

## Pretest - PM Chap 4

### True/False

Indicate whether the sentence or statement is true or false.

- \_\_\_ 1. Henry Ford's factory was the first to produce automobiles for sale to the public.
- \_\_\_ 2. Gasoline-powered cars have been around for over 100 years.
- \_\_\_ 3. In 1985, Congress passed the CAFE standards.
- \_\_\_ 4. CAFE refers to "car average federal emissions."
- \_\_\_ 5. Unibody construction is typical in most modern automobiles.
- \_\_\_ 6. Unibody construction is typical in most modern trucks.
- \_\_\_ 7. In body-over-frame construction, the frame is the vehicle's foundation.
- \_\_\_ 8. In body-over-frame construction, the body is supported to the frame by large rubber mounts.
- \_\_\_ 9. A crossover vehicle is typically a cross between a station wagon and a SUV.
- \_\_\_ 10. An SUV can be based on either a truck or automobile platform.

### Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

- \_\_\_ 11. Which of the following is not a typical emission control system?
  - a. EGR
  - b. PCV
  - c. EPA
  - d. EFE
- \_\_\_ 12. Engine power is transferred to an automatic transmission through a:
  - a. Differential
  - b. U-joint
  - c. Torque converter
  - d. Constant velocity joint
- \_\_\_ 13. Which of the following is *not* one of the strokes of a four-cycle engine?
  - a. Intake
  - b. Combustion
  - c. Power
  - d. Exhaust
- \_\_\_ 14. Which type of engine is classified as internal combustion?
  - a. Gasoline
  - b. Diesel
  - c. Both A and B
  - d. Neither A nor B
- \_\_\_ 15. What is the purpose of the valve train?
  - a. Connects a piston to the crankshaft
  - b. Supports the major parts of the engine
  - c. Converts reciprocating motion to rotary motion
  - d. Opens and closes the intake and exhaust ports of each cylinder
- \_\_\_ 16. Which one of the following is odorless and deadly?
  - a. HC
  - b. CO
  - c. Both A and B
  - d. Neither A nor B

- \_\_\_\_\_ 17. Which component is located in the vehicle's exhaust system?
- a. PCV
  - b. Catalytic converter
  - c. EGR
  - d. PVC
- \_\_\_\_\_ 18. Which emission control system introduces exhaust gases into the intake air to reduce the formation of NO<sub>x</sub> in the combustion chamber?
- a. PCV
  - b. AIR
  - c. NO<sub>x</sub>
  - d. EGR
- \_\_\_\_\_ 19. A torsion bar is associated with the:
- a. Ignition system
  - b. Cooling system
  - c. Suspension system
  - d. Steering system
- \_\_\_\_\_ 20. A recirculating ball-type design is associated with the:
- a. Ignition system
  - b. Cooling system
  - c. Suspension system
  - d. Steering system
- \_\_\_\_\_ 21. *Technician A* says liquid cooling an engine maintains a constant operating temperature. *Technician B* says that air cooling lets the engine operate more efficiently. Who is correct?
- a. A only
  - b. B only
  - c. Both A and B
  - d. Neither A nor B
- \_\_\_\_\_ 22. An engine that won't start has no spark at the spark plugs while it is being cranked over by the starter. *Technician A* says the problem is probably the battery. *Technician B* says the ignition system is most likely at fault. Who is correct?
- a. A only
  - b. B only
  - c. Both A and B
  - d. Neither A nor B
- \_\_\_\_\_ 23. *Technician A* says the PCV system is designed to limit CO emissions. *Technician B* says catalytic converters reduce HC emissions out the tailpipe. Who is correct?
- a. A only
  - b. B only
  - c. Both A and B
  - d. Neither A nor B
- \_\_\_\_\_ 24. Water dripping from the air conditioning unit is being discussed. *Technician A* says the air conditioning probably is malfunctioning. *Technician B* says the refrigerant (Freon) should be replaced. Who is correct?
- a. A only
  - b. B only
  - c. Both A and B
  - d. Neither A nor B
- \_\_\_\_\_ 25. *Technician A* says a four-wheel drive vehicle uses a transfer case. *Technician B* says a four-wheel drive vehicle may use a torque converter. Who is correct?
- a. A only
  - b. B only
  - c. Both A and B
  - d. Neither A nor B
- \_\_\_\_\_ 26. Automatic transmissions are being discussed. *Technician A* says they typically use planetary gearsets. *Technician B* says they always come equipped with a transfer case. Who is correct?
- a. A only
  - b. B only
  - c. Both A and B
  - d. Neither A nor B
- \_\_\_\_\_ 27. *Technician A* says shock absorbers support the vehicle weight. *Technician B* says shock absorbers slow the upward and downward movement of the vehicle after a bump. Who is correct?
- a. A only
  - b. B only
  - c. Both A and B
  - d. Neither A nor B



Name: \_\_\_\_\_

ID: A

47. Describe how the cooling system works.
48. Describe the purpose of the lubrication system.
49. While refueling a vehicle, what maintenance checks should be performed?
50. Identify the components included in a vehicle's charging system.