

Name _____

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

- 1) Heat transfer is improved from the coolant to the air when the _____. 1) _____
A) Temperature difference is great
B) Temperature difference is small
C) Coolant is 95% antifreeze
D) Both A and C
- 2) Which of these is the right procedure to use when refilling an empty cooling system? 2) _____
A) Determine capacity; fill with 50/50 coolant/water or pre-mixed coolant
B) Fill completely with antifreeze with a 50/50 mix in the overflow bottle
C) Fill block and one half of the radiator with 100% pure antifreeze and fill rest of with water
D) Fill radiator with antifreeze, start engine, drain the radiator, and refill with a 50/50 mixture of antifreeze and water
- 3) Technician A says that the automotive water pump is a positive displacement-type pump. 3) _____
Technician B says that the coolant mix should be a 50/50 split between antifreeze and water.
Which technician is correct?
A) Technician A
B) Technician B
C) Both technicians
D) Neither technician
- 4) What can be done to prevent air from getting trapped in the cooling system when the coolant is 4) _____
replaced?
A) Pour the coolant into the radiator slowly.
B) Use a coolant exchange machine that draws a vacuum on the system.
C) Open the air bleeder valves while adding coolant.
D) Either B or C
- 5) What diagnostic trouble code (DTC) could be set if the thermostat is defective? 5) _____
A) P0300
B) P0171
C) P0440
D) P0128
- 6) A 5 ribbed serpentine belt should be tensioned at about _____. 6) _____
A) 75 to 100 lbs.
B) 45 to 60 lbs.
C) 150 lbs.
D) None of these

- 7) Electric cooling fans are typically commanded on and off by the _____. 7) _____
- A) Powertrain control module (PCM)
 - B) Thermostat
 - C) Radiator pressure sensor (RPS)
 - D) Cooling system delta sensor
- 8) The upper radiator hose collapses when the engine cools. What is the most likely cause? 8) _____
- A) A defective upper radiator hose
 - B) The spring is missing from the upper radiator hose which is used to keep it from collapsing
 - C) A defective thermostat
 - D) A defective pressure cap
- 9) What type of pump is a water pump? 9) _____
- A) Positive displacement
 - B) Centrifugal pump
 - C) Vane-type pump
 - D) Gear-type pump
- 10) Which of these is NOT a type of hose clamp? 10) _____
- A) Worm-type
 - B) Nylon strap
 - C) Banded-type
 - D) Spring-type

Answer Key

Testname: ENGINES9_14B

- 1) A
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- 2) A
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- 3) B
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- 4) D
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- 5) D
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- 6) A
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- 7) A
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- 8) D
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- 9) B
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- 10) B
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