

Name: _____

Date: _____

1. Which of the following is NOT a benefit of varying both intake and exhaust camshafts in DOHC engines?

- A. Increased engine torque range
- B. Improved fuel efficiency
- C. Control over oxides of nitrogen emissions
- D. Enhanced engine cooling

2. In what scenario is the valve overlap increased to improve engine performance?

- A. Idle Valve Timing
- B. Performance Valve Timing
- C. EGR Function Valve Timing
- D. All of the above

3. Which valve timing mode aims to reduce NO_x emissions by trapping exhaust gases in the combustion chamber?

- A. Idle Valve Timing
- B. Performance Valve Timing
- C. EGR Function Valve Timing
- D. None of the above

4. Which camshaft phasing is primarily responsible for reducing NO_x exhaust emissions?

- A. Intake cam phasing
- B. Exhaust cam phasing
- C. Both intake and exhaust cam phasing
- D. Neither intake nor exhaust cam phasing

5. Which camshaft phasing aims to increase high-speed power in the engine?

- A. Intake cam phasing
- B. Exhaust cam phasing
- C. Both intake and exhaust cam phasing
- D. Neither intake nor exhaust cam phasing

6. What is the main purpose of the Spline Phaser System in an OHC engine?

- A. Control the valve overlap
- B. Increase engine torque
- C. Regulate exhaust emissions
- D. Control the engine cooling system

7. How does varying the intake camshaft timing primarily affect the engine?

- A. Reduces NO_x exhaust emissions
- B. Improves engine performance
- C. Increases fuel economy
- D. Reduces engine noise

8. By varying the exhaust camshaft timing, which aspect of the engine is primarily optimized?

- A. High-speed power
- B. Low-speed torque
- C. Exhaust emissions and fuel consumption
- D. Engine cooling efficiency

9. What is the main function of the control valve in an OHC engine?

- A. Vary the camshaft phasing
- B. Control the air intake
- C. Regulate fuel flow
- D. Control the exhaust flow

10. In the EGR Function Valve Timing mode, what is the primary characteristic of the valve overlap?

- A. Very low overlap
- B. Moderate overlap
- C. High overlap
- D. No overlap

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Chapter 29

Multiple Choice Quiz A

Answer Key

1. D

2. B

3. C

4. B

5. A

6. A

7. B

8. C

9. A

10. C