

Chapter 6

NAME _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1. Why is a DC signal that changes called a pulse train?

2. What is the benefit of recording oscilloscope and DSO waveforms?

3. What is the difference between DC coupling and AC coupling?

4. What is the purpose of a trigger when capturing data on a DSO?

5. What are the differences between an analog and a digital oscilloscope?

Answer Key

Testname: EV1SHORT06

1. A DC voltage that turns on and off in a series of pulses is called a pulse train. Pulse trains differ from an AC signal in that they do not go below zero.
[Page Ref: 68](#)
2. The data would be saved and then reviewed in an effort to determine what failure had occurred.
[Page Ref: 72](#)
3.
 - DC coupling is the most used position on a scope because it allows the scope to display both alternating current (AC) voltage signals and direct current (DC) voltage signals present in the circuit.
 - When the AC coupling position is selected, a capacitor is placed into the meter lead circuit, which effectively blocks all DC voltage signals, but allows the AC portion of the signal to pass and be displayed.
[Page Ref: 68](#)
4. A scope will start displaying a voltage signal only when it is triggered or is told to start. The trigger level must be set to start the display.
[Page Ref: 70](#)
5.
 - An analog scope uses a cathode ray tube (CRT) similar to a television screen to display voltage patterns. The scope screen displays the electrical signal constantly.
 - A digital scope commonly uses a liquid crystal display (LCD), but a CRT may also be used on some digital scopes. A digital scope takes samples of the signals that can be stopped or stored and is therefore called a digital storage oscilloscope (DSO).
[Page Ref: 66](#)