

Mississippi Department of Education



MS-CPAS2 Secondary Practice Assessment/ Assessment Preparatory Guidelines *11611P1-2014 Automotive Service Technician*

General Instructor Preparatory Guidelines

- **STUDENTS SHOULD ONLY TAKE PRACTICE TESTS ONLINE.**
- The practice tests are delivered the **SAME WAY** as the live tests.
- Use the correct curriculum and MS-CPAS2 assessment blueprint located at: <http://www.rcu.msstate.edu/Curriculum/CurriculumDownload.aspx>
 - Teach the correct number of instructional hours per unit.
 - Cover each competency/objective listed in the curriculum/blueprint.
- Use multiple-choice (selected response) assessments in your classroom. Examples are Unit Tests, Quizzes, and Timed Final Practice Exams.
- Take **Assessment 101** (RCU online course) to learn how to form well-constructed assessments for your classroom.
- Review previous MS-CPAS2 year reports to identify class unit performance. Adjust in-class reviews accordingly.
- Students should take the **DEMO MS-CPAS2** *OR* the **PRACTICE MS-CPAS2** to help students prepare for testing day.
- **Only** use this document as a review of the online practice assessment **AFTER** students take the practice assessment online. It is **NOT** meant for use as a study guide or predict student performance on the live test.

MS-CPAS2 PRACTICE Assessment

1. A brass hammer should be used when striking gears or a shaft because:

- a. it will not cause a spark.
- b. brass is heavier than the same size steel hammer.
- c. brass hammers will not rebound.
- d. brass will cause less damage to steel parts.

2. Technician A says scheduled maintenance is required on a hybrid internal combustion engine. Technician B says there is no maintenance required on a hybrid internal combustion engine. Which technician is correct?

- a. Technician A only
- b. Technician B only
- c. Both Technicians A and B
- d. Neither Technician A nor B

3. What is the name of the gasket that seals the cylinder head to the engine block?

- a. The Form-A-Gasket
- b. The head
- c. The oil pan
- d. The valve cover

4. While performing a cooling system service on a hybrid, Technician A does not disable the high-voltage system before serving the engine. Technician B says follow specific manufacturer's specifications. Which technician is correct?

- a. Technician A
- b. Technician B
- c. Both Technicians A and B
- d. Neither Technician A nor B

- 5. The area above the piston at top dead center where the air and fuel are burned is the:**
- oil pan.
 - combustion chamber.
 - valve cover.
 - intake manifold.
- 6. The crankshaft rotates at:**
- twice the speed of the camshaft.
 - three-fourths the speed of the camshaft.
 - the same speed as the camshaft.
 - one-half the speed of the camshaft.
- 7. The three times that the engine generally requires the richest air-fuel mixture are during:**
- starting, idling, and full-throttle operation.
 - starting, acceleration, and full-throttle operation.
 - starting, part-throttle, and full-throttle operation.
 - hot weather, high altitude, and high-speed operation.
- 8. Student A says that a cracked cylinder head can cause antifreeze to seep into the oil. Student B says that a cracked cylinder head can cause engine overheating. Which student is correct?**
- Student A
 - Student B
 - Both Students A and B
 - Neither Student A nor B
- 9. The camshaft is driven by the:**
- piston.
 - distributor.
 - rotor.
 - crankshaft.

10. The purpose of the valve train is to:

- a. open and close the valves at the correct time.
- b. ignite the air–fuel mixture at the correct time.
- c. compress the air–fuel mixture.
- d. open all of the valves at once.

11. During inspection of the coolant in the radiator, the coolant is found to be very rusty. Student A says that the radiator should be drained and flushed. Student B says that this is normal due to metal parts in the cooling system. Which student is correct?

- a. Student A
- b. Student B
- c. Both Students A and B
- d. Neither Student A nor B

12. What should be checked first when an engine will not reach proper operating temperature?

- a. The radiator cap
- b. The thermostat
- c. The water level
- d. The fan belt

13. Which component regulates the flow of coolant within an engine?

- a. The water pump
- b. The radiator
- c. The fan
- d. The thermostat

14. If oil is found in the air cleaner assembly, you should:

- a. clean or replace it.
- b. check the oil pressure.
- c. inspect the PCV system.
- d. check the return holes.

15. Oil viscosity refers to:

- a. color.
- b. ability to flow.
- c. quality.
- d. amount of additives.

16. A type of transmission that does not use typical gears as in other transmissions would be the:

- a. continuously variable transmission (CVT).
- b. continuously radical transmission (CRT).
- c. continuously moving transmission (CMT).
- d. continuously spinning transmission (CST).

17. Auto transmissions should be serviced on what schedule?

- a. When the vehicle is 3 years old
- b. Only when the unit is removed
- c. When unusual noises are heard
- d. According to manufacturer's recommendations

18. MOST front-wheel-drive automobiles have a:

- a. transmission.
- b. transaxle.
- c. rear drive axle.
- d. drive shaft.

19. On modern electronically controlled automatic transmissions, one way to get some diagnostic help would be to:

- a. read an automotive magazine.
- b. look at other similar cars.
- c. look in the owners manual.
- d. pull diagnostic trouble codes.

20. When adding automatic transmission fluid, the technician would base that decision on:

- a. the year model of the car.
- b. the mileage on the odometer.
- c. the fluid level on the dipstick.
- d. other vehicle maintenance.

21. CV joints may be worn if:

- a. the brakes squeal.
- b. a popping or clicking is heard while turning.
- c. the transmission will not shift.
- d. the vehicle will not stop.

22. Manual transmissions should be serviced:

- a. on a regular basis.
- b. on a yearly basis.
- c. when performing repairs.
- d. according to the manufacturer's specifications.

23. Technician A says stop-and-go driving wears out a clutch quicker than highway driving. Technician B says that highway driving wears out a clutch quicker than stop-and-go. Which technician is correct?

- a. Technician A only
- b. Technician B only
- c. Both Technicians A and B
- d. Neither Technician A nor B

24. Technician A states that all automatic transmissions use the same fluid. Technician B says that failure to use the specific fluid recommended by the manufacturer could lead to transmission failure. Which technician is correct?

- a. Technician A
- b. Technician B
- c. Both Technicians A and B
- d. Neither Technician A nor B

25. What reduces friction between the axle and axle housing?

- a. Axle seal
- b. Axle bearing
- c. Axle shims
- d. Axle retainer plate

26. Whenever possible, universal joints should be lubricated:

- a. on a yearly basis.
- b. on a weekly basis.
- c. when noise is detected.
- d. when the chassis is lubed.

27. What kind of current does an alternator produce that can be rectified into DC current?

- a. DC
- b. AC
- c. EC
- d. LC

28. What controls the voltage output in a charging system?

- a. Field coil
- b. Regulator
- c. Solenoid
- d. Diode

29. What component keeps the alternator from overcharging the battery?

- a. Generator
- b. Solenoid
- c. Voltage regulator
- d. Starter

30. Technician A says that if a constant 11 V is being produced by the alternator, the system is operating properly. Technician B says that if a constant 14 V is being produced by the alternator, the system is operating properly. Which technician is correct?

- a. Technician A
- b. Technician B
- c. Both Technicians A and B
- d. Neither Technician A nor B

31. A short to ground will cause the fuse to blow because the circuit will receive a larger than normal amount of :

- a. voltage.
- b. resistance.
- c. feedback.
- d. amperage.

32. Technician A says that the starter solenoid can be mounted on the starter. Technician B says that the starter solenoid can be mounted on the fender well. Which technician is correct?

- a. Technician A
- b. Technician B
- c. Both Technicians A and B
- d. Neither Technician A nor B

33. If an operating voltage of 12.6 is available from the battery and 1.2 V is lost due to unwanted resistance, how much voltage will the starter motor receive?

- a. 13.8 V
- b. 11.4 V
- c. 10.4 V
- d. 9.8 V

- 34. A vehicle's starter system operates, but the engine seems to crank faster than normal. What should you check first?**
- The timing belt
 - The battery
 - The solenoid
 - The clutch
- 35. Which stroke rids the cylinder of the burnt air-fuel mixture, thus preparing for a fresh mixture?**
- The intake stroke
 - The compression stroke
 - The power stroke
 - The exhaust stroke
- 36. Technician A says it is better to fast charge a completely discharged battery. Technician B says it is better to slow charge a completely discharged battery. Which technician is correct?**
- Technician A only
 - Technician B only
 - Both Technicians A and B
 - Neither Technician A nor B
- 37. If you are performing a load test on a 12-V battery, the voltage should not drop below:**
- 6 V.
 - 9.6 V.
 - 10.5 V.
 - 12 V.
- 38. A battery should be cleaned with:**
- Varsol.
 - baking soda and water.
 - a degreaser.
 - baking soda and Varsol.

39. Which type of solder should be used to repair a broken wire to a fuel gauge?

- a. Rosin Core
- b. Silver
- c. Zinc
- d. Acid Core

40. Which of the following is an insulator?

- a. Gold
- b. Rubber
- c. Copper
- d. Aluminum

41. When you are checking continuity in a circuit, you are checking for:

- a. a short in the circuit.
- b. a break/open in the circuit.
- c. a break in the circuit.
- d. corrosion in the circuit.

42. A 12-V test light is used to check for the presence of:

- a. voltage.
- b. continuity.
- c. ohms.
- d. amperage.

43. What is the name of the measuring tool illustrated below?



- a. Compression gauge
- b. Valve gauge
- c. Tire wear gauge
- d. Belt tension gauge

44. What is the name of the socket set part illustrated below?



- a. Speed handle
- b. Ratchet
- c. Breaker bar
- d. Extension

45. Which tool is used to cut internal threads?

- a. Die
- b. Round file
- c. Thread file
- d. Tap

46. A technician receives a job order for a front brake pad replacement. The car in need of a front brake pad replacement has been raised with a floor jack. Before beginning the replacement, the technician should make sure the:

- a. car is placed in gear.
- b. parking brake is set.
- c. jack stands are in place.
- d. steering wheel is unlocked.

47. What class of fire extinguisher should be used on flammable liquids?

- a. Class A
- b. Class B
- c. Class C
- d. Class D

48. While discussing electrical hazards, Technician A says that you should never operate electrical equipment while standing in water. Technician B says that you should never hand someone an electric drill with the operator's hand on the trigger. Which technician is correct?

- a. Technician A
- b. Technician B
- c. Both Technicians A and B
- d. Neither Technician A nor B

49. To remove rusted bolts from an exhaust manifold, you should use:

- a. a 6-point socket.
- b. vice grips.
- c. a box-end wrench.
- d. a 12-point socket.

50. Where can the vehicle identification number be found?

- a. Frame
- b. Dash
- c. Axle
- d. Engine

MS-CPAS2
PRACTICE Assessment
Answer Key

Answer Key

Question	Answer
1	D
2	A
3	B
4	B
5	B
6	A
7	B
8	C
9	D
10	A
11	A
12	B
13	D
14	C
15	B
16	A
17	D
18	B
19	D
20	C
21	B
22	D
23	A
24	B
25	B

Question	Answer
26	D
27	B
28	B
29	C
30	B
31	D
32	C
33	B
34	A
35	D
36	B
37	B
38	B
39	A
40	B
41	C
42	A
43	A
44	B
45	D
46	C
47	B
48	C
49	A
50	B