

Electric and Hybrid Electric Vehicles, 1st Edition

Quiz 6A

NAME _____

1. Two technicians are discussing pulse train signals. Technician A says a fuel injector pulse on a hybrid engine is an example of a pulse train signal. Technician B says that an ignition module pulse on a hybrid engine is an example of a pulse train signal. Which technician is correct?
A) Technician A only
B) Technician B only
C) Both technicians A and B
D) Neither technician A nor B 1. _____

2. A MAP sensor signal voltage on a hybrid engine is being observed using a DSO. The pattern on the scope occasionally, and instantaneously, rises to 5 volts (source voltage). What does this indicate?
A) A drop in manifold vacuum
B) A momentary short circuit
C) Normal operation
D) A momentary open circuit 2. _____

3. Which of these is measured as a percentage?
A) Duty cycle
B) Dwell
C) Pulse width
D) None of these 3. _____

4. An oscilloscope display is called a _____.
A) grid
B) graticle
C) division
D) box 4. _____

5. Voltage signals (waveforms) that do not go below zero are called _____.
A) AC signals
B) pulse trains
C) pulse width
D) DC coupled signals 5. _____

6. Which is the correct voltage division setting for testing an electric motor?
A) 1V
B) 10V
C) 5V
D) 3V 6. _____

7. A motor position sensor waveform is going to be observed. At what setting should the volts per division be set to see the entire waveform from 0 to 5 volts? 7. _____
- A) 0.5 V/div
 - B) 1.0 V/div
 - C) 2.0 V/div
 - D) 5.0 V/div
8. Technician A says an analog scope can store the wave-form for viewing later. Technician B says that the trigger level has to be set on most scopes to be able to view a changing waveform. Which technician is correct? 8. _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians A and B
 - D) Neither technician A nor B
9. A digital storage oscilloscope is set to begin displaying a waveform when a certain voltage is detected. This minimum voltage is called _____. 9. _____
- A) trigger
 - B) threshold
 - C) trip
 - D) None of these
10. Technician A says that analog scopes use an LCD display. Technician B says that digital scopes may use a CRT display. Which technician is correct? 10. _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians A and B
 - D) Neither technician A nor B

Answer Key

Testname: EV1_6A

1. C
Page Ref: 69
2. D
Page Ref: 72-73
3. A
Page Ref: 68
4. B
Page Ref: 66
5. B
Page Ref: 68
6. A
Page Ref: 67
7. A
Page Ref: 67
8. B
Page Ref: 70
9. A
Page Ref: 70
10. B
Page Ref: 66