

Iowa FFA Association
1999 Floriculture CDE
General Knowledge Examination

Name _____
(print)

FFA Chapter _____
(print)

Directions:

All answers will be placed onto the score sheet provided. On the answer sheet, be certain to fill in your name, your chapter, and your contestant number. When answering, fill in the bubbles completely and if you change an answer, be certain to erase fully. You will have 30 minutes in which to complete this phase of the CDE.

1. What structure underneath the leaf allows the leaf to breathe or transpire?

- a. stem b. pistil c. stoma d. chloroplasts

2. Which part of the root absorbs the moisture and minerals?

- a. root canal b. root cap c. medium roots d. root hairs

3. If green plants show a _____ color, this indicates a nitrogen deficiency.

- a. white b. yellow c. green d. purple

4. Growth regulating substances in plants are called

- a. particle streams b. nitrates
c. residues d. hormones

5. _____ are the joints at which buds, leaves, and branches grow out from the stem.

- a. Budettes b. Nodes c. Intersections d. Rootstocks

6. At what temperature should soil be sterilized by heating for one-half hour?

- a. 180 degrees F b. 100 degrees F
c. 300 degrees F d. 212 degrees F

7. When grafting, what is the name of the newly installed shoot or top of the plant?

- a. tissue b. rootstock c. corm d. scion

8. Layering is a method of

- a. stacking seeds b. asexual reproduction
c. budding d. producing vegetables

9. Identify the form asexual reproduction that eliminates burying part of the parent plant in the soil.

- a. seed strings b. upright layering
c. girdle layering d. air layering

10. The leaves that give poinsettias their color.

- a. pinched b. bracts c. breaks d. sleeves

11. What is the ideal temperature for growing poinsettias?

- a. 40 to 55 degrees F b. 65 to 75 degrees F
c. 85 to 95 degrees F d. 20 to 35 degrees F

12. These are funnel shaped and used to protect the individual poinsettias.
- a. tubes
 - b. sleeves
 - c. spores
 - d. Pro-Mix B
13. The most popular cut flower sold in the U.S. is the
- a. rose
 - b. carnation
 - c. chrysanthemum (mum)
 - d. daisy
14. Fertilizer for mums should be high in
- a. vitamins and minerals
 - b. nitrogen and potash
 - c. nitrogen and phosphorus
 - d. minerals and phosphorus
15. Keeping the soil of mums saturated may cause
- a. root rot
 - b. leaves to drop off
 - c. stems to decay
 - d. flowers to wilt
16. The number of days to flowering time for Easter lilies is influenced by
- a. warm treatment of bulbs
 - b. cold treatment of bulbs
 - c. moist treatment of bulbs
 - d. dry treatment of bulbs
17. Unsatisfactory weed control may result from use of the wrong
- a. fumigant
 - b. toxicity
 - c. herbicide
 - d. repellent
18. For the accurate application of herbicides, a sprayer should be properly
- a. cleaned
 - b. calibrated
 - c. trimmed
 - d. all of the above

19. The average soil mixture contains what percentage of air, water, minerals, and organic materials?
- a. 45 percent air, 5 percent water, 25 percent minerals, 25 percent organic material
 - b. 50 percent air, 15 percent water, 10 percent minerals, 25 percent organic material
 - c. 5 percent air, 10 percent water, 50 percent minerals, 35 percent organic material
 - d. 25 percent air, 25 percent water, 45 percent minerals, 5 percent organic material
 - e.
20. The best type of metal wire to use when shaping a bonsai tree is
- a. lead
 - b. copper
 - c. galvanized
 - d. gold
21. What is the best way to clean the leaves of an indoor plant?
- a. wash with a diluted ammonia solution
 - b. use a professional strength household cleaner
 - c. a fine spray of water
 - d. a heavy shower of water
22. Material used for greenery in door swags or wreaths and serves as a hanger is
- a. hooks
 - b. floral wire
 - c. staples
 - d. floral tape
23. In floral design, an arrangement that has equal visual weight is known as
- a. balance
 - b. equality
 - c. sameness
 - d. style
24. A single flower or small bouquet worn by a man is called
- a. corsage
 - b. nosegay
 - c. arrangement
 - d. boutonniere
25. What tool is used when a feathered carnation corsage is made?
- a. wire cutters
 - b. florist knife
 - c. scissors
 - d. pliers

Answer Key -- 1999 State Floriculture CDE

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

1999 Floriculture CDE Problem Solving

Participant Name: _____

Participant Number: _____

Participant School: _____

Put your name, school and contestant number at the top of the page and on the answer sheet as directed by the contest chairperson.

Read the problems below. Select the best answer and blacken in the appropriate choice on the answer sheet. Each question is worth 10 points.

Problem Solving begins at number 101 on your answer sheet

101. You own a greenhouse that is 100 feet in length and 40 feet wide. The greenhouse has on each side 3' wide benches that extend the entire 100 length on the greenhouse. There are also 3 benches that are 6 feet wide but are 3 feet shorter at each end (94 feet in length) to allow entrance to the greenhouse. There are 4 aisles that are 4 feet wide. What percentage of the space under cover is actually available for production?
- a. 45%
 - b. 51%
 - c. 67%
 - d. 58%
102. A part-per-million (ppm) is defined as a milligram per liter (mg/L). How many mg of a 10-10-10 fertilizer must be added to 1 liter of water (total final volume) to obtain a fertilizer solution containing 100 ppm of nitrogen?
- a. 10 mg
 - b. 100 mg
 - c. 1,000 mg
 - d. 10,000 mg

103. As a general rule of thumb, 2.5 pounds of dolomitic limestone added per cubic yard of a *Sphagnum* peat-based soilless growing medium will increase the pH of that medium by 0.5 units. How many pounds of dolomitic limestone need to be added to 8 cubic yards of a *Sphagnum* peat-based medium to increase its pH from 3.5 to 5.5?

- a. 112 pounds
- b. 176 pounds
- c. 20 pounds
- d. 80 pounds

104. A case of 1000 4-inch containers costs \$60.00 including taxes and shipping. What is the cost per container?

- a. \$ 24
- b. \$.06
- c. \$.04
- d. \$.12

105. If the germination percentage for a package of begonia seed is 70%, how many seed must be planted to obtain 10,000 seedlings?

- a. 142,857
- b. 15,286
- c. 16,000
- d. 14,286