GI-BMP Training Program
Review Worksheets

2/7/2013
Version 1

Instructions: Use the worksheets as a guide to review key learning points and information provided during the training program. Depending on the training format, answers may be discussed within the training session, posted in a designated area or available for download from the web to view.
Introduction Review

1. The intention of this training is to ________ the professional knowledge and _________ of the green industry professional for the protection of Florida’s ______ and natural resources.

2. Many of Florida’s water resources are particularly susceptible to pollution because of the state’s unique ________ and ________.

3. The acronym ________ is a shortened term which refers to the Green Industries Best Management Practices.

4. This training addresses _____ main goals to reduce nonpoint source pollution and _______ plant health.

5. The GI-BMP goals include reducing offsite runoff, using appropriate site design and plant selection, using _________ rates and methods of applying _______ and __________, and using integrated pest management (______) practices.

6. “Protection of water resources by the Green Industries” means that you play a ______ role in ________ your clients and implementing these practices.

7. This training program provides specific information and guidance on _________ and __________ management practices.

8. Water is the primary ______________ for the transport of dissolved chemicals through the ______.

9. Let only ______ down the storm drain.

10. It is recommended that you revisit this training program every _____ to four years for new and updated information.

Need a Hint?

Appropriate
Climate
Educating
Enhance
Fertilizer
Four
Geology
GI-BMP
IPM
Irrigation
Judgment
Landscape
Leading
Mechanism
Promote
Rain
Soil
Turfgrass
Two
Water
Overview Review

1. The _______ Water Act authorized the U.S. Environmental Protection Agency (______) to implement pollution control programs to _________ water quality.

2. Water quality standards are either _________ or narrative standards for a water body that will permit that water body to maintain its designated use.

3. Excessive _________ loading to Florida’s surface and ground waters is one of the biggest water quality issues facing our state.

4. Counties and cities may adopt more _________ standards than state laws mandate to address local nonpoint source pollution issues.

5. All urban commercial fertilizer applicators _______ have a Limited Commercial Fertilizer Applicator Certificate (LCFAC) by 2014 to operate legally in Florida.

6. Nonpoint Source Pollution (______) is water pollution that cannot be traced to its specific origin or _________ point.

7. An urban _________ is comprised of storm sewers that transfer stormwater from impervious surfaces to lakes and rivers.

8. _________ surfaces such as sidewalks, driveways, streets, rooftops or compacted soils often produce stormwater ________, excess water that flows along the ground.

9. _________ often refers to the loss of water-soluble plant nutrients and other landscape chemicals from the soil, due to excessive rain and irrigation.

10. The acronym ______ refers to Florida-Friendly Landscaping™, a quality landscape that is designed, installed and maintained according to ______ science-based principles that conserve and protect Florida’s water and natural resources.
Lawn and Landscape Review

1. The _______ root and shoot system of healthy turfgrass provides a natural “water filter” that removes contaminants and reduces effects of urban nonpoint source pollution.

2. __________________ has good tolerance to salts in coastal and reclaimed water irrigation areas and tolerates a wide range of pH soils, making it the most adaptable and widely used turfgrass in Florida.

3. There are several ______________ to St. Augustinegrass. It will not stay green without supplemental water during times of drought, it has poor wear tolerance and it accumulates ________, particularly with excess nitrogen and water applications.

4. Compared to St. Augustinegrass, Zoysiagrass has smaller, ________ leaf blades, which provide a ________ growth habit.

5. Zoysiagrass needs about the same amount of ________ as St. Augustinegrass.

6. Bahiagrass can be described as having ____ maintenance inputs; it requires relatively low inputs of water, fertilizer and pesticides. It also a good choice for ______________ grounds or large areas.

7. ______________ landscape cultural practices, such as leaving ____________ on sidewalks, driveways and streets, results in ________ environmental consequences such as harming aquatic life in nearby water bodies.

8. Over time, inappropriate cultural practices cause ________ environmental consequences, such as erosion and ________ buildup in nearby water bodies due to ______ of vegetative cover.

9. There are two ways to manage environmental turfgrass stress: use stress-tolerant species or cultivars; use proper ________ and management practices to alleviate the effects.

10. Improper ________ can cause tree decline due to lack of oxygen and trunk rot.

11. ________ should be a part of routine maintenance; however, close attention should be paid to proper timing and needs of various landscape plants.

12. Mangroves are usually associated with ________ wetlands and play a critical role in reducing flood damage by storing stormwater and releasing it slowly over time, and filtering pollutants, silt and sediment.
Irrigation Review

1. _______ is among Florida's most valued resources.

2. In Florida, salt water intrusion and _______ depletion are serious problems that occur in areas of high water demand.

3. ________ irrigation management reduces need for _________ and/or chemical treatments to landscape plants.

4. Rain ________ switches or other shut-off devices are required by law to be maintained and operational, regardless of the age of the irrigation system.

5. Proper ________ and installation of irrigation components optimizes their use and _________ any off-site environmental impacts.

6. Water from wastewater treatment plants is known as _________ wastewater.

7. _________ in reclaimed irrigation water may be variable, so confirm nutrient levels periodically and avoid over-irrigation and irrigation of _________ areas.

8. Backflow devices must be installed to _________ contamination of potable water with nutrients and _________.

9. Drip emitters are ideal when _________ is desirable or for narrow strip plantings, such as along hedge rows.

10. _________ inspection of micro-irrigation devices and filters is necessary to ensure overall system function.

11. Irrigation _________ is based on the water needs of particular plants in the landscape and will differ based on the plant's ability to extract soil moisture in relation to _______ zone depth, and ability to tolerate reduced moisture.

12. _________ rainfall is the total rainfall, minus runoff, evaporation, and deep percolation.

13. No more than ½ to ¾ inch of water should be applied for a _________ irrigation event.

14. _________ drought-tolerant plants may require little or no irrigation.

15. _________ can lead to increased plant disease, higher populations of plant pests, and leaching or runoff of nitrogen and phosphorus.
Fertilizer Review

1. A __________ may contain one or more recognized plant nutrients; promote plant growth; control soil pH; or provide enrichment or other corrective measures to the soil.

2. ________ soils are highly variable in nutrients and availability, so supplemental nutrients may be needed to correct or prevent nutrient deficiencies.

3. Plants that have ________ deficiencies may not be suitable for the site conditions. Select plants that are better adapted.

4. Do not fertilize your lawn during the ________ months if you are in a location where the lawn does not actively grow in the winter.

5. Fertilizer should be applied to grass when roots and shoots are ________ growing to reduce potential ________ leaching.

6. Newly planted sod and sprigs should not be fertilized sooner than 30-60 days after ________.

7. Established woody plants in an area where turf is routinely fertilized may not require ____________ nutrients unless they show deficiency symptoms.

8. A soil analysis is a __________ of what is present at the time of sampling. ________ analysis can indicate levels of certain nutrients and plant health condition.

9. ________ applied in excess can alter or degrade the environment.


11. Quick- and slow-release sources of nitrogen are applied at two different ________.

12. ________ is a micronutrient required for healthy turfgrass growth and maintenance; however, it cannot be ____________ for other required nutrients such as nitrogen.

13. Determining the ________ of application before fertilizing saves time and money, and prevents adverse impacts on the environment.

14. Calibration includes the ____________ of application equipment to ensure it is safe, in good condition and working correctly.

15. The rate of nutrient application, particularly nitrogen, depends on a number of ________: turfgrass species, turfgrass maintenance level goals, the location, time of year, and type of fertilizer source.

16. The ________ of responsibility ensures that fertilizers and other lawn chemicals do not come into direct contact with water bodies or with any structure bordering water such as a sidewalk, driveway, street, canal, lake, or waterway shorelines.

Need a Hint?
- Actively
- Area
- Chronic
- Factors
- Fertilizer
- Forms
- Inspection
- Iron
- Nitrogen
- Nutrient
- Planting
- Rates
- Ring
- Snapshot
- Substituted
- Supplemental
- Tissue
- Urban
- Winter
Pesticide (IPM) Review

1. It is _______ to apply any pesticide commercially, for hire, to a lawn, residential site, or other structural site without a license.

2. A license for pesticide application is _______ from the Florida Department of Agriculture and Consumer Services (_______).

3. Chapter _____ services the commercial pest control operators, commercial landscape maintenance industry, government and private employees or owners applying pesticide products.

4. Chapter _____ services the use, purchase, and supervision of restricted-use pesticides.

5. A ______ is anything that competes with humans, domestic animals, or desirable plants for food or water.

6. The main goal of Integrated Pest Management (______) is efficient use of pesticides by using a ______________ of tactics to control pests.

7. _______ identification is critical to knowing if a pest is harmful and treatment is necessary.

8. The _______ IPM component consists of the proper selection, establishment, and maintenance, such as pruning, fertilization, and irrigation of turf and landscape plants.

9. The _______ or mechanical IPM component is related to the removal of dead, diseased or infested materials and debris.

10. The _______ IPM component involves the release and/or conservation of natural enemies and other beneficial organisms.

11. IPM _______ control includes a wide assortment of conventional, broad-spectrum pesticides and more selective, newer chemicals.

12. _______ size and wind speed are the most important factors that influence drift.

13. Pesticide _______ contains information and instructions that users are legally required to follow.

14. To prevent _______ to pesticides, applicators should wear protective clothing and personal protective equipment (______).