2006 STATE FFA NURSERY LANDSCAPE KNOWLEDGE 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 two (2) points. The maximum score is 50.

_____ 1. In North Carolina, the best time to seed cool season grasses is from:
   a. August to October.
   b. September to November.
   c. October to December.
   d. November to January.

_____ 2. The fastest method for establishing turfgrass is:
   a. Grafting.
   b. Seeding.
   c. Sodding.
   d. Springging.

_____ 3. A bud on the end of a stem is a:
   a. Lateral bud.
   b. Lenticel.
   c. Root cap.
   d. Terminal bud.

_____ 4. The part of the landscape that requires the most time for maintenance during the year is the:
   a. Border.
   b. Lawn.
   c. Shrubs.
   d. Trees.

_____ 5. Which of these plants is deciduous?
   a. Flowering Dogwood
   b. Helleri Holly
   c. Sasanqua Camellia
   d. Southern Magnolia
6. A landscaping technique used to practice water conservation is:
   a. Allelopathy.
   b. Irrigation.
   c. Taxonomy.
   d. Xeriscaping.

7. Wisteria and spirea are commonly propagated from:
   a. Leaf cuttings.
   b. Leaf-bud cuttings.
   c. Mallet cuttings.
   d. Root cuttings.

8. In which stage of growth do plants rest or grow very little?
   a. Dormant
   b. Intermediate
   c. Juvenile
   d. Reproductive

9. To increase rooting uniformity and to speed root development on cuttings, a grower should:
   a. Buy good seeds.
   b. Harden-off plants.
   c. Reduce water and humidity.
   d. Use a rooting hormone.

10. The basic unit of growth in plants is the:
    a. Cell.
    b. Fruit.
    c. Phloem.
    d. Root.

11. What is the best time of day to take softwood cuttings?
    a. Early evening
    b. Early morning
    c. Late afternoon
    d. Noon

12. Most flowers, shrubs, and lawn grasses grow best in a pH ranging from:
    a. 1.0 to 2.5
    b. 3.0 to 5.0
    c. 5.5 to 7.0
    d. 7.5 to 9.0
13. If bedding plants have symptoms of a micronutrient deficiency, which fertilization method would quickly correct this problem?
   a. Banding
   b. Foliar spraying
   c. Perforating
   d. Topdressing

14. When insects are worms or caterpillars, what is their stage of development?
   a. Adult
   b. Egg
   c. Fly
   d. Larva

15. The practice of repeating specific plants in a landscape design illustrates the principle of:
   a. Balance.
   b. Focalization.
   c. Rhythm and line.
   d. Simplicity.

16. The best time to move bare root trees or shrubs is when they are:
   a. Actively growing.
   b. Dormant.
   c. Old.
   d. Young.

17. In the scientific name Ilex Vomitoria ‘Nana’ on a Dwarf Yaupon plant, which word denotes the plant species?
   a. Dwarf
   b. Ilex
   c. ‘Nana’
   d. Vomitoria

18. What should be the shape of the bottom of a hole used to plant a bare-root tree?
   a. Dome
   b. Flat
   c. Pointed
   d. Square

19. The type of pruning used to cut old branches back to the ground is:
   a. Heading back.
   b. Renewal.
   c. Root.
   d. Thinning.
20. What causes small seedlings to rot at ground level and fall over?
   a. Aphids
   b. Damping off
   c. Too much light
   d. Underwatering

21. The best place to find information about a pesticide including safety precautions and uses is:
   a. Chemical dealer.
   b. Neighbor.
   c. Pesticide hotline.
   d. Pesticide label.

22. A soil with a pH of 5.8 is:
   a. Acid.
   b. Alkaline.
   c. Neutral.
   d. Slightly alkaline.

23. A warm season grass that has light green medium textured leaves and grows from stolons is:
   a. Annual Ryegrass.
   b. Centipede.
   c. Kentucky Bluegrass.
   d. Tall Fescue.

24. Because azaleas produce flowers on wood grown the previous growing season, the shrubs should be pruned in late:
   a. Fall.
   b. Spring.
   c. Summer.
   d. Winter.

25. The chemical more often used commercially for rooting cuttings is:
   a. Indoleacetic acid.
   b. Indolebutyric acid.
   c. Naptholeneacetic acid.
   d. Talc.

26. An example of a plant propagated with rhizomes is the:
   a. Gladiolus.
   b. Tulip.
   c. Iris.
   d. Potato.
27. In grafting, which layer of the scion and rootstock must be carefully matched?
   a. Bark.
   b. Phloem.
   c. Xylem.
   d. Cambium.

28. In general, how many feet should shrubs be spaced from the foundation?
   a. 1
   b. 2
   c. 3
   d. 6

29. Which of these plants is an evergreen?
   a. Compacta Japanese Holly
   b. Burning Bush
   c. Flowering Dogwood
   d. Flame Azalea

30. Monocot stems have the xylem and phloem:
   a. Near the outside of the stem.
   b. Side by side.
   c. On each side of a cambium layer.
   d. In small bundles scattered in the stem.

31. What is added to the soil to lower pH and raise soil acidity?
   a. Complete fertilizer
   b. Lime
   c. Nitrogen
   d. Sulfur

32. Small plants less than 18 inches tall which cover the ground in place of turf are called:
   a. Flowers.
   b. Ground covers.
   c. Mulches.
   d. Vines.

33. A chemical that kills weeds is called a:
   a. Fungicide.
   b. Herbicide.
   c. Molluscicide.
   d. Nematocide.
34. The planting depth for shrubs is:
   a. 4 inches deeper than the depth at which they previously grew.
   b. 2 inches above ground level.
   c. The same depth at which they were growing before.
   d. 2 inches deeper than the depth at which they previously grew.

35. An example of an intangible enrichment item in the landscape is:
   a. A croaking frog.
   b. A rock wall.
   c. Water.
   d. Wind blowing through trees.

36. When planting annuals, pine bark is added to the soil to:
   a. Give the soil better drainage.
   b. Hold moisture in the soil.
   c. Make the soil heavier.
   d. Warm the soil in the spring.

37. A fertilizer in the form of small beads which are coated with plastic and dissolve over time is called:
   a. Slow-release.
   b. Soluble.
   c. Complete.
   d. Incomplete.

38. A small deciduous tree that does well in the shade or sun and has white blooms in April or May is a:
   b. White oak.
   c. Redbud.
   d. Flowering dogwood.

39. When planting balled and burlapped trees, a hold is dug:
   a. With slanted sides.
   b. 1 ½ - 2 times larger than the width of the root ball.
   c. Exactly as deep as the root ball.
   d. 3-4 times larger than the width of the root ball.

40. A tree with a hardiness zone rating of 8 can also survive the winters in zone:
   a. 2.
   b. 4.
   c. 6.
   d. 10.
41. The best time to apply fertilizer to an established ground cover is:
   a. Late fall.
   b. Mid-summer.
   c. Early spring.
   d. Mid-winter.

42. The pruning method in which all the terminal ends of the plant branches at the same height are removed is called:
   a. Thinning.
   b. Heading back.
   c. Root pruning.
   d. Renewal pruning.

43. Which plant is pruned in the summer or fall just before new growth begins?
   a. Crape myrtle
   b. Lilac
   c. Spirea
   d. Forsythia

44. Caladium is used in the interior landscape for its:
   a. Flower.
   b. Root size.
   c. Shape.
   d. Leaf color.

45. A safe chemical spray used to control chewing insects on broadleaf evergreens is:
   a. Sulfur.
   b. Sevin.
   c. Zineb.
   d. Captan.

46. The best soil for bulbs has a pH of:
   a. 4.0.
   b. 5.0.
   c. 6.0.
   d. 7.0.

47. The correct genus for the common name “geranium” is:
   a. Pelargonium.
   b. Paeonia.
   c. Photina.
   d. Peperomia.
48. Small hairlike worms that feed on plant roots are:
   a. Mollusks.
   b. Rodents.
   c. Nematodes.
   d. Slugs.

49. In nursery plant production, what structure is used to reduce the sunlight on plants?
   a. Greenhouse
   b. Lath house
   c. Cold frame
   d. Headhouse

50. A possible cause of the twigs on ornamentals and fruit trees turning brown or black is:
   a. Insufficient sunlight.
   b. Spider mites.
   c. Gall disease.
   d. Blight disease.
# Answer Sheet

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>#</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>a, b</td>
<td>26.</td>
<td>c</td>
</tr>
<tr>
<td>2.</td>
<td>c</td>
<td>27.</td>
<td>d</td>
</tr>
<tr>
<td>3.</td>
<td>d</td>
<td>28.</td>
<td>c</td>
</tr>
<tr>
<td>4.</td>
<td>b</td>
<td>29.</td>
<td>a</td>
</tr>
<tr>
<td>5.</td>
<td>a</td>
<td>30.</td>
<td>d</td>
</tr>
<tr>
<td>6.</td>
<td>d</td>
<td>31.</td>
<td>d</td>
</tr>
<tr>
<td>7.</td>
<td>d</td>
<td>32.</td>
<td>b</td>
</tr>
<tr>
<td>8.</td>
<td>a</td>
<td>33.</td>
<td>b</td>
</tr>
<tr>
<td>9.</td>
<td>d</td>
<td>34.</td>
<td>c</td>
</tr>
<tr>
<td>10.</td>
<td>a</td>
<td>35.</td>
<td>d</td>
</tr>
<tr>
<td>11.</td>
<td>b</td>
<td>36.</td>
<td>b</td>
</tr>
<tr>
<td>12.</td>
<td>c</td>
<td>37.</td>
<td>a</td>
</tr>
<tr>
<td>13.</td>
<td>b</td>
<td>38.</td>
<td>d</td>
</tr>
<tr>
<td>14.</td>
<td>d</td>
<td>39.</td>
<td>b</td>
</tr>
<tr>
<td>15.</td>
<td>d</td>
<td>40.</td>
<td>d</td>
</tr>
<tr>
<td>16.</td>
<td>b</td>
<td>41.</td>
<td>c</td>
</tr>
<tr>
<td>17.</td>
<td>d</td>
<td>42.</td>
<td>b</td>
</tr>
<tr>
<td>18.</td>
<td>a</td>
<td>43.</td>
<td>a</td>
</tr>
<tr>
<td>19.</td>
<td>b</td>
<td>44.</td>
<td>d</td>
</tr>
<tr>
<td>20.</td>
<td>b</td>
<td>45.</td>
<td>b</td>
</tr>
<tr>
<td>21.</td>
<td>d</td>
<td>46.</td>
<td>d</td>
</tr>
<tr>
<td>22.</td>
<td>a</td>
<td>47.</td>
<td>a</td>
</tr>
<tr>
<td>23.</td>
<td>b</td>
<td>48.</td>
<td>c</td>
</tr>
<tr>
<td>24.</td>
<td>b</td>
<td>49.</td>
<td>b</td>
</tr>
<tr>
<td>25.</td>
<td>b</td>
<td>50.</td>
<td>d</td>
</tr>
</tbody>
</table>