

Name _____

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

- 1) Technician A says that silent chains are quieter than roller chains and do not stretch with use. Technician B says that on overhead valve engines, the camshaft is usually placed in the block above the crankshaft. Which technician is correct? 1) _____
A) Technician A
B) Technician B
C) Both technicians
D) Neither technician
- 2) Technician A says that the camshaft turns at half of the crankshaft speed in a four-stroke cycle engine. Technician B says that the camshaft rotates at one-quarter the crankshaft speed. Which technician is correct? 2) _____
A) Technician A
B) Technician B
C) Both technicians
D) Neither technician
- 3) Hydraulic lifters or hydraulic lash adjusters (HLA) may not bleed down properly and could cause an engine miss if _____. 3) _____
A) The engine oil is 1 quart low
B) The wrong API-rated engine oil is used
C) The wrong SAE-rated engine oil is used
D) Both A and B
- 4) The PCM controls cam timing by use of _____. 4) _____
A) A variable spring
B) A pulse width modulated (PWM) signal
C) A reluctor regulator
D) A variable chain tensioner
- 5) Hydraulic valve lifters can make a ticking noise when the engine is running if _____. 5) _____
A) Valve lash is too close
B) Valve lash is too loose
C) Lobe centerline is over 110°
D) Both A and C
- 6) Which timing chain type is also called a "silent chain"? 6) _____
A) Roller
B) Morse
C) Flat link
D) Both B and C

- 7) Which of these terms is used to describe is the number of degrees of crankshaft rotation for which the valve is lifted off the seat? 7) _____
- A) Duration
 - B) Lift
 - C) Overlap
 - D) Underlap
- 8) Many technicians always use new pushrods because _____. 8) _____
- A) They are less expensive to buy than clean
 - B) All dirt cannot be cleaned out from the hollow center
 - C) They wear at both ends
 - D) Pushrods shrink in length if removed from an engine
- 9) A DOHC V-6 has how many camshafts? 9) _____
- A) 4
 - B) 3
 - C) 2
 - D) 1
- 10) A camshaft should be measured for both _____ and _____. 10) _____
- A) TIR; lobe height
 - B) Total indicated runout; valve height
 - C) TIR; shaft thickness
 - D) Hardened depth; TIR

Answer Key

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1) B

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2) A

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3) C

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4) B

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5) B

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6) D

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7) A

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8) B

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9) A

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10) A

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