37,500
- _____ 3. A local florist is having a 30% off clearance sale. If a customer bought items totaling \$450.00 at the regular price, how much would the items cost with the clearance markdown?
- a. \$315.00
 - b. \$585.00
 - c. \$265.00
 - d. \$135.00
- _____ 4. Susan wants to have begonias ready for sale in pots by May 1. If it takes sixteen weeks from seeding to market, when will she need to sow the begonia seeds?
- a. December 1
 - b. January 9
 - c. February 1
 - d. February 9

- _____ 5. If ten ounces of a chemical per 100 gallons of water are needed for a solution to treat 40,000 square feet, how many ounces of the same chemical will be needed to make a solution to treat 10,000 square feet?
- a. 1.0
 - b. 2.5
 - c. 3.5
 - d. 4.0
- _____ 6. It takes one cubic foot of potting media for twelve 6-inch pots. You have ordered ten cubic yards of potting media. How many pots will you be able to prepare?
- a. 1,440
 - b. 1,620
 - c. 2,100
 - d. 3,240
- _____ 7. A greenhouse has ten benches 4 feet wide and 100 feet long. If the final spacing for 6-inch poinsettias is 15 inches x 15 inches, what is the maximum number of pots that could be placed in the greenhouse?
- a. 1,777
 - b. 256
 - c. 2,564
 - d. 177
- _____ 8. An invoice listed three available discounts: 2% for early payment, 3% for early ordering, and 4% for buying large quantities. The local florist qualified for all three discounts. What would the florist pay, including 7% NC sales tax, if the original invoice before the discounts was \$6,000?
- a. \$600.20
 - b. \$540.00
 - c. \$5,460.00
 - d. \$5,842.20
- _____ 9. A North Carolina greenhouse operator received wind damage to several greenhouses. Expenses to date are:
- | | |
|------------------------|-------------|
| Materials and supplies | \$10,000.00 |
| Labor costs | \$6,000.00 |
| Utility costs | \$4,000.00 |
- An inventory showed that 5,000 plants could be sold from the greenhouses. What would be the selling price per plant to cover the expenses listed above?
- a. \$5.00
 - b. \$4.00
 - c. \$3.00
 - d. \$6.00

10. Your chrysanthemums have gray mold. You have chosen to treat this problem with chlorothalonil. If the average height of the greenhouse is 7.5 feet, width is 40 feet, and length is 100 feet, how many ounces of the chemical should you use to treat this problem?

CHRYSANTHEMUM			
Gray mold, Botrytis blight	chlorothalonil (Daconil) 2787 75 WP	1 lb/100 gal OR 2 tsp/gal	Spray every 7 to 14 days after disease first appears. Fumigate every 7 to 14 days after disease first appears.
	(Termil)	3.5 oz/10,000 cu ft	
	fenhexamid (Decree) 50 WG	1 to 1.5 lb/100 gal per acre	Spray to run off at 7- to 14-day intervals. DO NOT apply more than 6 lb of Decree per acre per season.
	fludioxonil (Medallion) 50 W	2 to 4 packets/100 gal	Spray every 7 to 14 days.
	iprodione (Chipco) 26019	1 to 2 lb/100 gal	Apply every 7 to 14 days.
	mancozeb (Dithane T/O, Fore, Mancozeb DG, Protect T/O) 80 W	1.5 lb/100 gal	Spray every 7 to 10 days.
	thiophanate methyl (Cleary's) 3336 or (Domain)	See label	Spray every 7 to 14 days after disease first appears.
Fusarium wilt	thiophanate methyl (Cleary's) 3336 50 WP	1 lb/100 gal, use 1 to 2 pt/sq ft	Apply as drench immediately after transplanting.
Phythium root rot	etridiazole (Truban) 30 WP	4 to 6 oz/200 gal/800 sq ft OR 1 tsp/4 gal to 30 sq ft	Apply at planting. Apply additional water immediately after application. Repeat at 4- to 8-week intervals if needed.
	metalaxyl (Subdue) 2 E	0.5 to 2 fl oz 100 gal/400 to 800 sq ft	Repeat at 1- to 2-month intervals. Do not use 1.6 to 2 fl oz rates more often than every 2 weeks.

- a. 3.5
- b. 7.5
- c. 9.5
- d. 10.5

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ANSWER SHEET

#	Answer
1.	c
2.	b
3.	a
4.	b
5.	b
6.	d
7.	c
8.	d
9.	b
10.	c