Automotive Technology 6th Edition
Chapter 71 - Ignition System Components and Operation
Quiz 71A

Name_____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Technician A says that the primary and secondary ignition systems are never connected. Technician B says that the primary and secondary windings are connected in some ignition coils. Which technician is correct? 1) _____
A) Technician A only
B) Technician B only
C) Both technicians
D) Neither technician

2) The ignition system pickup coil or trigger is usually electrically connected to the _____. 2) _____
A) ignition module
B) ignition coil
C) distributor cap
D) rotor

3) Which statement below is correct? 3) _____
A) The primary coil windings are designed for higher current (2–6 Amperes).
B) The secondary coil windings are designed for higher current (2–6 Amperes).
C) The primary coil windings are made of thinner wire than the secondary windings.
D) The primary coil windings have more turns of wire than the secondary windings.

4) An ion–sensing ignition system allow the ignition system itself to be able to _____. 4) _____
A) detect misfire
B) detect spark knock
C) detect rich or lean air–fuel mixture
D) all of the above

5) Which statement below is correct? 5) _____
A) Coil on plug systems use one ignition coil per cylinder.
B) All coil on plug systems require ignition wires.
C) Ignition control circuits cannot sense the voltage required to fire a spark plug.
D) It is not possible to control the ignition timing for each cylinder separately.

6) The primary (low–voltage) ignition system must be working correctly before any spark occurs from a coil. Which component is NOT in the primary ignition circuit? 6) _____
A) Spark plug wires
B) Ignition module
C) Pick up coil
D) Ignition switch

7) Technician A says that a waste spark ignition system fires two spark plugs at the same time. Technician B says that the waste spark ignition system uses ignition coils connected to companion cylinders. Which technician is correct? 7) _____

A) Technician A only
B) Technician B only
C) Both technicians
D) Neither technician

8) A waste–spark–type ignition system _____. 8) _____

A) fires two spark plugs at the same time
B) fires one spark plug with reverse polarity
C) fires one spark plug with straight polarity
D) all of the above

9) Because of _____, an ignition coil cannot be fully charged (reach magnetic saturation) until after a delay of about 10 milliseconds. 9) _____

A) voltage drop across the ignition switch and related wiring
B) resistance in the coil windings
C) inductive reactance
D) saturation

10) Which statement below is correct? 10) _____

A) Most ignition systems work by switching the negative side of the coil primary windings to ground.
B) Most ignition systems work by switching the positive side of the coil windings to power.
C) Most ignition systems work by switching the circuit grounding the ignition coil's secondary windings.
D) Most ignition systems work by switching the circuit to power the ignition coil's secondary windings.

Answer Key
Testname: AT6_71A

1) B
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2) A
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3) A
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4) D
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5) A
Page Ref: 842
6) A
Page Ref: 836
7) C
Page Ref: 840
8) D
Page Ref: 840
9) C
Page Ref: 836
10) A
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