

Name \_\_\_\_\_

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

- 1) All of these can happen when engine compression is lower than normal, EXCEPT \_\_\_\_\_. 1) \_\_\_\_\_
  - A) Low power
  - B) Poor fuel economy
  - C) Harder to crank engine
  - D) Easier engine cranking
  
- 2) The volume in the cylinder above the piston when the piston is at the bottom of the stroke (BDC) 2) \_\_\_\_\_ compared to the volume in the cylinder above the piston when the piston is at the top of the stroke (TDC) is referred to as \_\_\_\_\_.
  - A) Volumetric Efficiency
  - B) Compression Ratio
  - C) Compression Volume
  - D) Brake Mean Effective Pressure
  
- 3) How many rotations of the crankshaft are required to complete each stroke of a four-stroke 3) \_\_\_\_\_ cycle engine?
  - A) One-fourth
  - B) One-half
  - C) One
  - D) Two
  
- 4) Technician A says that the crankshaft determines the stroke of an engine. Technician B says that 4) \_\_\_\_\_ the length of the connecting rod determines the stroke of an engine. Which technician is correct?
  - A) Technician A
  - B) Technician B
  - C) Both Technicians
  - D) Neither Technician
  
- 5) The metric unit for torque is which of these? 5) \_\_\_\_\_
  - A) Foot-pound
  - B) Pound-foot
  - C) Newton-meter
  - D) Kilogram-meter
  
- 6) Technician A says that the four strokes of the 4-stroke cycle are intake, compression, power, and 6) \_\_\_\_\_ exhaust. Technician B says that most engines rotate clockwise as viewed from the rear (flywheel) end of the engine. Which technician is correct?
  - A) Technician A
  - B) Technician B
  - C) Both technicians
  - D) Neither technician

- 7) One horsepower is equal to \_\_\_\_\_ watts. 7) \_\_\_\_\_  
A) 149.2  
B) 1819  
C) 200  
D) 746
- 8) Technician A says that power is the rate of doing work. Technician B says that as horsepower increases, the time required to do work increases. Which technician is correct? 8) \_\_\_\_\_  
A) Technician A  
B) Technician B  
C) Both technicians  
D) Neither technician
- 9) The chemical energy in fuel is converted to heat by the burning of the fuel at a controlled rate. This process is called \_\_\_\_\_. 9) \_\_\_\_\_  
A) Combustion  
B) Consumption  
C) Power  
D) Torque
- 10) Which of these components determines the engine stroke? 10) \_\_\_\_\_  
A) Piston  
B) Rod  
C) Poppet valve  
D) Crankshaft

## Answer Key

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1) C

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2) B

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3) B

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4) A

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5) C

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6) A

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7) A

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8) A

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9) A

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10) D

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