

Automotive IP Red Seal Practice Exam

1. When an automobile engine is run without a thermostat, which of the following conditions would be most likely to result?
 - a. Higher HC and CO emissions
 - b. Higher NOX emissions
 - c. Engine overheat
 - d. Poor acceleration
2. What shape is a cold, cam ground piston?
 - a. Tapered
 - b. Round
 - c. Slightly oval
 - d. Slightly flared
3. What happens to a Plastigage strip when frictions bearing clearance decreases?
 - a. It changes color
 - b. It becomes wider
 - c. It remains unchanged
 - d. It becomes narrower
4. When an interference angle is faced to a valve it would be:
 - a. 1 degree
 - b. 2 degree
 - c. 5 degree
 - d. 10 degree
5. What must be done if the crankshaft end play exceeds specification?
 - a. Replace the crankshaft
 - b. Machine the crankshaft thrust faces
 - c. Shim the crankshaft
 - d. Replace the thrust washers
6. What is the correct method of measuring a cylinder head for warpage?
 - a. Dial indicator and magnetic base
 - b. Straight edge and feeler gauges
 - c. Outside micrometer
 - d. Dial bore gauge
7. When a cylinder head valve is equipped with a 2 valve springs what else be true?
 - a. Coil thickness must be identical
 - b. Both must have the same spring rate
 - c. They are wound oppositely
 - d. Valve rotators must be used

8. What will result if a full flow oil filter plugs on sediment?
 - a. Engine failure
 - b. Filter explodes
 - c. Crankshaft failure
 - d. Bypass valve flows oil around the filter assembly
9. Which of the following would be most likely to cause an upper radiator hose collapse on a cold engine?
 - a. Defective radiator cap
 - b. Incorrect thermostat rating
 - c. Overheating conditions
 - d. Empty overflow tank
10. What would be the most likely symptom if a turbocharger wastegate was seized in the closed position?
 - a. No turbo boost
 - b. High intake manifold vacuum readings
 - c. Engine knocking
 - d. Low NOX emissions
11. Which of following statement about oil pressure is correct?
 - a. It will be high if the bearing clearances are greater than specified
 - b. It will be high if the pressure regulator is seized closed
 - c. It will be low if there are blockage in the oil passage
 - d. It will be low if high viscosity oil is used in the engine
12. How should piston ring groove wear be checked?
 - a. Measure the grooves with a machinist rule and compare to specification
 - b. Install a new piston ring and measure with a feeler gauge between the upper surface of the ring and the land
 - c. Use a depth gauge and check for depth variance around the piston
 - d. Measure and compare the inside and outside diameters of the piston ring
13. When reinstalling an engine, what would most likely result from an improperly torqued transmission / transaxle bell housing?
 - a. Bell housing distortion
 - b. Cracked engine block
 - c. Rearmost engine cylinder be pulled out of round
 - d. Crankshaft will crack at rear main
14. Which of the following problems can be caused by a worn piston pin?
 - a. Cold engine knock
 - b. Oil burning (blue smoke emission)
 - c. Knocking noise that disappears when cylinder spark plug is grounded out
 - d. Knocking noise that does not disappear when cylinder spark plug is grounded out
15. A vehicle has an overheating problem in slow, stop and go traffic. Which of the following would most likely be the cause?
 - a. Stuck open thermostat
 - b. Debris in the radiator fins
 - c. Radiator cap rated at too low pressure
 - d. 70 / 30 water to antifreeze mixture

16. When reconditioning an engine block which machining process should be done first?

- a. Align boring
- b. Honing the cylinders
- c. Decking the block
- d. Cylinder boring

Answer

1. A
2. C
3. B
4. A
5. D
6. B
7. C
8. D
9. A
10. C
11. B
12. B
13. A
14. C
15. B
16. A