

Automotive Electrical and Engine Performance 9th Edition
Chapter 26 – Engine Condition Diagnosis
Multiple Choice Questions Quiz A

1. Which color of exhaust smoke indicates excessive fuel being burned in the combustion chamber?

- a) Blue
- b) Black
- c) White
- d) Gray

2. Technician A states that an oil leak can be found using a fluorescent dye with a black light to check for leaks. Technician B states that cleaning the engine with a degreaser helps locate oil leaks. Who is correct?

- a) Technician A only
- b) Technician B only
- c) Both Technicians A and B
- d) Neither Technician A nor B

3. Which of the following is least likely to cause engine noise?

- a) Carbon on the pistons
- b) Cracked exhaust manifold
- c) Loose accessory drive belt
- d) Vacuum leak

4. Engine oil pressure at 3,500 RPM should be at least:

- a) 10 PSI
- b) 25 PSI
- c) 35 PSI
- d) 42 PSI

5. During a running (dynamic) compression test at idle, a good engine should produce a compression reading between:

- a) 150 to 200 PSI
- b) 100 to 150 PSI
- c) 60 to 90 PSI
- d) 30 to 60 PSI

6. A cylinder contribution test uses which device to locate a potential weak cylinder?

- a) Scan tool
- b) DSO (Digital Storage Oscilloscope)
- c) DMM (Digital Multimeter)
- d) Vacuum gauge

7. Technician A says that in a power balance test, the cylinder causing the smallest RPM drop is the weak cylinder. Technician B says grounding a spark plug wire without an RPM drop indicates a weak cylinder. Who is correct?

- a) Technician A only
- b) Technician B only
- c) Both Technicians A and B
- d) Neither Technician A nor B

8. Normal cranking vacuum for an engine should be:

- a) 2.5 inch Hg or higher
- b) Over 25 inch Hg
- c) 17 to 21 inch Hg
- d) 6 to 16 inch Hg

9. Technician A claims that a leaking head gasket can be identified using a chemical tester. Technician B suggests using an exhaust gas analyzer to find a leaking head gasket. Who is correct?

- a) Technician A only
- b) Technician B only
- c) Both Technicians A and B
- d) Neither Technician A nor B

10. The low oil pressure warning light generally comes on when:

- a) An oil change is due
- b) Oil pressure drops dangerously low (4 to 7 PSI)
- c) The oil filter bypass valve opens
- d) The oil filter anti-drain back valve opens

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Answer Key Quiz A

Correct Answers:

1. b
2. c
3. d
4. c
5. c
6. a
7. c
8. a
9. c
10. b