

Name: _____
Date: _____

Grade: _____/100

_____ COUNTY MASTER GARDENER
PRE-TEST
Fall, 200_

1. (2 points each) Name three weather factors that influence evaporation.

a. _____

b. _____

c. _____

_____ 2. (1 point) What is a symptom of thrip damage?

- a. holes in leaves
- b. deformed plant parts such as leaves and flower parts
- c. honeydew coated leaves
- d. root rot

_____ 3. (1 point) What practices will NOT encourage biological control agents to help battle insect/mite pest problems?

- a. routinely or preventatively apply pesticides
- b. only treat when pest populations or related damage exceed tolerable limits
- c. when using a pesticide, choose one that is target-specific
- d. routine garden sanitation

T or F 4. (1 point) Tap roots are largely responsible for the absorption of water and nutrients.

_____ 5. (1 point) What is the percentage of nitrogen by weight in a 40 lb bag of 21-14-7 fertilizer?

_____ 6. (1 point) What is the most common tell-tale symptom of salt buildup in plants?

- a. brown edges to on leaves
- b. brown circular spots on leaves
- d. leaf drop
- e. wilting

_____ 7. (2 points) How many cuts are used when properly removing a large tree limb?

8. (2 points) The process by which plants produce their own food is called _____.

9. (2 points each) The pigment used in this process (see question 8) is called _____.

It has a _____ color.

10. (2 points each) List the three inputs for this process of food production by plants (see question 8).

a. _____

b. _____

c. _____

11. (2 points each) List in the order they appear, the three nutrients found in numeric form on all bags of fertilizer.

a. _____

b. _____

c. _____

12. (2 points) What micronutrient do we find the most problem with in heavy clay soils in South Texas?

13. (2 points) A deficiency in this micronutrient (see question 12) is most commonly induced by high concentrations of what nutrient in high pH soils? _____

14a. (1 point each) Answer the following questions with one of these grass varieties: Bermudagrass, Fescue, St. Augustine grass.

a. _____ Which grass has the lowest water requirement?

b. _____ Which grass performs the best in shady areas?

c. _____ Which grass is not recommended in South Texas?

_____ 15. (1 point) The best time to water your grass is

- a. early morning
- b. midday
- c. late evening
- d. either early morning or late evening
- e. it doesn't matter

_____ 16. (1 point) Brown Patch and Take-All Root Rot are most likely to be a serious problem with St. Augustine lawns

- a. in the early spring
- b. in the summer
- c. in the early spring and fall
- d. all year long
- e. St. Augustine does not get Brown Patch or Take-All Root Rot

_____ 17. (1 point) What causes a cucumber fruit to be small and misshapen?
a. poor pollination
b. lack of phosphorous
c. aphids
d. none of the above

18. (2 points) What is the term used to describe a water-wise landscape?
_____.

19. (2 points each) What are the seven principles of this type of water-wise landscaping?

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- f. _____
- g. _____

_____ 20. (1 point) What percentage of the insects of the world are considered economically detrimental to agriculture and horticulture?
a. 3 %
b. 8 %
c. 18 %
d. 21%
e. 100%

_____ 21. (1 point) Mulching the soil will
a. keep the soil cool in the summer
b. help retain moisture
c. keep the soil warm in the winter
d. control weeds
e. all of the above
f. none of the above

_____ 22. (1 point) What is the most commonly recommended thickness of organic mulch applications to be effective?
a. 1-2 inches
b. 3-4 inches
c. 5-6 inches
d. 7-8 inches
e. it doesn't matter
f. none of the above

23. (2 points) The term for adding excessive water to remove salts from the soil is _____.

- _____ 24. (1 point) The **most important** characteristic to look for when selecting a potting mix for most potted tropical foliage plants is:
- water retention
 - soil weight
 - organic matter content
 - light and fluffy consistency
 - cost
25. (2 points) The most accurate term for a potted plant we grow inside is _____.
- T or F 26. (1 point) Blooming plants make good indoor plants because they add color and readily rebloom.
- _____ 27. (1 point) What is the most important factor for effective vegetable gardening?
- full sun
 - good drainage
 - plant spacing
 - variety selection
 - all of the above
 - none of the above
- _____ 28. (1 point) The process by which a plant loses water through its leaves is
- photosynthesis
 - transpiration
 - respiration
 - translocation
 - hydrolysis
- _____ 29. (1 point) Sulfur will make an alkaline soil
- more acidic
 - more alkaline
 - make no change in the pH
- _____ 30. (1 point) Which of these vegetables would be best to **follow** cabbage in a crop rotation program?
- broccoli
 - cauliflower
 - corn
 - kohlrabi
- _____ 31. (1 point) The average soil pH in residential landscapes in the Texas Coastal Bend is around
- 4.0
 - 5.0
 - 6.0
 - 7.0
 - 8.0
 - 9.0

- _____ 32. (1 point) Besides sunlight, the next most important consideration for a vegetable garden location is
- a. nutrients in the soil
 - b. existing organic matter
 - c. overhead electric wire location
 - d. drainage

33. What are the three components of the disease triangle? (2 point each)

- a. _____
- b. _____
- c. _____

- _____ 34. Chlorosis is (1 point)
- a. the development of multiple colors in plant leaves
 - b. a disease caused by the chlorophyllus fungus
 - c. damage to plant tissues caused by chlorine fumes
 - d. yellowing of plant leaves

- _____ 35. (1 point) What is the most important factor when determining the placement and spacing of plants in a well planned, functional landscape?
- a. How fast you want full coverage of the space
 - b. availability of plant material
 - c. size of the container
 - d. mature size

- _____ 36. (1 point) Which of these trees is **NOT** a Texas native?
- a. live oak
 - b. tallow
 - c. mesquite
 - d. anaqua
 - e. pecan

37. (2 points) The process by which soil is covered with clear plastic to heat up and sterilize the soil is called

_____.

38. (2 points) The process by which a plant is rooted while still connected to the parent plant is called:

_____.

T or F 39. (1 point) Adding a weak fertilizer solution to cuttings will help them root faster.

T or F 40. (1 point) All food materials including meat and dairy products should be added to your compost pile.

- _____ 41. (1 point) IPM is an abbreviated version for what horticultural terminology?
- a. Integrated Pest Management
 - b. Integrated Plant Management
 - c. Internal Plant Mitosis
 - d. Insect/Plant Management

42. An annual is (2 points)

43. A perennial is (2 points)

- _____ 44. (1 point) Which grass shape is the worst design for turf water management?
- a. long narrow strips
 - b. square
 - c. large rectangle
 - d. circular/oval
 - e. shape doesn't matter

- _____ 45. (1 point) Blossom-end rot in tomatoes is caused by
- a. phosphorus deficiencies
 - b. insect damage
 - c. bacterial infection
 - d. irregular water availability
 - e. all of the above
 - f. none of the above

46. (2 points) The web address for the Texas A&M Horticulture Department Homepage is

http://_____

47. (2 points) The address of the _____ County Extension Office is:

48. (2 points) The phone number of the _____ County Extension Office is:

_____ COUNTY MASTER GARDENER
PRE-TEST
Fall, 2004

1. (2 points each) Name three weather factors that influence evaporation. **(order is not important)**

a. temperature

b. sunshine (light intensity)

c. wind

Also acceptable: humidity

B 2. (1 point) What is a symptom of thrip damage?

- a. holes in leaves
- b. deformed plant parts such as leaves and flower parts**
- c. honeydew coated leaves
- d. root rot

A 3. (1 point) What practices will NOT encourage biological control agents to help battle insect/mite pest problems?

- a. routinely or preventatively apply pesticides**
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8. (2 points) The process by which plants produce their own food is called photosynthesis.

9. (2 points each) The pigment used in this process (see question 8) is called chlorophyll.

It has a green color.

10. (2 points each) List the three inputs for this process of food production by plants (see question 8).

a. CARBON DIOXIDE (CO₂)

b. WATER (H₂O)

c. SUNLIGHT

11. (2 points each) List in the order they appear, the three nutrients found in numeric form on all bags of fertilizer.

a. Nitrogen (N)

b. Phosphorus (P or P₂O₅)

c. Potassium (K or K₂O) (Potash also accepted but make note of potassium)

12. (2 points) What micronutrient do we find the most problem with in heavy clay soils in South Texas?

Iron (Fe)

13. (2 points) A deficiency in this micronutrient (see question 12) is most commonly induced by high concentrations of what nutrient in high pH soils? Phosphorus (P)

14a. (1 point each) Answer the following questions with one of these grass varieties: Bermudagrass, Fescue, St. Augustine grass.

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b. ST. AUGUSTINE Which grass performs the best in shady areas?

c. FESCUE Which grass is not recommended in South Texas?

A 15. (1 point) The best time to water your grass is

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18. (2 points) What is the term used to describe a water-wise landscape?
 Xeriscape .

19. (2 points each) What are the seven principles of this type of water-wise landscaping?

- a. **Planning and Design**
- b. **Soil Analysis (and Preparation)**
- c. **Appropriate Plant Selection**
- d. **Practical Turf Areas**
- e. **Efficient Irrigation**
- f. **Use of Mulches**
- g. **Appropriate Maintenance**

- A** 20. (1 point) What percentage of the insects of the world are considered economically detrimental to agriculture and horticulture?
- a. **3 %**
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a. HOST

b. PATHOGEN

c. FAVORABLE ENVIRONMENT

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42. An annual is (2 points) a plant that completes its life cycle in one growing season (one year or less) .

43. A perennial is (2 points) a plant that completes its life cycle in more than one growing season or that continues to grow for multiple growing seasons/years. .

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(361) 767-5217 (or 767-5223 main number)