Automotive Technology 7th Edition
Chapter 15
Multiple Choice Quiz B

Name: _____ Date: _____

1. Which of these components seals the top of the cylinders in the engine block?
A. Cylinder head
B. Piston
C. Crankshaft
D. Connecting rod

2. Which component of the engine cools down the heated antifreeze coolant by releasing excess heat to the outside air?
A. Oil pan
B. Radiator
C. Cylinder head
D. Exhaust manifold

3. How many strokes are there in most automobile engine cycles?
A. Two
B. Three
C. Five
D. Four

4. Which engine component provides an air gap inside the cylinder where a spark occurs to initiate combustion?
A. Fuel injector
B. Intake manifold
C. Spark plug
D. Exhaust manifold

5. In a 4-cylinder engine, how often does a power stroke occur in terms of crankshaft rotation?
A. Every 90 degrees
B. Every 144 degrees
C. Every 180 degrees
D. Every 240 degrees

6. What is the formula for determining the displacement of an engine?
A. π(pi) × R × Stroke × Number of cylinders
B. π(pi) × R × Stroke ÷ Number of cylinders
C. π(pi) × R × Stroke + Number of cylinders
D. π(pi) × R ÷ Stroke × Number of cylinders

7. Which cycle allows the intake valve to be held open longer than usual to permit reverse flow into the intake manifold?
A. Otto cycle
B. Wankel cycle
C. Atkinson cycle
D. Diesel cycle

8. How does an engine's rotation direction, as viewed from the flywheel end, typically occur according to the SAE standard?
A. Clockwise
B. Counterclockwise
C. Alternates between clockwise and counterclockwise
D. Depends on the type of fuel

9. What does one horsepower equate to, as determined by James Watt?
A. Moving 550 pounds one foot in ten seconds
B. Moving 330 pounds one foot in one minute
C. Moving 550 pounds one foot in one second
D. Moving 1,000 pounds one foot in one second

10. At an altitude of 14,110 feet (like Pike's Peak in Colorado), approximately how much power is lost for a normally aspirated engine that originally develops 200 brake horsepower at sea level?
A. 116 brake horsepower
B. 84 brake horsepower
C. 58 brake horsepower
D. 42 brake horsepower

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Answer Key

1. A

2. B

3. D

4. C

5. C

6. A

7. C

8. B

9. C

10. A