

**NATIONAL FFA NURSERY/LANDSCAPE  
CAREER DEVELOPMENT EVENT  
GENERAL KNOWLEDGE EXAM  
2021**

Directions: Select the best answer for each item and mark your selection on the answer sheet provided. Using a #2 pencil, completely darken in the letter on the answer sheet that corresponds to your answer for each item.

1. Most containerized shrubs suitable for planting the landscape are measured by:
  - A. total plant height.
  - B. diameter of the shrub at the widest portion.
  - C. stem caliper.
  - \* D. pot size in gallons.
  
2. Non-verbal skills are important in salesmanship and client relations. One non-verbal signal that helps indicate that you are listening intently to the client is:
  - A. Crossing your arms.
  - \* B. Leaning slightly forward as the client speaks.
  - C. Asking the client to repeat themselves.
  - D. Maintaining an emotionless facial expression as the client speaks.
  
3. Mulching of landscape plants has several benefits. Which of these is **NOT** a benefit of mulching?
  - A. Controlling of weeds
  - B. Reducing water loss from the soil
  - \* C. Controlling of scale insects
  - D. Moderating of soil temperatures
  
4. Landscape and nursery plants are sold by the \_\_\_\_ name to help assure that the plants being purchased are the expected type, mature size, color, etc.
  - \* A. Genus, species, and sometimes cultivar
  - B. Family and Order along with genus
  - C. Common name used in that area
  - D. The most widely used common name
  
5. Some plants used in the landscape have adapted well to the area where they were planted and have escaped and now grow as nuisance or weed plants, competing with native plants in the area. These plants are called \_\_\_\_ plants.
  - A. Hostile
  - \* B. Invasive
  - C. Specimen
  - D. Agnostic
  
6. Landscape plants are rated by hardiness zones which identify geographical areas by climate and are used to determine where a plant species will grow best. Which of these publishes the most widely used plant hardiness zone map?
  - A. National Nursery and Landscape Association
  - B. National Association of Landscape Professionals
  - C. United States Department of Weights and Measures
  - \* D. United States Department of Agriculture

7. While plants vary in their ideal pH range, plant nutrients are generally most available with a soil pH in the \_\_\_\_ range.
- \* A. 6.5
  - B. 5.0
  - C. 4.0
  - D. 7.5
8. Which of these is a naturally occurring plant hormone which promotes and regulates plant growth.
- \* A. Auxin
  - B. Tannins
  - C. Resin
  - D. Alkaloids
9. The agriculture teacher was explaining to the class why a holly plant in the school landscape produces beautiful red fruit while the holly plant beside it never produces fruit. He told the class that the one without fruit has staminate flowers, which means that the plant:
- A. had no anthers.
  - \* B. was a male.
  - C. was a gymnosperm.
  - D. was an angiosperm.
10. A landscape planner is preparing a list of hardscape items to be installed. Which of these items should **NOT** be included on the hardscape list?
- A. Patio
  - B. Fountain
  - C. Flagstone walk
  - \* D. Hedge
11. A homeowner brought a turf sample to the nursery stating that his lawn looked like the grass tips were dead. Upon examination, it was determined that the grass tips were indeed dry, brown, frayed, and unattractive. The most likely cause is:
- A. pushing the lawn mower too slow.
  - \* B. a dull lawn mower blade.
  - C. the blade is not turning fast enough.
  - D. the grass was mowed in the late afternoon.
12. What is a common cause of scalping in turf?
- A. pushing the mower too slowly
  - \* B. setting the cutting height too low
  - C. uneven coverage of irrigation water
  - D. inconsistency of fertilizer application
13. Which of these is seldom used in commercial nursery potting media?
- \* A. Topsoil
  - B. Perlite
  - C. Peatmoss
  - D. Bark
14. A new employee accidentally applied double the recommended rate of fertilizer to the potted shrubs in the nursery. Fearing it was enough to severely damage or kill the plants, the best course of action might be to:
- A. apply an herbicide.
  - B. apply lime.
  - \* C. leach the soil.
  - D. cover the crop with heavy shade until they recover.

15. A crop of annual bedding plants had been produced during the winter in the greenhouse and were growing rapidly in the warm environment and the increasing day length of spring. The grower began reducing watering, and fertilization, and to lower the greenhouse temperature to prepare the plants to be planted in the landscape. In horticultural terms she was:
- \* A. hardening off the plants.
  - B. frost-proofing the plants.
  - C. inducing bloom buds.
  - D. roughing the edges of the plants.
16. A heavy nitrogen application to a crop is likely to cause:
- A. faster blooming.
  - B. yellowing of the leaves.
  - C. defoliation of the top-most leaves.
  - \* D. excessive vegetative growth.
17. What is the most likely causes of tall, spindly growth of container-grown nursery plants?
- \* A. overcrowding in the growing area or heavy shade
  - B. overfertilizing and under watering
  - C. low nutrition and under watering
  - D. low calcium and magnesium in the soil
18. Which of these is **NOT** commonly used in fertilization of landscape plants or container nursery plants?
- A. constant liquid feed
  - B. slow release fertilizer
  - C. granular fertilizer
  - \* D. nutrient sublimation
19. All the following are plant diseases caused by a virus, fungus, or bacteria **EXCEPT** \_\_\_\_\_.
- A. mildew
  - B. fusarium
  - \* C. chlorosis
  - D. rust
20. Before attempting maintenance or repairs on a push mower, always turn the mower off and:
- A. switch off the air filter.
  - B. place the mower on blocks high enough that the wheels do not reach the floor or ground.
  - \* C. disconnect the spark plug wire.
  - D. remove the fuel tank.
21. A rule-of-thumb for mowing turfgrasses is to mow often enough that no more than \_\_\_ of the leaf blade is removed during each mowing.
- A. one-half
  - \* B. one-third
  - C. one-fourth
  - D. One-fifth
22. Pesticide products with the signal word \_\_\_ are the most toxic.
- A. CAVEAT
  - \* B. DANGER
  - C. WARNING
  - D. CAUTION

23. The most limiting factor in maintaining interior plantscapes is usually:
- A. controlling pests without contaminating the indoor environment.
  - B. increased fertilization needs.
  - \* C. providing the amount of light required for proper plant health.
  - D. the need for visits by a technician for plant grooming, fertilization, and irrigation.
24. The outermost circumference of a tree canopy where water drips from and onto the ground is called the:
- \* A. drip line
  - B. arch line
  - C. limb line
  - D. rain line
25. This type of insurance provides wage replacement and medical benefits to employees injured in the course of employment.
- A. Umbrella insurance
  - B. Liability insurance
  - \* C. Workers compensation insurance
  - D. Property insurance
26. What is the primary purpose of the publication "American Standard for Nursery Stock?"
- \* A. To provide buyers and sellers common terminology and standards in plant sizes
  - B. To provide proper nomenclature for nursery stock to facilitate sales
  - C. To facilitate the transportation of nursery stock across state lines.
  - D. To establish standards for hardscape materials.
27. Which of these is **NOT** terminology used in the safety precautions for pesticides?
- A. REI - Restricted Entry Interval
  - B. LD50 – Lethal Dose
  - C. PPE – Personal Protective Equipment
  - \* D. STA – Safety Time Assessment
28. A customer has been told that the plants they purchased require full-sun. The customer asked, "What does "full sun" mean?" Which of the following is the best answer? Full sun generally means \_\_\_ hours or more per day of unobstructed sunlight.
- A. 12
  - B. 10
  - \* C. 6
  - D. 4
29. It is desirable for landscape plants to have deep roots and are therefore better able to withstand temporary periods of drought. Which of these practices will encourage plants to become more deeply rooted?
- \* A. Deep watering on a less frequent basis, perhaps every 3–5 days depending on conditions.
  - B. Light watering each day until the plant becomes established.
  - C. Heavy watering each day until the plant becomes established.
  - D. Watering each morning and afternoon until the plant is established.
30. It is important to have one sprayer that is only used for \_\_\_\_\_ and one or more other sprayers for different types of pesticides.
- A. fungicides
  - B. miticides
  - C. insecticides
  - \* D. herbicides

31. Newly planted trees are often supported with stakes, wires, rope, nylon cords etc. Leaving cords or wires around the tree trunk too long may lead to a condition known as \_\_\_ where the tree grows around the supporting materials.
- \* A. girdling
  - B. choking
  - C. weeping
  - D. strangling
32. The best example listed of an indirect cost for a landscape installation business is:
- A. shrubs
  - B. trees
  - C. mulch
  - \* D. truck
33. The front yard area of a residence is sometimes referred to as the \_\_\_ area.
- A. private
  - B. service
  - \* C. public
  - D. living
34. Which type of mower is best to use on highly manicured turfgrass areas such as golf greens and in other high maintenance turf sites?
- A. flail
  - B. rotary
  - \* C. reel
  - D. zero-turn
35. Which of these is the primary purpose of installing landscape fabric?
- A. To moderate soil temperature.
  - \* B. To prevent weed growth.
  - C. To encourage soil air exchange.
  - D. To hold newly planted groundcovers in place.
36. Generally, which of the following is true about the foliage texture of landscape plants?
- A. Large leaved plants provide a fine visual texture.
  - \* B. Coarse textured plants should be used sparingly in small areas.
  - C. Only fine textured plants should be used in plantings for screening large areas.
  - D. Only coarse textured plants should be used in foundation plantings.
37. Which of these statements is **NOT** true?
- \* A. A wilting plant is always an indication of a lack of water.
  - B. Weeds use soil moisture that might otherwise be used by the crop.
  - C. Mulch around plants in the landscape helps conserve water in the soil.
  - D. Potted plants are generally irrigated until water runs out the bottom of the pot.
38. Gasoline blowers have been banned in many communities because:
- \* A. The decibel rating is high, causing noise pollution and possible hearing loss.
  - B. Gasoline blowers have been rated as a fire hazard due to the highly flammable nature of gasoline.
  - C. The weight associated with the machine and pressure exerted onto the soil.
  - D. Some states have banned the use of fossil fuels in horticulture.

39. This plant disorder covers the leaves with a whitish material. It rests on the leaf surface and absorbs sap from plant cells. Infected leaves are often twisted and gnarled.
- A. Mealy mold
  - B. White bluish
  - C. Silver mildew
  - \* D. Powdery mildew
40. A customer wants flowering bedding plants for the home landscape that can be planted in the fall in Indianapolis and can best withstand freezing weather and provide color late into the fall. Which of these choices would be the best plants to suggest to this customer?
- A. wax begonias and clematis
  - B. impatiens and periwinkle
  - C. coleus and marigolds
  - \* D. pansies and snapdragons
41. Which of these is generally recognized as the most expensive method of lawn establishment?
- A. seeding
  - B. sprigging
  - \* C. sodding
  - D. hydroseeding
42. A client wants a turfgrass that is extremely heat tolerant. Which of these would be the best choice?
- A. Bentgrass
  - B. Kentucky Bluegrass
  - \* C. Bermudagrass
  - D. Fountain grass
43. One reason nutsedge is especially difficult to control by mechanical means such as tilling and hand-pulling is because it:
- A. reproduces by spores that spread easily in the wind.
  - B. is toxic to animals.
  - C. can grow easily from leaf-piece cuttings.
  - \* D. produces underground tubers that are difficult to kill.
44. This pest control method utilizes a combination of pest management techniques designed to minimize the use of hazardous pesticides.
- A. APHIS
  - B. PPE
  - C. LD<sub>50</sub>
  - \* D. IPM
45. This agency is responsible for ensuring safe and healthy working conditions. It enforces workplace standards, provides training, and inspects businesses to ensure that employers provide a workplace that is free from recognized hazards that are likely to cause harm to the employees.
- A. American Community and Workplace Administration
  - \* B. Occupational Safety and Health Administration
  - C. Cooperative Extension Service
  - D. Hazard and Health Prevention Administration

46. Which of these would **NOT** be appropriate when replying by email to a client of the company?
- \* A. typing in all upper case to emphasize important points
  - B. addressing the recipient by Mr., Ms., Dr., etc.
  - C. concluding the message by inviting them to write back if they have further questions
  - D. writing the email in language similar to that used in business letters
47. When installing a landscape or nursery crop irrigation system from a potable water source, this device should be installed to prevent water from flowing back into the system and contaminating the drinkable water supply.
- A. On/Off valve
  - \* B. Backflow prevention valve
  - C. Reduced pressure valve
  - D. Dual-flow prevention valve
48. An accurate inventory of tools and equipment that includes the number of each item, condition, cost, and depreciation should be kept to assure an accurate record of company assets and:
- \* A. maintenance schedule.
  - B. consumable list.
  - C. client satisfaction.
  - D. routing schedule.
49. Which of these instruments is a tool **NOT** normally useful in landscape and nursery businesses?
- A. Global Positioning System (GPS)
  - B. Global Information System (GIS)
  - \* C. Sling psychrometer
  - D. Laser level
50. Turfgrasses are cut to specific heights based on the type of grass, season, use, etc. No matter the turfgrass species, most are cut higher than normal during \_\_\_\_ to prevent water loss.
- A. Spring
  - \* B. Summer
  - C. Fall
  - D. Winter

End  
FBF