

## SMART CONTROLLER-SENSORS WORKSHEET

### Soil Moisture Sensors

True/False, Multiple Choice

- \_\_\_\_\_ 1. A soil moisture sensor may be used in place of a rain shut off device on most irrigation controllers.
- \_\_\_\_\_ 2. Soil depth is not important when installing a soil moisture sensor.
- \_\_\_\_\_ 3. A single soil moisture sensor is more accurate than ET when scheduling irrigation *over a large varying landscaped area*
- \_\_\_\_\_ 4. Which of the following is an acceptable method for determine soil moisture?
- a) Gypsum Block/Granular Matrix
  - b) Tensiometer
  - c) Capacitance Probe
  - d) Feel Method
  - e) Probing
  - f) All the Above
- \_\_\_\_\_ 5. Which describes how a soil moisture controller can work?
- a) Provides Closed Loop Feedback
  - b) Gives Feedback to a Weather Based System Controller
  - c) Calculates Daily Evapotranspiration
  - d) A & B Only
- \_\_\_\_\_ 6. Where should a soil moisture sensor be placed?
- a) Where the grass is green
  - b) in the top 12 inches of soil
  - c) Location and depth representative of the zone
  - d) None of the Above
- \_\_\_\_\_ 7. Which of the following affects soil moisture content?
- a) Soil Type
  - b) Slope
  - c) Location
  - d) All the Above

### Rain Sensors

True/False, Multiple Choice

- \_\_\_\_\_ 11. A rain shut off (rain switch) device is used to measure the amount of precipitation for a rainfall event.
- \_\_\_\_\_ 12. Total Rainfall is always used in Irrigation Scheduling over long periods of time.
- \_\_\_\_\_ 13. Texas State Regulations require a rain sensor on all new irrigation systems
- \_\_\_\_\_ 14. Which of the following is another term for a Rain Sensor?
- a) Rain Shut-off Device
  - b) Rain Switch
  - c) Tipping Bucket Rain Gauge
  - d) All the Above

## Smart Controllers

- \_\_\_\_\_ 15. An “ET-based” irrigation controller uses weather data to calculate ET
- \_\_\_\_\_ 16. A Rain Gauge is not required for calculating ET.
- \_\_\_\_\_ 17. A Conventional Irrigation Controller requires you to enter the Plant Type and Sprinkler Precipitation Rate
- \_\_\_\_\_ 18. All Smart controllers calculate irrigation runtime
- \_\_\_\_\_ 19. A Centralized Weather Station that is connected to a controller typically has which of the following sensors?
- a) Pyranometer (Solar Sensor)
  - b) Anemometer (Wind Sensor)
  - c) Temperature/Relative Humidity Sensor
  - d) Tipping Bucket
  - e) All the Above
- \_\_\_\_\_ 20. Which of the following is typically required to program a Smart Controller?
- a) Precipitation Rate
  - b) Slope
  - c) Soil Type
  - d) Plant Type
  - e) All the Above