

2024 Wisconsin State Nursery and Landscaping written exam

1. Increased mowing heights are recommended when:
 - a. **The turf is experiencing drought stress**
 - b. The turf isn't shaded
 - c. You want to mow more frequently
 - d. Your goal is to increase plant density and tillering
2. Type 1 and Type 2 shade trees with _____ stems within the lower half of the crown do not meet the minimum requirements:
 - a. **Co-dominant**
 - b. Dominant
 - c. Adjacent
 - d. Healthy
3. The following is not a benefit of using a plant growth regulator:
 - a. Controlling seed heads
 - b. Improving color
 - c. **Increasing irrigation and fertility needs**
 - d. Improving density
4. Because they are far below the surface of the ground, tree roots do not compete with turf for water and nutrients.
 - a. True
 - b. **False**
5. Spread measurement shall be the average spread of the branches of the plants
 - a. With leaves for deciduous shrubs
 - b. Without leaves for evergreens
 - c. **With leaves for evergreens**
 - d. Taken from the soil level and up for all plants
6. It is best to remove no more than what percentage of leaf area in a single mowing:
 - a. 10-20%
 - b. 20-30%
 - c. **30-40%**
 - d. 40-50%
7. When applying pesticides:
 - a. You only need to follow the label when it is most convenient
 - b. Avoid spot treatments because they aren't cost effective
 - c. **Make note of any environmental hazards and groundwater advisories included on the label**
 - d. Do not rotate modes-of-action to reduce the likelihood of resistance
8. If you have a diagnosed nematode problem, the following is a best management practice:
 - a. Decrease mowing height
 - b. Application of a fungicide
 - c. **Divert traffic away from the impacted area(s)**
9. Concerning container class volume size, SP stands for:
 - a. **Small plant**
 - b. Slightly pruned
 - c. Species problematic
 - d. Shearing preferred
10. Topiary is used to describe a plant that is:

- a. Pruned back so as to multiply the branching structure and to develop a more formal effect
 - b. **Sheared or trimmed closely in a formal geometric pattern**
 - c. Trained on a structure of a specified shape and style
 - d. Allowed to grow in its nature shape
11. For evergreens, height measurement shall not be taken at the tip of the leader, but should be taken at the midpoint between the uppermost whorl(s) and the tip of the leader.
- a. **True**
 - b. False
12. Dwarf conifers are classified as a separate plant type, and they should not be classified and specified in accordance with the natural habitat of the particular cultivar.
- a. True
 - b. **False**
13. Pruning cuts to correct injury, damage, or branching structure don't have to meet any set of provisions:
- a. True
 - b. **False**
14. Which of these containers is the largest:
- a. #1
 - b. #2
 - c. **#5**
 - d. #SP5
15. Which type of mower is best suited for maintaining a higher height-of-cut such as a mow lawn:
- a. Flail mower
 - b. Reel mower
 - c. **Rotary mower**
 - d. All of the above
16. *Juniperis horizontalis* cultivars are good example of:
- a. **Type 1 conifers**
 - b. Type 4 conifers
 - c. Type 1 deciduous shrubs
 - d. Type 3 deciduous shrubs
17. One unique specification for street trees is that they shall include:
- a. Its ball size and depth
 - b. Whether it was a collected plant
 - c. **The minimum height of the lowest branch**
 - d. Plant size by caliper, height, or width
18. IPM planning should consider:
- a. Turf Health
 - b. Economic Costs
 - c. Aesthetic Thresholds
 - d. **All of the above**
19. Plants having the tendency not to produce top growth that is fully winter hardy in certain parts of the country may be classified as Type ____ tender deciduous shrubs.
- a. **0**

- b. 1
 - c. 2
 - d. 3
20. When it comes to conifers, classifying them with the letter “S” means that they are:
- a. Spreading
 - b. Small
 - c. **Sheared**
 - d. Standard
21. Type 3 deciduous shrubs with a narrow habit may have:
- a. Larger spread of harvested roots than shown in the standard table
 - b. **Significantly fewer canes than shown in the standard table**
 - c. Both A & B
 - d. Neither A nor B
22. All nursery stock transacted within the terms of the Standard shall, at the time of shipment, be:
- a. **In good living condition**
 - b. Mostly free of damaging insects and diseases
 - c. Atypical in habit for the species in the region of the country in which it is grown
 - d. Priced to sell
23. Using chemical controls should be the first step in properly applied integrated pest management.
- a. True
 - b. **False**
24. *Spirea japonica* ‘little princess’ and *Berberis thunbergia* ‘Crimson Pygmy’ are both examples of:
- a. **Type 1 small or dwarf deciduous shrubs**
 - b. Type 2 intermediate deciduous shrubs
 - c. Type 1 conifers
 - d. Type 2 conifers
25. Cultural controls that make the environment less suitable for pests include:
- a. Scouting
 - b. **Proper cultivar selection**
 - c. Pesticide applications
 - d. Recordkeeping
26. Type 2 intermediate deciduous shrubs typically mature at a height or spread from:
- a. 1 foot up to 3 feet
 - b. 2 feet up to 5 feet
 - c. **3 feet up to 7 feet**
 - d. 4 feet up to 9 feet
27. Which of the following is not a method used to determine caliper measurement:
- a. The number of trunks and the minimum caliper of each required trunk
 - b. **The caliper of only the smallest trunk, with all other trunks within a certain caliper of the smallest trunk**
 - c. The caliper specified is one-half of the caliper of the three largest required trunks
 - d. The caliper specified is the average of all required trunks
28. One reason that burlap is often used to wrap root balls is because it is:
- a. Very cheap

- b. The same color as most soils
 - c. Waterproof
 - d. **Biodegradable**
29. Because tree trunks are seldom round, the most accurate caliper measurement will result from the use of:
- a. Manual caliper
 - b. **Diameter tape**
 - c. Electronic (slot) caliper
 - d. Pincer caliper
30. Proper fertilization is essential for turfgrasses to sustain:
- a. Undesirable color
 - b. A thriving population of weeds
 - c. **Growth density**
 - d. A beneficial population of nematodes
31. All nursery stock shall be correctly identified by:
- a. Genus
 - b. Species
 - c. Cultivar (if necessary)
 - d. **All of the above**
32. Parties to a transaction may agree that nursery stock will be in an “unclassified” container, which is a container with a volume not included within the recommended container class volume ranges.
- a. **True**
 - b. False
33. What are some good ways to avoid herbicide resistance in weeds:
- a. Use mechanical weed control methods
 - b. Rotate herbicides and modes of action
 - c. **Both a and b**
 - d. Neither a nor b
34. One benefit of varying mowing directions is:
- a. Developing “grain”
 - b. Rutting
 - c. Marcelling
 - d. **A smooth playing surface**
35. At the base of the IPM pyramid is the most important control measure:
- a. **Prevention**
 - b. Cultural controls and sanitation
 - c. Biological control
 - d. Physical and mechanical control
36. Depth of the root ball is measured from the top of the ball, which in all cases shall begin at the:
- a. **Root flare**
 - b. First branch
 - c. Soil surface
 - d. None of the above
37. The following cultivation method should be initiated when thatch levels reach 0.25 to 0.5 inches in depth and should be performed monthly to avoid further thatch accumulation:

- a. **Vertical mowing**
 - b. Deep drill aerification
 - c. Water injection
 - d. Slicing
38. Increasing infiltration, smoothing the playing surface, and increasing surface firmness are all objectives of:
- a. Mowing
 - b. **Topdressing**
 - c. Root pruning
 - d. Using plant growth regulators
39. When topdressing, it is important to ensure that the sand is compatible with the root zone mixture since not every sand will help maintain surface drainage:
- a. **True**
 - b. False
40. A practice used to manage soil compaction with reduced physical disturbance is:
- a. Verticutting
 - b. Using seaweed extracts and humic acids
 - c. Topdressing
 - d. **Core aerification**
41. In most cases, the ratio of height to spread for type 5 conifers should be less than:
- a. 1:1
 - b. 3:2
 - c. **5:1**
 - d. 10:1
42. Included in the 5 keys steps for integrated pest management are:
- a. Setting action level of thresholds
 - b. Scouting, identification, and monitoring
 - c. Making decisions on control method(s) and timing
 - d. **All of the above**
43. Common turfgrass diseases in Wisconsin include:
- a. Snow ring
 - b. **Dollar spot**
 - c. Rust mold
 - d. None of the above
44. Specification tables for conifers include the following details:
- a. Maximum spread
 - b. Acceptable container classes
 - c. Minimum acceptable in-ground fabric bag size
 - d. **All of the above**
45. Most traditional Christmas trees are Type 3 conifers. What is the best way to describe their shape is:
- a. Broad upright
 - b. Columnar
 - c. Semi-spreading
 - d. **Cone type (pyramidal)**
46. The following is not typically considered a beneficial insect in Wisconsin:
- a. **Japanese beetles**

- b. Lady beetles
 - c. Praying Mantis
 - d. Pirate Bugs
47. Grass clippings contain nutrients that can be a source of pollution when they aren't properly managed. Other considerations for clipping disposal include:
- a. Managing the spread of weed seeds
 - b. Location relative to impervious surfaces and surface water
 - c. Unpleasant odors
 - d. **All of the above**
48. When you want to control a pest, it's lifecycle and which stage to target isn't important:
- a. True
 - b. **False**
49. When you observe that you have a disease on your turf, the first step should be to:
- a. Record and map disease outbreaks to help identify trends
 - b. **Correctly identify the disease pathogen**
 - c. Leave "check" plots to determine how effective your management program is compared to a non-treated area
 - d. Minimize conditions that produce stressful environments for the turf
50. Rolling greens can increase putting speed for improved ball roll. Another impact of this practice includes:
- a. **Less weeds and disease**
 - b. More imperfections on the playing surface
 - c. The need for higher cutting heights to maintain the faster green speed
 - d. None of the above