

## Landscaping Pre-Test 2

- 1) The basic living unit of the plant is \_\_\_\_\_.
  - A) the roots
  - B) the shoot
  - C) the organs
  - D) the cells
  
- 2) The organs of a plant are \_\_\_\_\_.
  - A) root and stems
  - B) leaves and flowers
  - C) both a and b
  - D) none of the above
  
- 3) What chemical is responsible for the green color of the leaves?
  - A) Gibberellins
  - B) Cytokinins
  - C) Chlorophyll
  - D) Chlorine
  
- 4) The plant uses what two elements to make sugars in the leaves in the process of photosynthesis?
  - A) Carbon monoxide & water
  - B) Water & Hydrogen
  - C) Carbon dioxide & water
  - D) Oxygen & water
  
- 5) Roots function to \_\_\_\_\_.
  - A) anchor plant firmly in the soil
  - B) absorb water and nutrients from soil
  - C) store food
  - D) all the above
  
- 6) The most conspicuous parts of cultivated plants are \_\_\_\_\_.
  - A) shoots & stems
  - B) flowers
  - C) leaves
  - D) roots
  
- 7) It is possible to identify a particular plant species at a quick glance by \_\_\_\_\_.
  - A) their venation
  - B) their bark
  - C) their leaves
  - D) the shoot system
  
- 8) Dicotyledons are plants with \_\_\_\_\_.
  - A) one seed leaf
  - B) two seed leaves
  - C) three seed leaves

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- D) round shaped seed leaves
- 9) Most leaves are attached to a stem by a \_\_\_\_\_.
- A) pedicel
  - B) receptacle
  - C) petiole
  - D) lateral bud
- 10) A mountain ash leaf is an example of a \_\_\_\_\_.
- A) heart shaped leaf
  - B) simple leaf
  - C) compound leaf
  - D) monocotyledon leaf
- 11) The primary function of the leaf is \_\_\_\_\_.
- A) production of chlorophyll
  - B) production of food
  - C) to transport water around the plant
  - D) production of photosynthesis
- 12) The primary function of cell types in the leaf are \_\_\_\_\_.
- A) chlorenchyma cells
  - B) spongy mesophyll cells
  - C) parenchyma cells
  - D) guard cells
- 13) The food made through the process of photosynthesis is transferred throughout the plant by \_\_\_\_\_.
- A) vascular cambium
  - B) phloem
  - C) xylem
  - D) periderm
- 14) All stems grow in length. Stems of \_\_\_\_\_ plants grown in girth.
- A) herbaceous
  - B) ornamental
  - C) woody
  - D) all of the above
- 15) New layers of cells are added year after year to this wood in an outward direction (growth in girth). What layer of the woody plant is this?
- A) periderm
  - B) phloem
  - C) cambium
  - D) xylem
- 16) The region where a leaf bud is attached is called a node. What is the region between two nodes called?
- A) lateral buds
  - B) lateral nodes

- C) internodes  
D) none of the above
- 17) The terminal buds are located \_\_\_\_\_.  
A) on the side of the branch  
B) on the tips of the stem  
C) at the nodes between the petiole and stem  
D) at the base of the shoot
- 18) There are two types of root systems. They are \_\_\_\_\_.  
A) fibrous and multibranched  
B) tap and feeder  
C) fibrous and tap  
D) feeder and fibrous
- 19) Most feeder roots are found in the top \_\_\_\_\_ inches of soil.  
A) 4 to 8  
B) 6 to 10  
C) 8 to 12  
D) 10 to 14
- 20) In deciduous trees and shrubs, large amounts of food in the form of \_\_\_\_\_ are stored in the woody roots during the dormant season.  
A) sugars  
B) carbohydrates  
C) starches  
D) all of the above
- 21) Certain stems will produce roots if separated from the plant or if injury occurs. This type of root is known as a(n) \_\_\_\_\_.  
A) fibrous root  
B) root hair  
C) adventitious root  
D) all of the above
- 22) The stamens are the \_\_\_\_\_ part of the flower.  
A) male parts  
B) female parts  
C) male and female parts  
D) fertile eggs
- 23) A \_\_\_\_\_ is a small group of cells that remain nonspecialized and retain the capacity for rapid cell division.  
A) palisade cells region  
B) lateral bud region  
C) meristem  
D) internode
- 24) What hormones are produced in actively growing apical meristems?  
A) gibberellins

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- B) auxins
  - C) cytokinins
  - D) all of the above
- 25) Cytokinins are produced in what part of the plant?
- A) apical meristem
  - B) the shoot
  - C) the leaves
  - D) the roots
- 26) The chemicals Alar, B-9 and Cycocel are used to regulate and help control?
- A) pest
  - B) growth
  - C) disease
  - D) fungus
- 27) An example of a hardy plant is \_\_\_\_\_.
- A) petunia
  - B) cone flower
  - C) cleome
  - D) celosia
- 28) For practical horticulture, the most important three name classification units are \_\_\_\_\_.
- A) Genus, Family, Order
  - B) Species, Order, Class
  - C) Genus, Species, Kingdom
  - D) Species, Genus, Family
- 29) The following best describes a species:
- A) A natural group of plants composed of similar individuals that can produce similar offspring.
  - B) The primary or fundamental concept in the understanding of the plant forms of life; the basic unit of classification.
  - C) Plants of one kind
  - D) All of the above
- 30) The Latin binomial (two-part name) system of naming organisms was developed for \_\_\_\_\_.
- A) Scientific use
  - B) Ease of communication for people of different languages
  - C) The fact that Latin was a convenient language to use for naming plants since it is static.
  - D) All of the above.
- 31) In the name 'Dianthus caryophyllus L.' Dianthus is the \_\_\_\_\_.
- A) Species
  - B) Genus
  - C) Specific epithet
  - D) Family

- 32) Which of the following is incorrect according to the rules set for the binomial naming system?
- A) 'Dianthus caryophyllus'
  - B) Dianthus caryophyllus
  - C) *Dianthus caryophyllus* L.
  - D) Dianthus Caryophyllus
- 33) Two plants in the same *genus* is a group of related\_\_\_\_\_.
- A) Families
  - B) Species
  - C) Orders
  - D) Classes
- 34) Which is a true rose?
- A) Moss rose
  - B) Rose-of-Sharon
  - C) Lenton rose
  - D) None of the above
- 35) Horticulturists manipulate the production of identical offspring by asexual cloning or controlled sexual crossing of breeding lines such as petunias and marigolds. These plants are known as \_\_\_\_\_.
- A) Hybrids
  - B) Botanical varieties
  - C) Cultivars
  - D) None of the above
- 36) A hybrid is typically a cross between \_\_\_\_\_.
- A) Two plants of related genera
  - B) Two plants of related family
  - C) Two plants of related cultivars
  - D) Two plants of related species
- 37) Plant patents last \_\_\_\_\_.
- A) 10 years
  - B) Indefinite
  - C) 17 years
  - D) 27 years
- 38) Trademarks are made for the \_\_\_\_\_.
- A) Plant species
  - B) Plant family
  - C) Plant name
  - D) All of the above
- 39) Which of the following is the smallest Cranberry bush viburnum cultivar?
- A) *Viburnum opulus* 'Nanum'
  - B) *Viburnum opulus*
  - C) *Viburnum opulus* 'Compactum'

- D) *Viburnum plicatum* var. *tomentosum* 'Shasta'
- 40) Which of the following is true in BINOMIAL LATIN?  
A) The genus name and specific epithet should be *Italicized* or Underlined.  
B) The cultivar name should be preceded by the abbreviation cv. Or set of with single 'quotation' marks.  
C) The first letter of the genus name should be capitalized (ex. *Acer rubrum*).  
D) All of the above.
- 41) Plant roots need to obtain what three things from the soil?  
A) Water, Nitrogen, Hydrogen  
B) Nitrogen, Potassium, Phosphorus  
C) Water, Oxygen, Mineral nutrients  
D) Mineral nutrients, Nitrogen, H<sub>2</sub>O
- 42) The intermediate size particles in soil are \_\_\_\_\_.  
A) Clay  
B) Sand  
C) Silt  
D) Loam
- 43) Soil structure can be improved by \_\_\_\_\_.  
A) Adding fertilizers  
B) Adding soil amendments  
C) Tilling soil when wet  
D) All the above
- 44) When soil particles aggregate, they form \_\_\_\_\_.  
A) Smaller soil particles & smaller pore spaces  
B) Larger particles & larger pore spaces  
C) New soil particles  
D) Smaller soil particles increasing water holding capacity
- 45) The level of soil fertility and potential nutrient deficiencies are determined by a \_\_\_\_\_.  
A) Professional horticulturist  
B) Fertilizer testing kit  
C) Soil test  
D) Soil texture
- 46) When taking a soil sample it should be taken \_\_\_\_\_.  
A) From the top soil  
B) From 4 to 6 inches deep  
C) From 6 to 8 inches deep  
D) From 10 to 12 inches deep
- 47) Elemental sulfur is the best component to \_\_\_\_\_.  
A) Increase soil pH  
B) Reduce soil compaction  
C) Decrease soil pH

- D) Aerate soil
- 48) What percent of soil organic matter is considered desirable in ground beds?  
A) 5%  
B) 10%  
C) 15%  
D) 20%
- 49) Container growing media are quite different from soils. But likewise, they must \_\_\_\_\_.  
A) support the plant  
B) supply water and oxygen  
C) supply minerals  
D) all of the above
- 50) The (WHC) Water holding capacity of a growing medium is related to \_\_\_\_\_.  
A) The proportion of larger pores that hold water  
B) The proportion of sand, loam and clay in the medium  
C) The proportion of smaller pores that hold water  
D) The length of time that a growing medium will stay moist in dry environmental conditions
- 51) The best pH range for container medium is \_\_\_\_\_.  
A) 5.0 – 6.0  
B) 5.5 – 6.5  
C) 6.0 – 7.0  
D) 6.5 – 7.5
- 52) What are the three most commonly deficient elements in soil?  
A) Nitrogen, Potassium, Magnesium  
B) Water, Oxygen, Hydrogen  
C) Calcium, Phosphorus, Iron  
D) Nitrogen, Potassium, Phosphorus
- 53) Which of the 4 selections below *is not* a goal of a well designed landscape, but rather a result of meeting the goal?  
A) Please the owners by reflecting their personalities and values  
B) Function logically  
C) Fit the physical conditions of the site  
D) Enhancing the beauty of the home and property
- 54) The customer interview is the first step in the design process. The objective of this interview is \_\_\_\_\_.  
A) To get to know the customer  
B) To learn the customers outdoor living space needs, lifestyle and maintenance expectations  
C) The customers budget for the project  
D) All of the above
- 55) The base plan drawing shows what?

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- A) Location of plants and hardscaping
  - B) Property lines, house, other buildings and existing features that will remain
  - C) Shapes showing uses, such as lawn, gardens, patio, driveway and walks
  - D) All of the above
- 56) On which plan is it most important that all measurements be as close to exact as possible, for the reason that all other plans will be drawn from this one?
- A) Functional / bubble diagram
  - B) Master plan
  - C) Preliminary drawing
  - D) Base plan
- 57) Plant species are selected at what stage in the design process?
- A) Master plan
  - B) Bubble / Functional diagram
  - C) Final design
  - D) Customer interview
- 58) The qualities of a well design landscape are \_\_\_\_\_.
- A) function, fit, match
  - B) please the owner, function logically, be visually attractive
  - C) order, unity, rhythm
  - D) all of the above
- 59) When planting plants in a mass planting, you should group them together and plant in odd numbers to gain \_\_\_\_\_.
- A) Rhythm
  - B) Order
  - C) Visual Continuity
  - D) All of the above
- 60) As a rule of thumb, the depth of planting beds bordering the house of building should be equal to \_\_\_\_\_ the height of the house or building.
- A)  $\frac{1}{4}$
  - B)  $\frac{1}{3}$
  - C)  $\frac{1}{2}$
  - D)  $\frac{2}{3}$
- 61) The term “inter-connection” in landscaping refers to \_\_\_\_\_.
- A) Spacing plants equal distances in all beds
  - B) Plants placed in a narrow border
  - C) Repeating elements in a landscape
  - D) The physical linking or tying together of various elements in a landscape
- 62) On a master plan, the heavy lines are used to give emphasis to outlines of \_\_\_\_\_.
- A) Property and borders
  - B) Three dimensional elements
  - C) Underground utilities
  - D) All of the above

- 63) The information of a master plan is communicated in what two ways?  
A) Color code & directions  
B) Graphic symbols & color code  
C) Written notes & graphic symbols  
D) Graphic symbols & key code index
- 64) Various gray tones and textures used in a master plan distinguish hard surfaces from \_\_\_\_\_.  
A) Soft ground beds  
B) Soft surfaces  
C) Wood decks and patios  
D) All of the above
- 65) “Batter boxes” are used for \_\_\_\_\_.  
A) framing to pour cement  
B) squaring of a particular area  
C) staking of plants (particularly B&B plants)  
D) horizontal dimensioning
- 66) When installing a deck or patio, proper vertical layout is *important* for what major reason?  
A) Levelness  
B) Water drainage  
C) Proper construction  
D) Visual impact
- 67) Pressure treated wood can be identified by \_\_\_\_\_.  
A) its light brown color  
B) its ink stamp  
C) its light green color  
D) its grain texture
- 68) Which of the following types of wood is naturally resistant to insects and decay?  
A) Pressure treated lumber  
B) Cedar & redwood  
C) Western hemlock & southern pine  
D) All of the above
- 69) An annual plant is \_\_\_\_\_.  
A) a plant that is ever living  
B) a plant that matures in two growing seasons  
C) a plant that lives its life cycle in one growing season  
D) a plant that lives as least three growing seasons
- 70) A perennial plant is \_\_\_\_\_.  
A) a plant that lives only two growing seasons  
B) a plant that lives only one growing season  
C) a plant that lives at least three growing seasons  
D) perennial is another term for tropicals

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- 71) "Pinching" is done to annuals to promote \_\_\_\_\_.  
A) root growth  
B) branching  
C) the stem to grow in girth  
D) increased photosynthesis
- 72) Deadheading is \_\_\_\_\_.  
A) also known as pinching  
B) removal of dead foliage  
C) removal of spent flowers  
D) all of the above
- 73) Hardiness zone refers to \_\_\_\_\_.  
A) a plant that can survive winter temperatures  
B) a plant that cannot survive cold winters  
C) minimum winter temperatures for an area  
D) maximum winter temperatures for an area
- 74) Most perennials grow best in a pH range of \_\_\_\_\_.  
A) 5.0 – 5.5  
B) 6.0 – 6.5  
C) 6.2 – 6.7  
D) 6.5 – 7.5
- 75) In a new perennial bed, prior to planting, organic matter can be incorporated 1/3 by volume if the soil is prepared to a depth of 12". How many inches of organic matter will be applied to the surface and then incorporated to the 12" depth?  
A) 2  
B) 3  
C) 4  
D) 6
- 76) Soil pH should be \_\_\_\_\_ for hardy bulbs.  
A) 5.5 to 6.5  
B) 6.0 to 7.0  
C) 6.5 to 7.5  
D) 6.2 to 6.7
- 77) Most woody ornamentals will grow best when soil pH ranges between \_\_\_\_\_.  
A) 5.5 – 6.5  
B) 6.0 – 7.0  
C) 6.5 – 7.5  
D) 6.2 – 6.7
- 78) Using a "blend" of Kentucky bluegrass is recommended for establishing turf in Ohio. A "blend" is a \_\_\_\_\_.  
A) mixture of different species of grasses  
B) combination of several varieties within the same species  
C) hybrid of two species of grass  
D) mixture of Kentucky bluegrass, ryegrass and zoisla grass

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- 79) Kentucky bluegrass and ryegrass mixture's optimum mowing height is \_\_\_\_\_.
- A) 1 ½ - 2 ½ inches
  - B) 2 - 2 ½ inches
  - C) 2 ½ - 3 inches
  - D) 3 - 3 ½ inches
- 80) The ideal soil pH for most turf grass is \_\_\_\_\_.
- A) 5.0 - 6.0
  - B) 5.5 - 6.5
  - C) 6.0 - 7.0
  - D) 6.5 - 7.5
- 81) On a bag of fertilizer there will be three sets of numbers representing N., P., K. (ex. 12-5-5). What do these numbers mean?
- A) The amount of fertilizer in the bag.
  - B) The amount of N., P., K. per ounce.
  - C) The % per pound of N., K., P.
  - D) The % of inert matter.
- 82) Weeds are a major problem in lawns that can be effectively controlled by using \_\_\_\_\_.
- A) Pesticides
  - B) Fungicides
  - C) Herbicides
  - D) All of the above
- 83) The most common annual grass (weed) found in lawns is \_\_\_\_\_.
- A) Crab grass
  - B) Goose grass
  - C) Foxtail
  - D) Blue Fescue
- 84) Which of these two types of herbicides, Preemergence and Postemergence, is absorbed into the leaf, moves through the plant to the roots and underground structures, and kills the plant?
- A) Preemergence
  - B) Postemergence
  - C) Both a and b
  - D) Neither a or b
- 85) A vertical mower is used for \_\_\_\_\_.
- A) Mowing slopes and steep hills
  - B) Extracting thatch
  - C) Edging
  - D) There is no such thing as a vertical mower.
- 86) This disease is common to bluegrass in the Spring and can be described as black spots with yellowing of the blades.
- A) Dollar spot
  - B) Stripe and flag smuts

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- C) Brown patch
  - D) Leaf spot and melting out
- 87) As the soil dries and temperature increases in the Spring, the turf dies in a circular pattern with green, recovering grass in the center, causing a frog-eye appearance. This frog-eye pattern is one of the diagnostic features of what disease?
- A) Dollar spot
  - B) Powdery mildew
  - C) Necrotic ring spot
  - D) Leaf spot and melting out
- 88) \_\_\_\_\_ is a disease problem in shaded areas of the lawn, most commonly on bluegrasses and fescues. It appears as a gray-white growth occurring mostly on the upper surface of the leaf blade.
- A) Flag smut
  - B) Rust
  - C) Snow mold
  - D) Powdery mildew
- 89) You have a large area of dead turf. When you grasp and pull the dead grass, stems break at the crown and there is a sawdust-like material packed into the stems. What lawn insect causes this?
- A) White grub
  - B) Sod webworm
  - C) Bluegrass bill bug
  - D) Cinch bug
- 90) The most important component of personal relations is \_\_\_\_\_.
- A) Personal appearance
  - B) A good attitude
  - C) Employee to employee relations
  - D) Communication
- 91) Communication channels are \_\_\_\_\_.
- A) Audio, print, and T.V.
  - B) Radio and telephone
  - C) E-mail
  - D) All of the above
- 92) Which of the answers below is not a cultural method of controlling weeds?
- A) Mowing
  - B) Cultivation
  - C) Mulching / pulling
  - D) Herbicides
- 93) Anthracnose leaf blotches, bacterial crown gall, black spot, and phytophthora root and crown rots are examples of \_\_\_\_\_.
- A) Plant bacterial fire blight
  - B) Noninfectious diseases
  - C) Infectious diseases

- D) Parasitic plant pathogens
- 94) Insects, subgrouped into a specialized feeders category known as “skeletonizers,” eat the foliage of a leaf, leaving only the veins. Which insect below is in this category?
- A) Bagworm
  - B) Gypsy moth
  - C) Japanese beetle
  - D) Boxwood leafminer
- 95) Bronze birch borer, white pine weevil, peachtree borers, and clearwing moth borers are the larvae of various beetles and moths that \_\_\_\_\_.
- A) bore through plant leaves in between the upper and lower layers of the leaf
  - B) bore into and through roots, feeding on starches stored in the roots
  - C) bore into stems and trunks of trees
  - D) all of the above
- 96) Thrips, plant bugs, lace bugs, hoppers, aphids, scale and mites are what type of pest?
- A) Chewing
  - B) Borers
  - C) Sucking
  - D) Leaf miners
- 97) The three elements of the disease triangle are \_\_\_\_\_.
- A) Host plant, environment, and insect
  - B) Host insect, environment, and pest
  - C) Host plant, environment, and pathogen
  - D) Host plant, environment, and biological
- 98) If applescab fungus is abundant in a particular site, and it is a very moist spring, and there is a susceptible crabapple such as *Malus 'Radiant'*, are all the components present for applescab to infect the *Malus 'Radiant'*?
- A) Yes
  - B) No
  - C) Neither A nor B
  - D) Both A and B
- 99) The key environmental factor of rose blackspot is \_\_\_\_\_.
- A) Soil surface remaining moist at all times
  - B) Very dry conditions
  - C) Foliage remaining wet for long periods of time
  - D) All of the above
- 100) You use a pesticide to target a particular pest. It also kills the target's natural predator. The target pest then has a subsequent rapid increase in its population. This increase is called \_\_\_\_\_.
- A) Secondary pest
  - B) Pest resurgence
  - C) Resistance
  - D) Improper treatment

- 101) What are the three components of the IPM (Integrated Pest Management) triangle?  
A) Host plant, environment, pathogen  
B) Chemical, cultural, biological  
C) Test, plant, insecticide  
D) Plant host, environment, pathogen
- 102) These practices help to create a less favorable environment for disease and pests. They include proper planting and proper maintenance, such as fertilizing, watering, and pruning. These practices are called \_\_\_\_\_.  
A) Biological  
B) Chemical  
C) Cultural  
D) Mechanical
- 103) Biological control of insects involves what three things?  
A) Cultural, chemical, and biological  
B) Host plant, environment, and insect  
C) Parasites, pathogens, and predators  
D) Plant host, environment, and insect
- 104) Bacillus Thuringiensis or B.T. the strain “Kurstaki” affects only \_\_\_\_\_.  
A) Caterpillars  
B) Leaf feeding beetles  
C) Leaf miners  
D) Aphids
- 105) Three foot poultry wire fences or monofilament line, stretched post to post with 6” – 8” in between each line (generally only three lines are used) is a deterrent tactic used to help keep \_\_\_\_\_ out of gardens, yards, and ponds.  
A) Rabbits  
B) Canadian geese  
C) Raccoons  
D) Deer
- 106) Vole damage to woody plants usually occurs in what?  
A) Late summer- early fall  
B) Late fall- early spring  
C) Late winter- early spring  
D) Late spring- early summer
- 107) The most common flower damaged by rabbits is \_\_\_\_\_.  
A) Daisy  
B) Daffodil  
C) Tulip  
D) Hyacinth
- 108) The most common injuries that occur in landscaping are \_\_\_\_\_.  
A) Cuts and bruises  
B) Back injuries  
C) Leg injuries

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- D) Head injuries
- 109) Heat exhaustion may also cause shock due to loss of fluids through heavy perspiration. Heat exhaustion may also be exhibited by \_\_\_\_\_.
- A) Vomiting
  - B) Paleness
  - C) Fatigue
  - D) All of the above
- 110) The green plant is view as a three part system: Roots, shoots, & stems.
- A) TRUE
  - B) FALSE
- 111) Through the process of respiration, plants are able to use sugars and other compounds as energy sources.
- A) TRUE
  - B) FALSE
- 112) The rate of photosynthesis is not affected by temperature, light intensity, CO<sub>2</sub> content in the air, or water and nutrient availability.
- A) TRUE
  - B) FALSE
- 113) Factors that affect photosynthesis also affect transpiration.
- A) TRUE
  - B) FALSE
- 114) Making a cut around the circumference of the stem of a monocotyledonous plant (girdling) will not kill it.
- A) TRUE
  - B) FALSE
- 115) Fibrous root systems are best adapted to wetland type soils.
- A) TRUE
  - B) FALSE
- 116) Transferal of the pollen from the anther to the stigma by wind or water or mechanical means is known as the process of fertilization.
- A) TRUE
  - B) FALSE
- 117) The meristem produces a callus roll, which eventually grows over to close a wound on a woody plant.
- A) TRUE
  - B) FALSE
- 118) When the stem apex is cut or “pinched” off, many of the lateral buds below the apex begin active growth.
- A) TRUE
  - B) FALSE

- 119) Ethylene has no damaging affects on flowers.  
A) TRUE  
B) FALSE
- 120) The second name in a binomial name is the specific epithet (ex. *Dianthus caryophyllus*).  
A) TRUE  
B) FALSE
- 121) When a related species in a particular genus are in a list, it is acceptable after the first species to list them by the first letter of the genus. (ex. *Dianthus caryophyllus*, *D. chinensis*, *D. gigantus*, etc...).  
A) TRUE  
B) FALSE
- 122) A cultivar name should not be used for more than one plant in a given genus, even it if is in a different species.  
A) TRUE  
B) FALSE
- 123) There can be cultivars of botanical varieties.  
A) TRUE  
B) FALSE
- 124) It is not possible to have cultivars of hybrids.  
A) TRUE  
B) FALSE
- 125) A trademark is defined as a word or words or a symbol which identifies the place or origin of a product.  
A) TRUE  
B) FALSE
- 126) There are two basic methods of producing ornamental plants: Either they are grown in soil in a field or they are grown in a potting medium in the container, nursery, or greenhouse.  
A) TRUE  
B) FALSE
- 127) Soil texture is determined by the particle size.  
A) TRUE  
B) FALSE
- 128) Soil that has poor structure will have a high bulk density.  
A) TRUE  
B) FALSE
- 129) Calcium, magnesium, and sulfur are three of the macro-nutrients. They are known as macro-nutrients because they are needed in very small quantities.  
A) TRUE

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- B) FALSE
- 130) The coarseness or fineness of particles in the growing medium components will not affect pore size distribution.  
A) TRUE  
B) FALSE
- 131) Plants grown in containers do not need to be supplied with a constant supply of nutrients because growing medium for containers is very rich in the 17 essential elements and will support plant life on its own.  
A) TRUE  
B) FALSE
- 132) One area of the landscape should be more dominate than the rest for visual impact.  
A) TRUE  
B) FALSE
- 133) A master plan is defined as an illustrative scale drawing in which all elements of a design are shown.  
A) TRUE  
B) FALSE
- 134) It is not necessary to use “dead men” when constructing a retail wall that will run four or more courses high out of railroad ties. You only use “dead men” when using “landscape timbers.”  
A) TRUE  
B) FALSE
- 135) In an annual bed, the soil can be amended seasonally because, annuals are planted every season.  
A) TRUE  
B) FALSE
- 136) Soil preparation is ideally done the summer or fall before planting the following year for a perennial garden.  
A) TRUE  
B) FALSE
- 137) The term “bareroot” refers to stock shipped to a nursery or sold to customers without any packaging beyond the necessary to protect from destruction.  
A) TRUE  
B) FALSE
- 138) Under moderate shade, fine fescues will eventually dominate Kentucky bluegrass.  
A) TRUE  
B) FALSE
- 139) State and federal law requires specific information be provided on each container of prepackaged grass seed. The percent of see purity, and the percent of weed seed does not have to be provided on the label.  
A) TRUE

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- B) FALSE
- 140) The quickest and most economical way to establish a new lawn is by sodding.  
A) TRUE  
B) FALSE
- 141) Nitrogen is the element responsible for the deep green color of the grass and plant density.  
A) TRUE  
B) FALSE
- 142) Fertilization will do more to improve poor quality lawns than any other single management practice.  
A) TRUE  
B) FALSE
- 143) Preemergent grass herbicides are the most effective.  
A) TRUE  
B) FALSE
- 144) Dandelion, plantain, white clover, and ground ivy are common, broadleaf weeds found in lawns.  
A) TRUE  
B) FALSE
- 145) When applying broadleaf herbicide in granular form, the foliage should be wet or moistened prior to application to insure striking of the granule to the leaf.  
A) TRUE  
B) FALSE
- 146) Tall fescue, quack grass, timothy, beantgrass, bermuda grass, and nimblewell are all weeds that commonly occur in lawns. They are known as perennial grasses.  
A) TRUE  
B) FALSE
- 147) Thatch is an organic layer that develops between the soil and green vegetation.  
A) TRUE  
B) FALSE
- 148) Necrotic ring spot spreads via crowns, leaf sheafs, rhizomes, and roots during the cool, moist periods in the spring.  
A) TRUE  
B) FALSE
- 149) It is recommended to water turf in the evening to encourage growth and prevent disease.  
A) TRUE  
B) FALSE
- 150) The adult moth of the sod webworm causes most of the damage to a turf. The larvae or worm does little damage to grass plants at all.

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- A) TRUE  
B) FALSE
- 151) Personal appearance of an employee has no effect on customers and will not help a customer to decide whether they will return to a garden center.  
A) TRUE  
B) FALSE
- 152) Weeds are classified by their life cycles. There are annual, biennial, and perennial weeds.  
A) TRUE  
B) FALSE
- 153) Postemergence chemicals kill existing weeds and generally have little effect on weeds that germinate after application.  
A) TRUE  
B) FALSE
- 154) There is very little difference between selective and non-selective herbicides, and either could be used for general purpose.  
A) TRUE  
B) FALSE
- 155) Plant disease names usually relate either to the symptoms that these diseases cause or the signs of the pathogen.  
A) TRUE  
B) FALSE
- 156) When differentiating between “disease” and “host parasite” relationships and insects, diseases cause infections and host parasites and insects do not.  
A) TRUE  
B) FALSE
- 157) Diseases can and will occur without all three components of the disease triangle.  
A) TRUE  
B) FALSE
- 158) “Treeage” is a pest management decision making concept for selecting the best course of action.  
A) TRUE  
B) FALSE
- 159) Insect pests cannot develop a resistance to pesticides.  
A) TRUE  
B) FALSE
- 160) The label on pesticides is the law.  
A) TRUE  
B) FALSE

- 161) Visual repellants such as flags, balloons, and scarecrows are normally used at 1 per 3-5 acres before waterfowl become accustomed to loafing or feeding in the area.  
A) TRUE  
B) FALSE
- 162) You can tell damage was done by a sapsucker rather than a woodpecker by the ¼ inch holes in numerous rows drilled in ornamental trees.  
A) TRUE  
B) FALSE
- 163) Raccoons can cause considerable damage to freshly laid sod by rolling it up; and established lawns by looking for food.  
A) TRUE  
B) FALSE
- 164) Chipmunks sometimes feed on flower bulbs.  
A) TRUE  
B) FALSE
- 165) The groundhog is also known as the woodchuck.  
A) TRUE  
B) FALSE
- 166) Planting castor beans in the corners of your yard or field is an effective measure to help keep moles out of your yard.  
A) TRUE  
B) FALSE
- 167) When lifting a heavy object, you should bend at the knees into a squat, get a firm grip and use your leg muscles to lift the object while keeping your back straight.  
A) TRUE  
B) FALSE
- 168) When a person hurts their back on the work site and is laying on the ground, you should not move them, and call for help.  
A) TRUE  
B) FALSE

#### ANSWER KEY

- 1) D
- 2) C
- 3) C
- 4) C
- 5) D
- 6) C
- 7) C

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- 8) B
- 9) C
- 10) C
- 11) B
- 12) A
- 13) B
- 14) C
- 15) C
- 16) C
- 17) B
- 18) C
- 19) C
- 20) C
- 21) C
- 22) A
- 23) C
- 24) B
- 25) D
- 26) B
- 27) B
- 28) D
- 29) D
- 30) D
- 31) B
- 32) D
- 33) B
- 34) D
- 35) C
- 36) D
- 37) C
- 38) C
- 39) A
- 40) D
- 41) C
- 42) C
- 43) B
- 44) B
- 45) C
- 46) C
- 47) C
- 48) A
- 49) D
- 50) C
- 51) B
- 52) D
- 53) D
- 54) D
- 55) A
- 56) D
- 57) C

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- 58) C
- 59) D
- 60) B
- 61) D
- 62) B
- 63) C
- 64) B
- 65) B
- 66) B
- 67) C
- 68) B
- 69) C
- 70) C
- 71) B
- 72) C
- 73) C
- 74) C
- 75) C
- 76) B
- 77) C
- 78) B
- 79) B
- 80) C
- 81) C
- 82) C
- 83) A
- 84) B
- 85) B
- 86) D
- 87) C
- 88) D
- 89) C
- 90) D
- 91) D
- 92) D
- 93) C
- 94) C
- 95) C
- 96) C
- 97) C
- 98) A
- 99) C
- 100) B
- 101) B
- 102) C
- 103) C
- 104) A
- 105) B
- 106) B
- 107) C

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- 108) B
- 109) D
- 110) B
- 111) A
- 112) B
- 113) A
- 114) A
- 115) B
- 116) B
- 117) A
- 118) A
- 119) B
- 120) A
- 121) A
- 122) A
- 123) A
- 124) B
- 125) A
- 126) A
- 127) A
- 128) A
- 129) B
- 130) B
- 131) B
- 132) A
- 133) A
- 134) B
- 135) A
- 136) A
- 137) A
- 138) A
- 139) B
- 140) B
- 141) A
- 142) A
- 143) A
- 144) A
- 145) A
- 146) A
- 147) A
- 148) A
- 149) B
- 150) B
- 151) B
- 152) A
- 153) A
- 154) B
- 155) A
- 156) A
- 157) B

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- 158) A
- 159) B
- 160) A
- 161) A
- 162) A
- 163) A
- 164) A
- 165) A
- 166) B
- 167) A
- 168) A