PRACTICE EXAM 25

1. A customer says, "Ever since my windshield was replaced, my car drifts and the steering doesn't help keep me in the lane anymore." Which is the most likely cause?

A. The tire pressure is low

B. The fuel system is failing

C. The rear corner radar is blocked

D. The forward camera needs recalibration after the glass replacement

2. A customer reports, "My cruise control won't keep its distance from the car ahead anymore — it just acts like regular cruise." Which component should the technician investigate first?

A. The ultrasonic park sensors

B. The driver-monitoring camera

C. The forward radar

D. The rear corner radar

3. A customer says, "The little light in my mirror that warns me about cars beside me stopped coming on." Which system is involved?

A. Traffic sign recognition

B. Blind spot warning using the corner radar

C. Adaptive cruise control

D. Automatic high beams

4. A customer complains, "My parking sensors beep constantly even when nothing is behind me, and it started right after the bumper was repainted." Which is the most likely cause?

A. Excessive paint over the ultrasonic sensor faces

B. A failed forward radar

C. A distorted windshield

D. A discharged key fob

5. A customer says, "The car slammed on its brakes by itself when there was nothing there, right after my windshield was done." Which is the most likely cause?

A. A painted-over rear ultrasonic sensor

B. A miscalibrated forward camera after the glass replacement

C. A failed tire pressure sensor

D. A dead key fob battery

6. A customer reports, "My lane warning, sign reader, and automatic high beams all quit at the same time." Which single cause most likely explains all three?

A. Four separate module failures

B. A rear corner radar fault

C. An ultrasonic obstruction

D. A shared forward camera problem

7. A customer says, "When it's foggy, my lane-keeping gets unreliable, but it works fine on clear days." How should the technician interpret this?

A. The camera module is failing intermittently

B. The radar is interfering with the camera

C. This is likely a normal visibility limitation in fog

D. The gateway drops messages only in fog

8. A customer complains, "My car warns me about the car ahead too late, and the bumper was just repaired and repainted with a thick finish." Which is the most likely cause?

A. The thick metallic paint attenuating the forward radar signal

B. A painted ultrasonic sensor

C. A distorted windshield

D. A dead key fob

9. A customer says, "After backing into a pole and getting the rear bumper fixed, the system warns me about cars crossing behind me that aren't there." Which is the most likely cause?

A. A forward camera miscalibration

B. A misaimed rear corner radar after the repair

C. A failed tire pressure sensor

D. An outdated navigation map

10. A customer reports, "Several of my driver-assist features stopped working all at once, and the shop found communication codes." Where should the technician look first?

A. Replace the forward camera

B. Replace each sensor one at a time

C. A shared cause such as a bus, gateway, or power/ground problem

D. The tire pressure sensors

11. A customer says, "I turned the lane-keep feature off, but every time I start the car it's back on." If the reference defines the system to default to ON after an ignition cycle, what should the technician explain?

A. The switch is broken and needs replacement

B. This is the system's normal defined default behavior

C. The module lost its configuration

D. The gateway is forcing it on due to a fault

12. A customer complains, "My parking beeps go off randomly when it's raining hard, then stop when it's dry." How should this be interpreted?

A. Likely a normal environmental limitation of ultrasonic sensing in heavy rain

B. A failed forward radar

C. A distorted windshield

D. A dead battery

13. A customer says, "Since I put a lift kit and bigger tires on my truck, the forward collision system misjudges distances." Which is the most likely cause?

A. The ride-height change misaiming the forward radar and camera

B. A failed gateway module

C. Painted ultrasonic sensors

D. A dead key fob

14. A customer reports, "My blind spot light comes on all the time even when no one's beside me, and it started after a rear-end repair." Which is the most likely cause?

A. A discharged key fob

B. An outdated navigation map

C. A failed cabin camera

D. A misaimed corner radar after the repair

15. A customer says, "The shop replaced my forward camera with a new one, but my lane features still don't work." What was most likely omitted?

A. The required calibration of the new camera

B. Replacement of the 12-volt battery

C. A rear-axle alignment

D. A brake bleed

16. A customer complains, "My adaptive cruise stopped keeping distance, and separately my blind spot warning quit." How should the technician approach this?

A. Assume one radar serves both and check only the forward radar

B. Replace both radars without diagnosis

C. Recognize the forward radar serves cruise and the corner radar serves blind spot, and check each

D. Reprogram the gateway and release

17. A customer says, "Right after a snowstorm, my collision warning shut off and showed a 'blocked' message." What is the most appropriate first response?

A. Inspect for and clear packed snow or ice on the fascia

B. Replace the radar module

C. Reprogram the gateway

D. Perform a wheel alignment

18. A customer reports, "My car reads the wrong speed-limit signs sometimes when the windshield is dirty in front of the camera." How should the technician interpret this?

A. The radar is misaimed

B. The corner radar is blocked

C. The gateway is faulty

D. The camera's view is degraded by the dirty glass in its zone

19. A customer says, "After the glass shop replaced my windshield, the camera shows no codes but the lane stuff is off." What two things should the technician verify first?

A. The tire pressures and fuel level

B. The key fob and navigation maps

C. Whether the glass is correct spec and whether the camera was recalibrated

D. The muffler and brake fluid

20. A customer complains, "My parking system acts up, and the shop says it uses cameras and sensors together." Why shouldn't the technician assume it's purely the sensors?

A. Sensors always fail before cameras

B. Surround-view cameras use radar

C. The cause could lie in the surround-view cameras or their integration

D. The gateway can't route the data

21. A customer says, "The steering tugs me back when I drift, but lately it tugs even when I'm centered, and I just had an alignment issue." Which is the most likely contributor?

A. A painted ultrasonic sensor

B. A dead key fob

C. A distorted windshield only

D. A camera referenced to a centerline that differs from the vehicle's true track

22. A customer reports, "My new radar module was installed and mounted right, but the cruise still behaves wrong for my car." What is most likely still needed?

A. A brake bleed

B. Programming and configuration to the vehicle, then initialization and calibration

C. A windshield replacement

D. A wheel alignment only

23. A customer says, "All my assist features are dead, and the scan tool can't even talk to one of the modules." Before replacing that module, what should be confirmed?

A. The windshield is OEM

B. The tire pressures are correct

C. The radio presets are set

D. The module has power, ground, and an intact bus connection

24. A customer complains, "My lane-keep, cruise, and collision warning are all off, and it happens on and off." Which root-cause category fits an intermittent, multi-system pattern?

A. A shared power, ground, or network problem

B. A single painted ultrasonic sensor

C. A distorted windshield only

D. A dead key fob

25. A customer says, "The shop calibrated my camera and said it 'completed,' but it still doesn't keep me in the lane on the road." What does this most likely indicate?

A. Calibration is never needed

B. The completion message guarantees correct function

C. A misaimed result that passed completion but failed functional verification

D. The camera needs no further attention

26. A customer reports, "My back-up parking sensors don't detect the wall anymore since the bumper was repainted." Which is the most likely cause?

A. A failed forward radar

B. A distorted windshield

C. A dead key fob

D. Excessive paint or contamination on the sensor faces reducing sensitivity

27. A customer says, "After a fender bender repair, my cruise control sees the car ahead but seems aimed off to the side." Which is the most likely cause?

A. A painted ultrasonic sensor

B. A forward radar misaligned by the disturbed mounting

C. A distorted windshield

D. A dead battery

28. A customer complains, "My collision braking kicked in for no reason, and the bumper was recently fixed." Which is the most likely cause?

A. A misaimed forward radar producing false detections

B. A painted rear ultrasonic sensor

C. A failed tire pressure sensor

D. A dead key fob

29. A customer says, "My car keeps telling me the assist system is 'unavailable' when it's raining or snowing hard, then it's fine after." How should the technician interpret this?

A. The module is failing

B. This is likely a normal weather-related limitation

C. The gateway is faulty

D. The windshield is the wrong spec

30. A customer reports, "The shop replaced my corner radar and configured it, but my blind spot detection still isn't right." What is most likely still needed?

A. A windshield replacement

B. A brake bleed

C. The required aiming/calibration of the new corner radar

D. Reprogramming the ultrasonic sensors

31. A customer says, "My lane features stopped working right after I had the rearview mirror replaced, and the mirror is near the camera." Which is the most likely cause?

A. The camera was disturbed during the mirror work and needs recalibration

B. The forward radar failed

C. The ultrasonic sensors are painted over

D. The tire pressure sensors failed

32. A customer complains, "My parking sensors and my blind spot warning both went haywire after the same bumper repaint." Which paired diagnosis fits?

A. Both are forward radar faults

B. Both are camera calibration faults

C. Both are gateway faults

D. The sensors point to ultrasonic faces/reseating and the blind spot points to corner-radar aim

33. A customer says, "The shop says my scan is clean, but my collision system still doesn't seem to react on the road." What does this illustrate?

A. A clean scan always confirms a repair

B. A clean scan is necessary but not sufficient without functional verification

C. Road testing is unnecessary

D. Functional verification is optional

34. A customer reports, "My car's assist features act strange and intermittent, and the shop found a corroded ground shared by several modules." Why does that one ground explain so much?

A. It changes the camera's optical spec

B. It only affects tire sensors

C. It raises only the bus terminating resistance

D. Many modules share grounds, so one bad ground causes erratic, multi-system behavior

35. A customer says, "My forward camera was reinstalled on the right glass but with the wrong bracket, and now lane-keep is off." What is the most complete fix?

A. Install the correct bracket to restore aim, then recalibrate and verify

B. Replace the camera module

C. Replace the windshield

D. Reprogram the gateway

36. A customer complains, "My dynamic calibration drive never finished — the tech said the road had no lane lines." Why did it fail?

A. The radar frequency changed

B. The gateway disabled the camera

C. Ultrasonic interference blocked it

D. The camera couldn't establish its reference without clear lane markings

37. A customer says, "My assist features all came back to life after the shop fixed one wiring connector." What does this confirm about the original problem?

A. Each feature had an independent fault

B. The expensive sensor should have been replaced

C. A single shared connection was the root cause

D. The codes were meaningless

38. A customer reports, "My new module was bolted in but it won't work for my car's specific options." What is most likely still required?

A. A brake bleed

B. A windshield replacement

C. A wheel alignment only

D. Programming and coding/configuration to the vehicle, then initialization and calibration

39. A customer says, "My parking beeps falsely only in heavy road spray and snow, otherwise it's fine." How should this be interpreted?

A. A failed forward radar

B. A likely normal environmental limitation of ultrasonic sensing

C. A distorted windshield

D. A dead key fob

40. A customer complains, "My cruise distance-keeping and forward collision both misjudge, and the front was recently in a collision and repaired." Which is the most logical primary suspect?

A. The forward radar's mounting/aim and fascia condition from the repair

B. The rear ultrasonic park sensors

C. The driver-monitoring camera

D. The tire pressure system

41. A customer says, "The shop calibrated everything and the scan is clean, but I want to be sure my collision system actually works." What is the appropriate final step?

A. Release on the clean scan alone

B. Repeat the pre-repair scan

C. Reprogram the gateway

D. Perform functional verification, including a road test

42. A customer reports, "My forward radar shows lost communication, but the shop says its power and ground are good and the wiring is fine." What is the most likely remaining cause?

A. A distorted windshield

B. The radar module or its internal bus interface

C. A painted ultrasonic sensor

D. A thrust-angle error

43. A customer says, "My car reads signs and keeps the lane fine in daylight but struggles when the sun is low and glaring." How should the technician interpret this?

A. The camera module is failing

B. This is a normal visibility limitation under glare

C. The radar is interfering

D. The gateway drops messages in sunlight

44. A customer complains, "After a lift, oversized tires, and an aftermarket bumper, my forward assist features are off." Which corrections are needed before calibration?

A. Restore correct ride height and address the non-factory bumper affecting sensor mounting/aim

B. Only a software update

C. Only a wheel alignment

D. Replace the forward radar

45. A customer says, "My static calibration kept failing in the shop's cluttered back corner." Which environmental issue most likely caused it?

A. The tire pressures were high

B. The scan tool was charged

C. Metric units were used

D. The cluttered, reflective background violated the calibration bay requirements

46. A customer reports, "My forward features all fail together, but the camera talks fine, the glass is clear and correct, the bracket is right, and ride height is good." What is the best next step?

A. Replace the rear ultrasonic sensors

B. Check the tire pressure sensors

C. Determine whether the shared camera needs recalibration or a software update

D. Replace the key fob battery

47. A customer says, "My radar disables in heavy snow buildup but comes back once it's cleared off." How should this be classified?

A. An internal radar hardware failure

B. A gateway communication fault

C. A likely normal, self-resolving blockage condition

D. A camera optical distortion

48. A customer complains, "My new camera was installed, mounted, and set up for my car, but lane features still don't work." What is the most likely omission?

A. The required calibration to establish the new camera's reference

B. A windshield replacement

C. A brake bleed

D. A tire rotation

49. A customer says, "My assist features keep cutting out together, with no single sensor code but repeated communication faults." Which root-cause category fits best?

A. Four independent sensor failures

B. A distorted windshield

C. A shared power, ground, or bus/network problem

D. A painted ultrasonic sensor

50. A customer asks, "How do I know my ADAS repair is really done?" What is the correct answer?

A. When the calibration shows a completion message

B. When a post-repair scan plus functional verification both confirm correct operation

C. When the codes are cleared

D. When the vehicle starts normally

Answer Key & Full Answer Explanations

1. D — Lane drift and failed steering assistance immediately after a windshield replacement point to a forward camera needing recalibration. Tire pressure, fuel, and corner radar are unrelated to the camera's post-glass aim. Glass replacement disturbs camera aim and mandates recalibration.

2. C — Cruise that no longer keeps distance points to the forward radar, which measures distance and closing speed. Ultrasonic, driver-monitoring, and corner radar serve other functions. The affected feature identifies the forward radar.

3. B — A mirror warning light for adjacent vehicles is blind spot warning, which uses the corner radar. Sign recognition, cruise, and high beams are unrelated features. The complaint maps to the corner-radar system.

4. A — Constant false parking beeps beginning after a repaint point to excessive paint over the ultrasonic sensor faces. A forward radar, windshield, or key fob would not cause this. Bumper refinishing is a classic ultrasonic fault source.

5. B — Unexpected automatic braking right after a windshield replacement points to a miscalibrated forward camera. A rear sensor, tire pressure sensor, or key fob would not cause false forward braking. Glass replacement disturbs camera aim.

6. D — Lane warning, sign reading, and automatic high beams quitting together most likely share a forward camera problem. Four separate failures, a corner radar fault, or ultrasonic obstruction do not explain all three. Shared sensors explain grouped failures.

7. C — Lane-keeping unreliable only in fog and fine in clear weather is likely a normal visibility limitation. An intermittent module fault, radar interference, or gateway dropout are not supported. The camera cannot see lane lines through fog by design.

8. A — Late forward warning after a thick repaint points to the metallic paint attenuating the forward radar signal. A painted ultrasonic sensor, windshield, or key fob would not cause this. Refinish work directly affects radar transmission.

9. B — False rear cross-traffic warnings after a rear bumper repair point to a misaimed rear corner radar. A forward camera, tire pressure sensor, or navigation map are unrelated. Rear collision work commonly disturbs corner-radar aim.

10. C — Several features failing at once with communication codes point to a shared cause such as a bus, gateway, or power/ground problem. Replacing the camera, swapping sensors one at a time, or checking tire pressure ignores the pattern. The simplest shared cause usually explains all symptoms.

11. B — A feature defined to default to ON after an ignition cycle that returns on after each start is normal defined behavior. The switch is not broken, the configuration is intact, and the gateway is not at fault. Defined defaults are not faults.

12. A — Random parking beeps only in heavy rain that stop when dry are a normal environmental limitation of ultrasonic sensing. A forward radar, windshield, or battery would not cause this. Heavy rain and spray can scatter sound and cause false alerts.

13. A — Forward collision misjudging distances after a lift and oversized tires point to the ride-height change misaiming the forward radar and camera. A gateway, painted sensors, or key fob would not cause this. Ride-height modifications directly misaim body-mounted sensors.

14. D — A blind spot light coming on falsely after a rear-end repair points to a misaimed corner radar. A key fob, navigation map, or cabin camera would not cause this. Collision repairs commonly disturb corner-radar aim.

15. A — A new forward camera that still fails most likely lacks the required calibration to establish its reference. A battery, alignment, or brake bleed would not aim the camera. A new sensor must be calibrated before it functions.

16. C — Cruise and blind spot failing separately call for recognizing the forward radar serves cruise and the corner radar serves blind spot, and checking each. Assuming one unit, replacing both blindly, or reprogramming and releasing are wrong. Each feature identifies its own radar.

17. A — A collision warning shutting off with a blocked message after a snowstorm calls for inspecting and clearing packed snow or ice on the fascia. Replacing the radar, reprogramming, or aligning skips the obvious cause. Blockage is a normal, correctable condition.

18. D — Wrong sign readings when the glass in front of the camera is dirty indicate the camera's view is degraded by the dirty glass in its zone. A misaimed or blocked radar, or a faulty gateway, are not implicated. The camera depends on a clear view through its zone.

19. C — A code-free camera with off lane features after a glass shop replacement calls for verifying whether the glass is correct spec and whether the camera was recalibrated. Tire pressures, fuel, key fob, maps, muffler, and brake fluid are unrelated. Glass spec and recalibration are the critical checks.

20. C — A fused parking system means the cause could lie in the surround-view cameras or their integration, not the sensors alone. Sensors do not always fail first, surround-view cameras do not use radar, and the gateway can route the data. Identify which sensors actually serve the complaint.

21. D — Steering tugging even when centered after an alignment issue points to a camera referenced to a centerline that differs from the vehicle's true track. A painted sensor, key fob, or glass distortion alone would not cause this. Forward sensors must be referenced to the thrust line.

22. B — A correctly mounted new radar that behaves wrong for the vehicle most likely still needs programming and configuration to the vehicle, then initialization and calibration. A brake bleed,

windshield, or alignment alone would not configure it. Replacement requires electronic setup plus calibration.

23. D — Before replacing a module the scan tool cannot reach, confirm it has power, ground, and an intact bus connection. Glass type, tire pressures, and radio presets are irrelevant. A powerless or disconnected module appears dead but may be fine.

24. A — Intermittent, multi-system failures point to a shared power, ground, or network problem. A single painted sensor, glass distortion, or key fob would not produce this pattern. Shared electrical faults cause widespread intermittent symptoms.

25. C — A camera that "completed" calibration but still fails on the road indicates a misaimed result that passed completion but failed functional verification. Calibration is needed, completion does not guarantee function, and the camera does need attention. A misaimed sensor can pass completion.

26. D — Back-up sensors failing to detect after a repaint point to excessive paint or contamination on the sensor faces reducing sensitivity. A forward radar, windshield, or key fob would not cause this. Bumper refinishing commonly disables ultrasonic sensors.

27. B — Cruise that sees the car ahead but is aimed off to the side after a repair points to a forward radar misaligned by the disturbed mounting. A painted sensor, windshield, or battery would not cause lateral aim error. Collision repair commonly disturbs radar aim.

28. A — Unexpected collision braking after a bumper repair points to a misaimed forward radar producing false detections. A rear sensor, tire pressure sensor, or key fob would not cause false braking. Repairs disturbing the radar's mounting cause false detections.

29. B — An assist system reporting "unavailable" only in heavy rain or snow, then recovering, is a normal weather-related limitation. A failing module, faulty gateway, or wrong glass are not supported. Severe weather can temporarily limit sensing by design.

30. C — A configured new corner radar that still misbehaves needs the required aiming/calibration. A windshield, brake bleed, or ultrasonic reprogramming would not aim it. A replacement radar must be calibrated before release.

31. A — Lane features failing after a rearview mirror replacement near the camera point to the camera being disturbed during the work and needing recalibration. A forward radar, ultrasonic sensors, or tire pressure sensors are unrelated. Disturbing the camera's mounting triggers recalibration.

32. D — Parking and blind spot problems after the same repaint pair as the sensors pointing to ultrasonic faces/reseating and the blind spot pointing to corner-radar aim. They are not both forward radar, camera, or gateway faults. Each symptom maps to its own sensor cause.

33. B — A clean scan with a collision system that still doesn't react illustrates that a clean scan is necessary but not sufficient without functional verification. A clean scan does not always confirm a repair, and road testing and verification are not optional. Verification closes the loop.

34. D — Strange intermittent behavior with a corroded shared ground is explained because many modules share grounds, so one bad ground causes erratic, multi-system behavior. A poor ground does not change glass spec, affect only tire sensors, or raise only bus resistance. Shared grounds cause widespread intermittent faults.

35. A — A camera reinstalled on correct glass with the wrong bracket is fixed by installing the correct bracket to restore aim, then recalibrating and verifying. Replacing the camera or windshield or reprogramming would not fix the mounting error. Correct mounting precedes calibration.

36. D — A dynamic calibration that won't finish on a road with no lane lines failed because the camera couldn't establish its reference without clear lane markings. Radar frequency, the gateway, and ultrasonic interference are not involved. Clear markings are essential to dynamic camera calibration.

37. C — Features returning to life after fixing one wiring connector confirms a single shared connection was the root cause. It does not indicate independent faults, justify replacing the sensor, or render the codes meaningless. The outcome validates the shared-cause approach.

38. D — A bolted-in new module that won't work for the vehicle's options needs programming and coding/configuration to the vehicle, then initialization and calibration. A brake bleed, windshield, or alignment alone would not complete the setup. Replacement requires electronic setup plus calibration.

39. B — Parking false alerts only in heavy road spray and snow, otherwise fine, are a likely normal environmental limitation of ultrasonic sensing. A forward radar, windshield, or key fob would not cause this. Spray and snow can scatter sound and trigger false alerts.

40. A — Cruise and forward collision misjudging after a front collision repair point to the forward radar's mounting/aim and fascia condition from the repair. Rear ultrasonic sensors, the driver camera, and tire pressure are unrelated to forward-distance errors. Collision repair commonly disturbs forward-radar aim and fascia transmission.

41. D — To confirm a collision system works after a clean scan, perform functional verification, including a road test. Releasing on the scan alone, repeating the pre-repair scan, or reprogramming are insufficient. A misaimed sensor can pass a scan, so function must be confirmed.

42. B — A radar with lost communication despite good power, ground, and intact wiring points to the radar module or its internal bus interface. A windshield, painted sensor, or thrust-angle error would not cause a communication loss. Once the external circuit checks out, the module is the suspect.

43. B — Reading signs and keeping the lane in daylight but struggling under low-sun glare is a normal visibility limitation. An intermittent module failure, radar interference, or gateway dropout are not supported. Glare is a designed limitation of optical sensing.

44. A — A lift, oversized tires, and an aftermarket bumper require restoring correct ride height and addressing the non-factory bumper affecting sensor mounting/aim before calibration. A software update or alignment alone, or replacing the radar, would not address all the non-factory conditions. Non-factory conditions must be corrected first.

45. D — A static calibration failing in a cluttered back corner was most likely caused by the cluttered, reflective background violating the calibration bay requirements. Tire pressure, a charged scan tool, or unit choice would not produce this. The bay environment is part of the procedure.

46. C — With clear correct glass, normal communication, a correct bracket, and correct ride height, the next step is to determine whether the shared camera needs recalibration or a software update. Ultrasonic sensors, tire pressure sensors, and the key fob are unrelated to grouped forward faults. The shared camera is the common denominator.

47. C — A radar disabling in heavy snow buildup and recovering once cleared is a likely normal, self-resolving blockage condition. An internal failure, gateway fault, or camera distortion are not supported. Blockage protection is designed behavior.

48. A — A new camera installed, mounted, and set up that still fails most likely lacks the required calibration to establish its reference. A windshield, brake bleed, or tire rotation would not aim it. A new sensor must be calibrated before it works.

49. C — Features cutting out together with no single sensor code but repeated communication faults point to a shared power, ground, or bus/network problem. Four independent failures, glass distortion, or a painted sensor would not produce this pattern. Shared electrical and network faults cause widespread intermittent symptoms.

50. B — An ADAS repair is confirmed done when a post-repair scan plus functional verification both confirm correct operation. A completion message, cleared codes, or a normal start are not sufficient. Verification closes the loop on every ADAS repair.