

**Texas FFA State Nursery / Landscape Career Development Event  
General Knowledge Examination Question Bank**

Fifty (50) questions for the General Knowledge Examination of the Texas FFA State Nursery/Landscape Career Development Event will be selected from the following list.

1. PVC irrigation pipe is joined by connectors/couplings that are \_\_\_\_\_to the pipe.  
**A. Solvent Welded**
2. Similar to the textural appearance of plants, \_\_\_\_\_can be used to create spatial illusions in a perennial garden.  
**A. Color**
3. To preserve the germination ability of most seeds, store them in a:  
**A. Cool, dry environment**
4. \_\_\_ \_\_ drawings show an object as seen by the eyes at eye-level.  
**A. Perspective**
5. Fireblight is a disease that most often affects susceptible plants:  
**A. During periods of rapid succulent growth**
6. The soil pH level primarily controls:  
**A. Availability of essential plant nutrients**
7. Three types of ground patterns used in landscape design are \_\_\_\_\_ .  
**A. Curved-line, arc-and-tangent, straight-line**
8. Training plants into three-dimensional ornamental forms, such as animals, is called:  
**A. Topiary**
9. Clay soils require:  
**A. A longer time for absorption of irrigation water than sandy soils**
10. The approximate range of average annual minimum temperature for Plant Hardiness Zone 8 is:  
**A. 10 to 20 degrees**
11. Fertilizer recommendations are often given in pounds of nitrogen per thousand square feet. How many 50 pound bags of 10-10-10 fertilizers should be applied to an area 50 X 100 ft. if the recommendation is for 2 pounds of nitrogen per 1000 sq. ft.?  
**A. 2**
12. Plants that have been clipped or pruned into two-dimensional forms are:  
**A. Espalier**
13. A transplanted tree or shrub should be set into the ground:  
**A. At the same depth at which it was originally growing**
14. Which of the following is true about lady bug beetles? They:  
**A. Eat aphids**

15. Plants that use less water and are tolerant of dry landscape sites are called:  
**A. Xerophytes**
16. Damping-off is caused by:  
**A. Fungi**
17. Which of the following is a disadvantage of using a time clock to control an irrigation system?  
**A. The plants are watered at set times, whether they need watering or not.**
18. Which of the following is a group of terms related to landscape design principles?  
**A. Focalization, proportion, simplicity**
19. The Oak Leaf Nursery advertised a group of trees with a trunk caliper of 3 inches. In the trade, it is assumed that this measurement was taken:  
**A. 6 inches above ground level**
20. One function of the stomates is to:  
**A. Give off water vapor**
21. A friable soil is one that:  
**A. Is loose and of good structure and texture**
22. Plants usually do not grow well in poorly drained soils because:  
**A. Oxygen content is low in poorly drained soils**
23. To make the living area of a landscape appear larger, a designer should include plants that feature:  
**A. Cool-colored flowers such as blues, purples, lavenders**
24. Which of the following turf areas is mowed to the lowest height?  
**A. Golf green**
25. In plants, \_\_\_\_\_ is the process of converting stored energy into energy for plant growth.  
**A. Respiration**
26. A landscape designer uses many \_\_\_\_\_ in developing the preliminary design for a project.  
**A. Bubble diagrams**
27. Fairy ring is caused by:  
**A. Fungi**
28. An "x" in the botanical name of a plant means the plant:  
**A. Is a true hybrid**
29. An example of an organic material is\_\_\_\_\_.  
**A. Leaf mold**
30. Which of the following is microscopic?  
**A. Nematodes**

31. The loss of water in the form of vapor from the surface of plant leaves is referred to as:  
**A. Transpiration**
32. The basic underlying principle of using a mist propagation system is that it:  
**A. Increases humidity around the cutting and reduces transpiration**
33. \_\_\_\_\_ is an example of a parasitic plant.  
**A. Mistletoe**
34. Low-growing landscape plants should:  
**A. Be placed in front of intermediate growing plants**
35. Which signal word for pesticide labels indicates the lowest level of toxicity?  
**A. Caution**
36. In a landscape design, properly located plants and structures.  
**A. Can reduce heat intensity**
37. Which of the following would be most suited for a hot, dry, steep bank in the landscape?  
**A. Creeping juniper**
38. A shade loving border plant is:  
**A. Impatiens**
39. Soft pencil leads are indicated by the letter \_\_\_\_\_ .  
**A. B**
40. A plant pathologist studies plant:  
**A. Diseases**
41. A plant that dies to the ground at the end of each growing season but comes back from the same root-stock year after year is most accurately described as a(n):  
**A. Herbaceous perennial**
42. Two basic types of pruning are heading-back and thinning-out. Which of the following is true about these pruning methods?  
**A. Thinning cuts are made close to a main branch or ground and few axillary buds are left.**
43. Lowering the soil grade around a tree removes many of the tree's roots.  
**A. Feeder**
44. Water availability, temperature extremes, and \_\_\_\_\_ should be considered when selecting trees for the landscape.  
**A. Soil type**
45. The four life cycle stages of beetles such as the Japanese beetle are:  
**A. Egg, grub, pupae, adult**
46. An important step in properly composting landscape refuse is to:  
**A. Thoroughly moisten each layer of material**

47. A pencil lead that is soft, prints well, erases easily, and tends to smear easily is .  
**A. 3B**
48. A large perennial that provides a general effect of mass and grows in excess of five feet is:  
**A. Pampas grass**
49. Lawn sprinkler systems are installed so they provide even coverage. This is accomplished by:  
**A. Spacing the heads so that each sprinkler sprays to the next sprinkler**
50. The statement on a bag of fertilizer that lists the percentages of nitrogen, phosphorous, and potassium contained in the fertilizer is called a(n) \_\_\_\_\_ analysis.  
**A. Fertilizer**
51. Callus is a term usually referring to:  
**A. The first tissue to develop on a cutting just before the roots form**
52. A \_\_\_\_\_ is a woody perennial that has more than one main trunk.  
**A. Shrub**
53. Mrs. Thompson loves spring flowering bulbs. Which of the following would you suggest for Mrs. Thompson to plant?  
**A. Hyacinthus orientalis cv.**
54. If a two-cycle engine on a weed trimmer uses a 24:1 fuel ratio, you should mix:  
**A. 24 parts gasoline to 1 part oil**
55. Soil texture refers to:  
**A. The size of the soil particles**
56. In nursery production, a "liner" refers to \_\_\_\_\_.  
**A. A rooted cutting or small seedling**
57. Which of the following is a deciduous vine?  
**A. Chinese wisteria**
58. When planting ground covers grown in compressed peat containers:  
**A. Make several cuts down the sides of the container before planting**
59. What part of a lawn mower prevents dust from entering the carburetor?  
**A. Air cleaner**
60. The optimum germination temperature for most bedding plant seeds is:  
**A. 75 to 85°F**
61. Paul had 400 containers of mature Salvia to wholesale to a landscaper. His cost of producing the plants, including labor, was \$832. If he adds 30% to the cost of production as his profit, how much will he charge the landscaper per container?  
**A. \$2.70**
62. Which of the following statements is true about applying dry fertilizer to a lawn?  
**A. It is a good practice to water-in dry fertilizer applied to a lawn**

63. The classifications of soil particles based on size are sand, silt, and:  
**A. Clay**
64. Which fuel is used in chainsaws, string trimmers, and other 2-cycle engines?  
**A. Gasoline and oil mix**
65. Which of the following is the proper recommendation for pruning trees at planting:  
**A. Pruning should be limited to shaping the plant by removing dead or damaged limbs**
66. The practice of manually watering a container plant until water comes out of the drainage holes of the container is effective for helping to reduce the buildup of \_\_\_\_\_ in the growing medium.  
**A. Soluble salts**
67. A scale of 1:20 means that:  
**A. 1" of blueprint equals 20' in the landscape**
68. The best time to spray a glyphosate is:  
**A. When weeds are in active growth**
69. Which of the following groups contains only evergreen plants?  
**A. American arborvitae, Camellia, Japanese Yew**
70. Which of the following is a group of small-growing trees?  
**A. Crape myrtle, Eastern redbud, Japanese black pine**
71. When referring to the USDA Plant Hardiness Zone map, one can determine the:  
**A. Minimum expected temperature for an area**
72. One of the best ways to speed up the rooting process of cuttings is to:  
**A. Provide bottom heat**
73. Fred was about to drive the tractor down the street to another landscape job when Alan said, "Hey, you had better put that orange triangle on the back of that tractor before you get run-over." Alan was referring to the:  
**A. Slow-moving vehicle sign**
74. Divide and separate fall blooming perennials:  
**A. In early spring**
75. Leaf miners lay their eggs:  
**A. Inside the leaves**
76. An area of the landscape that includes space for such items as a clothes line and garbage cans is the \_\_\_\_\_ are  
**A. Service**
77. The landscape design principle of interconnection:  
**A. Occurs when visual components are physically linked together**

78. When trying to save trees on a construction site, cut and fill under the drip line of the trees should be limited to a depth of inches.

**A. 0 (Never cut or fill under the drip line of trees.)**

79. \_\_\_\_\_ pruning is a pruning technique concerned primarily with the removal of branches that could lead to damage or weaken a plant's health and appearance.

**A. Natural target**

80. Underground stems with scale-like fleshy leaves (leek and onion) are called:

**A. Bulbs**

81. In most plants, a hormone called auxin is produced by the terminal bud. It moves downward into the shoot and inhibits the growth and development of lateral buds. This is called:

**A. Apical dominance**

82. Some seeds are produced in the fall and remain on or in the ground until they germinate in the spring. Exposing seeds to the winter cold and moist soil is nature's method of \_\_\_\_\_.

**A. Stratifying**

83. Once they are beneath the bark surface, \_\_\_\_\_ are difficult to control.

**A. Borers**

84. The use of plant materials and landscaping techniques to conserve soil moisture and to reduce water usage is:

**A. Xeriscaping**

85. Which of the following describes plants that lose their leaves during the winter?

**A. Deciduous**

86. Hardiness refers to:

**A. The quality of being strong and being able to survive in a certain region**

87. Hardening-off is a term used in the nursery/landscape industry to mean:

**A. Acclimatizing tender plants to harsher, outdoor conditions**

88. Which one of the following plant hardiness zones is colder than Zone 6?

**A. Zone 3**

89. Many insect traps attract insects with:

**A. Pheromones**

90. Some vines use \_\_\_\_\_ to support themselves as they climb.

**A. Tendrils**

91. A \_\_\_\_\_ is a landscape designer's tool for drawing circles on a landscape plan.

**A. Circle template**

92. The following plant grows from a tuber:

**A. Elephant Ear**

93. The best definition of a surfactant is a:  
**A. Material added to a liquid spray solution to reduce surface tension between the liquid and leaf surface**
94. Which type of insecticide would be most effective against sucking-type insects?  
**A. Systemic**
95. The three major divisions of a soil profile are:  
**A. topsoil, subsoil, and parent material**
96. A lawn mower with blades parallel to the surface of the ground is called a(n):  
**A. Rotary mower**
97. Which of the following groups contains only deciduous plants?  
**A. Cedar Elm, *Carya illinoensis*, Red Oak**
98. A 50 pound bag of 5-10-15 fertilizer contains \_\_\_\_\_ pounds of nitrogen.  
**A. 2.5**
99. The scientific name for Heavenly Bamboo is:  
**A. *Nandina domestica***
100. The turfgrass least tolerant of shade is:  
**A. Bermudagrass**
101. Which of the following is not an important environmental requirement for germination to occur?  
**A. Carbon dioxide**
102. Light energy, carbon dioxide, and water enter into the process of photosynthesis, through which:  
**A. Carbohydrates are formed**
103. When planting B&B plants:  
**A. The tie string should be cut from the trunk of the plant**
104. The most common synthetic root-promoting chemicals used in rooting hormones are:  
**A. IBA and NAA**
105. There are five common methods of night lighting for landscapes. They are:  
**A. Walk, silhouette, shadow, up, and down lighting**
106. What information is not contained in the legend on a final landscape plan?  
**A. Designer's name**
107. When planting a bare-rooted tree, the tree should be planted:  
**A. Directly even with the original soil level**

108. The road in front of Steve's house has become traffic congested in recent years. The view, and especially the noise, bothers the family. When Steve discussed this problem with a landscaper, the landscaper mentioned berms. What was the landscaper talking about?

**A. Tall mounds of soil placed between the house and road to block the noise and view**

109. A propagator in a nursery business is responsible for:

**A. Starting new plants from seeds, cuttings, grafting, or other means and planning the propagation schedule**

110. A glyphosate is a non-selective herbicide that will kill:

**A. Any green plant that it contacts**

111. A major advantage for producing nursery stock in containers is that it:

**A. Allows for transplanting any time during the growing season**

112. A method of fertilizer application is\_\_\_\_\_.

**A. Side dressing**

113. Brown patch, dollar spot, and gray snow mold are all diseases of:

**A. Turfgrasses**

114. Which plant is a vine?

**A. *Lonicera japonica***

115. If a container-grown nursery crop has been over watered for a long period, a grower might expect to find the roots in the following condition:

**A. The roots dead or absent at the bottom of the container but healthier in the top portion of the container**

116. Site features to consider when conducting a site survey include:

**A. Topography, soil conditions, natural features, and existing vegetation**

117. Food produced in the leaves moves to other parts of a plant through the \_\_\_\_\_.

**A. Phloem**

118. Which of the following would be the best response if a client calls you in October and wants to know what to do about a 20-foot Japanese pine that has turned completely brown?

**A. Cut it down. It is definitely dead.**

119. When installing a landscape, which step (from the following list) should be completed LAST?

**A. Plant the trees and shrubs**

120. Cuttings in the rooting bench should be:

**A. Kept constantly moist**

121. Examples of cool season grasses include perennial ryegrass, bentgrass, and:

**A. Fescue**

122. Magnesium, calcium, and sulfur:

**A. Are essential elements needed for plant processes**

123. A "spreader-sticker" added to a spray solution causes the chemical to:  
**A. Better cover the plant surface and resist being washed off by rain and irrigation**
124. Informal landscapes:  
**A. Are constructed with asymmetrical balance and curved lines**
125. When selecting ginkgo trees for the home landscape, you should choose:  
**A. Male trees only**
126. Functional roles of plants in the landscape do not include:  
**A. Greening up**
127. Professional-grade string trimmers are usually powered by:  
**A. A 4-cycle engine**
128. To increase the bushiness of a flowering plant while the plant is young, one should:  
**A. Pinch the stem tips of the plant**
129. *Liriope* and *Ajuga* are generally classified as:  
**A. Groundcovers**
130. The recommended minimum width for a residential walkway in the public area of the landscape is \_\_\_\_\_ feet.  
**A. 3.5**
131. Which of the following is a major reason for mulching landscape plants?  
**A. Moderates soil temperature and conserves soil moisture**
132. A color scheme in a garden that produces a carnival-like effect is referred to as being:  
**A. Polychromatic**
133. A group of plants located along the perimeter of a landscape use area is called a \_\_\_\_\_ planting.  
**A. Border**
134. Which tree has the finest textured foliage?  
**A. Mesquite**
135. Which of the following serves as a food reservoir for the developing embryo within the seed of a monocot?  
**A. Endosperm**
136. The term \_\_\_\_\_ is used in horticulture to define plant injury sometimes caused by pesticides.  
**A. Phytotoxicity**
137. An example of a creeping or prostrate coniferous evergreen is:  
**A. Juniperus horizontalis**
138. A major advantage for using slow-release fertilizer in container-grown nursery stock is that it:  
**A. Supplies nutrients over a long period of time with one application**

139. A plant that remains vegetative during its first season of growth and flowers in the second season is a(n):

**A. Biennial**

140. A landscaper in New York calls a wholesaler/grower in Tennessee to inquire about plant material for a landscape job. One of the trees he asks about is bald cypress. He wants to know if it is hardy in middle New York. The grower says, "Let me see, that is Zone 4 ..." They are talking about the:

**A. USDA Plant Hardiness Zones**

141. Plowing or tilling a bed or lawn when it is excessively wet may:

**A. Damage the structure of the soil**

142. Most landscape plants like the soil pH:

**A. Slightly acidic**

143. In the plant name *Ilex x meserveae* 'Blue Princess':

**A. The genus is *Ilex*, the "x" means it is a hybrid, the species is *meserveae*, and the cultivar is Blue Princess.**

144. B&B in the nursery/landscape trade means:

**A. Balled and burlapped**

145. When installing a landscape, which step (from the following list) should be completed FIRST:

**A. Install the drainage system**

146. Which insect eats out trails between the leaf surfaces?

**A. Leaf miners**

147. Wisteria, clematis, and Japanese honeysuckle are examples of:

**A. Vines**

148. When should soil NOT be tilled?

**A. When it is wet**

149. When using heat to sterilize/pasteurize soil, the soil should be heated to:

**A. 180°F for 30 minutes**

150. Mr. Roberts told his horticulture class that the temperature for rooting shrubs should be no lower than 70 °F. He was referring to the:

**A. Temperature of the rooting media**

151. Traditional garden centers, in many cases, have been able to compete with chain department stores by providing:

**A. Better service**

152. One characteristic of Roundup (Glyphosate) that customers sometimes object to is:

**A. That it takes several days to kill weeds**

153. Which LD-50 rating listed is the most potentially lethal to a human, based on animal studies?

**A. 84**

154. Larger nursery pots are measured by the:

**A. Gallon**

155. Water \_\_\_\_\_ to help reduce disease in nursery crops.

**A. Early in the day**

156. One reason modern horticultural fabrics used in landscaping are said to be better than black polyethylene film is they:

**A. Allow exchange of gases between soil and air**

157. Who is responsible for establishing the binomial system for naming plants?

**A. Linnaeus**

158. The best type of sand to use in soil mixtures for container grown plants is:

**A. Coarse textured**

159. Scientific names generally consist of two words, the first being the genus and the second being the:

**A. Specific epithet**

160. In the name *Acer palmatum* 'October Glory', 'October Glory' is a \_\_\_\_\_ if it did not occur as a natural mutation:

**A. Cultivar**

161. What is the function of the axillary bud on the stem?

**A. To produce a new leaf or stem**

162. Failure to firm down the soil around a newly planted tree or shrub can result in air pockets. This may cause:

**A. Drying of plant roots**

163. Which is most important to the financial health of a nursery/landscape business/

**A. Net profit**

164. Leaves that show interveinal chlorosis probably suffer from:

**A. Iron deficiency**

165. Shrubs planted in small groups in the landscape are generally placed in:

**A. Odd numbered groups (i.e. 3,5,7)**

166. For maximum effectiveness, mulches should be applied about \_\_\_\_\_ deep.

**A. 3-4 inches**

167. What is one reason mid-day watering of lawns in the summer is usually not recommended?

**A. Much of the water is lost through evaporation**

168. The landscape profession for which you are most likely to need a license is:

**A. landscape architect**

169. An individual or firm hired to install or construct a portion of a large landscape job is called a:

**A. Subcontractor**

170. Which is most likely NOT a benefit from using mulch?

**A. Reduced insects**

171. Plants sold in the landscape trade are sold by \_\_\_\_ name.

**A. Botanical**

172. Plants which evolve and grow naturally in an area are termed \_\_\_\_ plants.

**A. Native**

173. Which of the following definitions best describes 'auxin'?

**A. A naturally occurring plant hormone which promotes plant growth**

174. A plant that produces flowers that have either stamens or pistils, but **not** both on the same plant is called:

**A. Dioecious**

175. The thick portion of a seed that contain the tissue used as food by the seedling in its early growth is the:

**A. Endosperm**

176. In landscaping terms, if the mower blade is set too low and the turf is not level, the mower may \_\_\_\_\_ the turf in spots.

**A. Scalp**

177. The viability of a group of seeds is measured by:

**A. The germination percentage**

178. The analysis of fertilizer is guaranteed by the manufacturer and regulated by the:

**A. USDA**

179. A landscaper has to decide whether to put in a groundcover instead of turfgrass on a site with the following characteristics. Which characteristic is the most important factor in making this decision?

**A. The landscape area has a 25% slope**

180. When taking a soil sample, be sure to take cores at least \_\_\_\_ inches deep.

**A. 6**

181. Which of the following is NOT a rule-of-thumb traditionally followed by landscapers?

**A. Shrubs should be planted about 6-12" from the foundation**

182. A landscaper says that the soil on a home development site will not perk. What does that mean?

**A. Water does not pass through the soil at an acceptable rate**

183. Landscape plans generally include all of the following except:

**A. The mature height of the plant**

184. Which landscape tool is used to prune branches an inch or larger in diameter?

**A. pruning saw**

185. Some of the salt buildup in potted crops can be removed by :

**A. leaching**

186. The process in which water, grass seed, fertilizer, cellulose fiber and a glue type material are mixed together and sprayed onto the soil to establish turf is called \_\_\_\_\_.

**A. hydroseeding**

187. Warm season turf grasses include which of the following?

**A. Bermuda grass**

188. The hardscape in a landscape design is defined as:

**A. structures, paving, fencing, etc incorporated into a landscape**

189. Trees are fertilized with granular fertilizer by spreading it within \_\_\_\_\_.

**A. the drip line**

190. The nursery landscape trade and related industries are sometimes referred to as the \_\_\_\_\_.

**A. green industry**

191. Blue spots along the cutting edge of a rotary mower blade after sharpening indicate that \_\_\_\_\_.

**A. the blade was overheated during sharpening**

192. Which of the following plants is commonly grafted or budded?

**A. Roses**

193. Which of the following propagation methods usually produces the greatest amount of genetic variation in the offspring?

**A. seedling**

194. Flowering plants that are tetraploid have reduced maintenance costs because of the reduced need to \_\_\_\_\_.

**A. dead head**

195. Ron plans to start a wholesale nursery growing Japanese maples. It will take him two years to produce the first saleable crop. Which of the following will be most affected?

**A. cash flow**

196. When servicing the spark plug on a lawn mower, the electrode should be \_\_\_\_\_ before reinstalling it in the mower.

**A. cleaned and dried**

197. Joe's landscaping pays rent, legal fees, utilities and insurance, all of which are classified as \_\_\_\_\_

**A. overhead costs**

198. Which would not be part of a lawn irrigation system?

**A. differential valve**

199. The ideal soil is composed of \_\_\_\_\_.

**A. 25% water, 25% air and 50% solid material**

200. Dead, decaying plant and animal material in the soil is referred to as \_\_\_\_\_.  
**A. organic matter**
201. The main objective of root pruning is to \_\_\_\_\_.  
**A. develop a compact and fibrous root system**
202. A systemic insecticide refers to an insecticide that \_\_\_\_\_.  
**A. is absorbed through the roots and leaves of a plant**
203. When moving turf, it is recommended that no more than \_\_\_\_\_ of the leaf blade be removed at each cutting.  
**A. one third**
204. A layer of partially decomposed stems, roots and leaves of grass which develops above the soil surface in the lawn is called \_\_\_\_\_.  
**A. thatch**
205. What is one reason the container grown sector of nursery crop production has increased in recent years?  
**A. factors affecting plant growth can be maintained at optimum levels**
206. Which of the following best describes seed scarification?  
**A. removing some of the seed coat by using a file, sandpaper or an acid solution**
207. A financial plan for the future is called a \_\_\_\_\_.  
**A. budget**
208. If a business has assets of \$ 500,000; total expenses of \$ 95,000 and \$ 210, 000 in total revenue, what is the net profit?  
**A. \$115,000**
209. Benefits of landscaping include which of the following?  
**A. landscaping does all of these**
210. Plants need \_\_\_\_\_ essential elements for proper growth and development.  
**A. 16**
211. The terms triploid, diploid and haploid refer to the \_\_\_\_\_.  
**A. number of chromosomes**
212. Natural soil is arranged in layers referred to as \_\_\_\_\_.  
**A. soil horizons**
213. Which is the best definition of the term understory, as used in landscaping?  
**A. smaller plants that grow under the canopy of trees**
214. Which is NOT a type of leaf arrangement?  
**A. pyramidal**
215. Which of the following is the best definition of an F1 hybrid?  
**A. the first generation of seedlings from genetically different parents**

216. The synthetic growth regulator, Indole -3-butyric Acid (IBA), is used in the nursery trade as a \_\_\_\_.
- A. rooting hormone**
217. Which is a drawback to planting English or Virginia Creeper on the side of a wood or vinyl sided house?
- A. the adhesive tips of the ivy damage the siding or leave unsightly blemishes**
218. Horticultural chemicals should be stored in which of the following?
- A. A free-standing, locked building**
219. When mowing Bermuda grass lawns, what is the general range for the proper height of cut?
- A. 1.5 to 2.5 inches**
220. Freshly cut bark chips and saw dust should not be used as a soil amendment, because they \_\_\_\_.
- A. rob the soil of nitrogen during decomposition**
221. Which of the following grasses has the longest winter dormancy period?
- A. Zoysia**
222. What type of watering conditions would cause the clustering of turf grass roots at the top of the soil? Assume that there has been little or no rainfall.
- A. frequent, light watering**
223. The factor used as an indication of grade and general vigor of Hybrid Tea Rose plants sold at retail is the number of healthy \_\_\_\_\_.
- A. canes**
224. Which of the following is an indication of a fertile soil?
- A. earth worms**
225. Which of the following statements is not true?
- A. Frost is most likely to form when there is low, heavy cloud cover and a slight cool breeze**
226. Plant diseases caused by rain splashed microorganisms from the ground can be reduced by \_\_\_\_.
- A. applying mulch around and underneath plants**
227. An area that has a slightly different climate conditions than the surrounding land, such as the north side of a house which provides shelter from excess sun and wind, is called a \_\_\_\_\_.
- A. micro-climate**
228. The best time to prune azaleas is \_\_\_\_\_.
- A. just after they bloom**
229. Fertilizers should be added to soil \_\_\_\_\_.
- A. Based on soil test results**
230. All other things being equal, which diameter of pipe or combination of pipes will carry the most water?
- A. One 2 inch pipe**
231. Of the grasses listed below, which is most commonly used on golf greens?
- A. Bentgrass**

232. Generally, a lawn needs about \_\_\_\_ inch(es) of water a week, either as rain or irrigation.  
**A. 1**
233. Which of the following can be said about applying an herbicide to a lawn in granular form rather than as a liquid spray?  
**A. There is little or no drift from the granular form**
234. Large nursery pots are measured by the \_\_\_\_\_.  
**A. gallon, and sizes are strictly regulated**
235. Tree roots that are responsible for most nutrient uptake are found \_\_\_\_\_.  
**A. in the subsoil**
236. Which of the following government organizations would want to talk to you if you shipped nursery plants across state lines without a license?  
**A. USDA**
237. When Alan finished sharpening his rotary mower blade he noticed that his mower vibrated and shook so bad that he could hardly control it. What was wrong?  
**A. The blade was out of balance**
238. A pre-emergence herbicide is applied \_\_\_\_\_.  
**A. before the weed seeds germinate**
239. Soil around the foundation of a house is often more alkaline than surrounding soil due to which of the following?  
**A. Leaching from the masonry mortar on the home and masonry debris from construction**
240. The most commonly used lawn grasses in the U.S. can be divided into \_\_\_\_ or \_\_\_\_ types.  
**A. Warm season or cool season**
241. Mowing the lawn in a different direction each time helps reduce the chance of \_\_\_\_\_.  
**A. soil compaction and undesirable grain set**
242. Recommended service intervals for jobs such as changing the oil in motorized landscape equipment is usually measured in \_\_\_\_ of operations.  
**A. hours**
243. When propagating woody cuttings, a growth promoting substance is some times applied to the base of the cutting in order to \_\_\_\_\_.  
**A. all of the above**
244. A post emergence herbicide is applied \_\_\_\_\_.  
**A. after the weeds have germinated and emerged from the soil**
245. Large trees used to frame a one story, ranch style home can make the home seem \_\_\_\_ than it really is.  
**A. smaller**

246. Which of the following is important in producing a uniform size and quality container grown nursery crop?

**A. All of the above**

247. Though not recommended, if 2 cycle engine fuel is actually used in a 4-cycle engine:

**A. The engine will likely smoke a lot, but it will run**

248. If a house is painted in several colors you might be worried about the colors of the house and the plant flower color clashing. One flower choice that would be safest to use is \_\_\_\_\_.

**A. white**

249. A privacy fence should be at least \_\_\_\_\_ feet high if the purpose is to screen the view of neighbors at ground level or others walking near the property at the same elevation.

**A. 8**

250. Plants showing symptoms of nitrogen deficiency will show which of the following symptoms?

**A. Yellowing of the entire leaf**