PRACTICE EXAM 32

1. If a vehicle's ride height is left below specification during a forward camera calibration, the resulting calibration will most likely be:

A. Inaccurate because the sensor aim no longer matches the reference

B. Unaffected because the camera self-levels regardless of ride height

C. Faster to complete because the camera sits closer to the roadway

D. Improved because a lower stance sharpens the camera's forward view

2. When a static camera calibration is performed, the target must be placed at the correct distance and centered on the vehicle axis so that the camera:

A. Receives a higher supply voltage from the alignment equipment

B. Selects a dynamic procedure instead of a static one automatically

C. Establishes an accurate aim reference relative to the vehicle

D. Disconnects from the ADAS CAN bus during the calibration cycle

3. If reflective metal objects are positioned near the target during a static radar calibration, the most likely effect is that the calibration will be:

A. Improved because the metal reinforces the reflected radar signal

B. Unaffected because radar disregards nearby stationary objects

C. Corrupted because stray reflections distort the radar return

D. Converted to a camera-based procedure to bypass the metal

4. Which of the following would NOT be a valid prerequisite before performing an ADAS calibration?

A. Disconnecting the battery to clear all stored ADAS fault codes

B. Confirming the vehicle ride height is within the specified range

C. Verifying the tires are properly inflated and evenly worn

D. Ensuring the calibration takes place on a level floor surface

5. If the switched-ignition voltage feed to an ADAS module is open while battery voltage is still present, the module will:

A. Operate normally with no detectable change in its function

B. Raise its transmit frequency above the legal operating band

C. Fail to power up or operate when the ignition is turned on

D. Overcharge the private CAN terminating resistor in the module

6. When a windshield with a glass-mounted forward camera is replaced, the camera must be recalibrated because the replacement:

A. Resets the ultrasonic park assist firmware to a default level

B. Alters the radar module's transmit frequency band setting

C. Changes the camera's mounting reference and forward aim

D. Reprograms the powertrain control module operating software

7. If a dynamic camera calibration is attempted on a route with faded lane markings, the procedure will most likely:

A. Complete faster because the camera ignores the lane markings

B. Fail to complete because the camera cannot read the markings

C. Switch automatically to a static calibration inside the bay

D. Improve in accuracy because faint markings reduce glare

8. A blind spot warning system depends on the rear corner radar because the feature must detect vehicles:

A. Directly ahead within the forward radar's primary detection zone

B. By reading the posted speed limit signs along the roadway side

C. At close range under one meter while parking at low speeds

D. In the adjacent rear-lane blind spot zone reliably at speed

9. If the left rear corner radar, designated as primary, loses communication, the most directly affected function is:

A. ADAS CAN bus communication for which that module is primary

B. The forward camera's traffic sign recognition display function

C. The ultrasonic park assist sensing at the front of the vehicle

D. The instrument cluster gauge sweep performed at each startup

10. When adaptive cruise control following distance is adjusted by the driver, the input is made through:

A. A rotary dial mounted on the lower left dashboard trim panel

B. A handheld scan tool connected at the diagnostic link connector

C. The instrument cluster module (ICM) interface within the dash

D. A center console touchscreen housed in the stack assembly unit

11. If a rear corner radar module is replaced but not initialized, the expected result is that the module will:

A. Communicate immediately and require no further technician action

B. Fail to communicate properly until initialization is performed

C. Raise its transmit frequency above the normal operating band

D. Recalibrate the forward camera automatically upon installation

12. The Composite Vehicle's medium-range forward radar is specified to detect objects across a range of approximately:

A. A fixed 30 meters directly ahead in all driving conditions

B. A close range under 5 meters intended only for parking

C. An extended range beyond 500 meters for highway cruising

D. A medium range of about 0 to 160 meters (0 to 525 feet)

13. If a forward radar bracket is bent in a low-speed impact while the module still tests good, the correct response is to:

A. Leave the bracket because the radar self-corrects small offsets

B. Replace the forward camera since it shares the radar bracket

C. Recalibrate only the ultrasonic sensors to offset the bend

D. Repair or replace the bracket, then aim and calibrate the radar

14. Adaptive cruise control on the Composite Vehicle becomes active in any forward gear once the vehicle speed exceeds approximately:

A. About 5 mph (8.0 km/h) once the vehicle is in forward motion

B. A minimum of 25 mph regardless of the selected forward gear

C. A minimum of 45 mph on level roadway surfaces only

D. Any speed including a complete stop with no lower limit

15. Which of the following would NOT typically require a forward camera recalibration?

A. A windshield replacement on a vehicle with a glass-mounted camera

B. A camera module replaced with a new multifunction camera unit

C. A vehicle ride height changed by an aftermarket suspension lift

D. A routine cabin air filter replacement performed during service

16. If a traffic sign recognition feature stops working while radar features remain normal, the fault most likely lies with the:

A. Rear corner radar modules connected by the private CAN bus

B. Forward-facing camera, its calibration, or its lens condition

C. Ultrasonic park assist sensors mounted within the bumper covers

D. Adaptive cruise control switch located on the steering wheel

17. When a pre-scan is performed before an ADAS repair, its primary function is to:

A. Permanently clear all stored codes without keeping any record

B. Document the fault codes present before the repair is started

C. Raise the battery voltage needed to support the calibration

D. Reset the tire pressure monitoring baseline reference values

18. If both rear corner radars drop offline together while the rest of the network communicates, the most likely cause is:

A. An open or fault in the private CAN bus shared by the two radars

B. A bent forward radar bracket located behind the front fascia panel

C. A clogged cabin air filter restricting airflow across the modules

D. A windshield camera that lost its stored calibration reference data

19. The ultrasonic sensors on the Composite Vehicle are best described as providing the ADAS system with:

A. A long-range input that drives the adaptive cruise control feature

B. A close-range input analyzed for use by the overall ADAS system

C. A lane-marking input used by the lane keep assistance function

D. A traffic-sign input feeding the posted speed limit display feature

20. If a static camera calibration is attempted on a sloped floor, the most likely result is that the calibration will:

A. Be inaccurate because the tilted vehicle misaims the camera

B. Complete normally because the camera compensates for slope

C. Switch to a dynamic procedure to bypass the uneven floor

D. Improve because the slope angles the camera toward the road

21. When forward collision warning false-activates after a fascia repair, with the radar testing good and the bracket straight, the best next check is to:

A. Replace the instrument cluster module to stop the false alerts

B. Reinitialize the ultrasonic park sensors in the rear bumper area

C. Reflash the transmission control module to current calibration

D. Verify radar aim and inspect the fascia for material or paint buildup

22. If several ADAS modules report "no communication" while the engine and transmission modules respond normally, this pattern most strongly indicates:

A. A single failed ultrasonic park sensor element in the rear bumper

B. An obstructed forward camera lens covered by accumulated debris

C. A fault in the ADAS CAN bus segment serving those ADAS modules

D. An internal processor failure within the powertrain control module

23. The 120-ohm component contained in each rear corner radar module functions on the private CAN bus to:

A. Reduce the battery supply voltage feeding the radar emitter circuit

B. Convert the analog radar return into a usable digital distance value

C. Terminate the bus correctly to prevent signal reflections on it

D. Filter electromagnetic noise originating from the forward camera

24. If an aftermarket lift raises a vehicle and the forward radar reads elevations consistently high, the root-cause correction is to:

A. Replace the forward radar with an updated service part number

B. Reflash the camera module to compensate for the added height

C. Lower the ultrasonic sensor sensitivity threshold in the software

D. Restore correct ride height, then re-aim and calibrate the radar

25. A rear cross traffic alert is most useful to the driver specifically when the vehicle is:

A. Cruising at a steady highway speed on a divided roadway surface

B. Backing out of a parking spot into traffic crossing from the sides

C. Parking forward into an angled space within a busy parking lot

D. Reading an upcoming posted speed limit sign while moving forward

26. If a forward radar communicates on the bus but reports implausible target data after a collision, the most probable cause is:

A. The instrument cluster module lost its stored ACC configuration

B. The ultrasonic park assist controller requires a reinitialization

C. A private CAN terminating resistor opened inside a corner radar

D. The radar's physical aim or mounting was disturbed in the crash

27. When diagnosing an intermittent ADAS communication fault, the most appropriate first step is to:

A. Replace the most expensive suspect module as the first action taken

B. Capture stored and pending codes along with the network status

C. Clear all stored codes before recording any freeze frame data

D. Perform a full calibration before retrieving any of the fault codes

28. If a blind spot warning is inoperative on one side and a code shows lost communication to that side's corner radar, the check that best isolates the fault is to:

A. Test the affected module's power, ground, and bus continuity

B. Replace both rear corner radar modules together as a matched set

C. Recalibrate the forward camera to restore the lost communication

D. Reflash the instrument cluster module to a current software level

29. When a four-wheel alignment corrects the thrust angle on a vehicle scheduled for ADAS calibration, this matters because:

A. Alignment changes the radar module's internal clock timing rate

B. Thrust angle directly alters the engine's fuel injection timing

C. Alignment is unrelated and has no effect on the ADAS sensor aim

D. Sensor reference geometry depends on a correct vehicle thrust line

30. If a multifunction camera is replaced and initialized but lane keep assist still performs erratically, the remaining required step is most likely:

A. A reset of the tire pressure monitoring system threshold values

B. A reinitialization of the ultrasonic park assist controller module

C. A camera calibration following the vehicle's specified procedure

D. A replacement of the forward radar sensor module assembly unit

31. When a post-scan is performed after a calibration, its purpose is to:

A. Confirm the codes are resolved and the systems operate correctly

B. Document the pre-existing faults present before the repair began

C. Raise the system voltage required for the calibration to proceed

D. Establish the vehicle's thrust line before placing the target board

32. If underinflated, unevenly worn tires are present at a pre-calibration inspection, they must be corrected first because they:

A. Alter the ride height and therefore the sensor aim toward the road

B. Raise the radar module's transmit frequency above its legal band

C. Discharge the battery below the minimum required calibration voltage

D. Increase the electromagnetic noise carried on the ADAS CAN bus wiring

33. The forward radar module and multifunction forward camera are described in the reference as serving the role of:

A. Outputs that only illuminate the dashboard warning indicators

B. The primary inputs for several of the forward ADAS features

C. Components used exclusively by the ultrasonic park assist system

D. Independent units that never share any sensor data with each other

34. If a dynamic camera calibration never completes and the log shows the required speed was rarely held, the corrective action is to:

A. Switch immediately to a static calibration inside the service bay

B. Replace the forward camera because the dynamic calibration failed

C. Initialize the rear corner radar modules before retrying the drive

D. Repeat the drive on a route allowing the sustained required speed

35. When the ignition switch is cycled from ON to OFF and back to ON, the Composite Vehicle's ACC system defaults to:

A. A permanently disabled state requiring a scan tool to re-enable it

B. The ON state when the ignition is cycled back to the on position

C. A locked-out state below a 45 mph minimum activation threshold

D. Whatever custom following-distance setting was last selected

36. Which forward radar mounting statement matches the Composite Vehicle reference?

A. The bracket and module are welded together and replaced as a unit

B. The module is aimed automatically with no physical adjustment step

C. The module is calibrated solely through a dynamic road test alone

D. The bracket and module are serviced separately as distinct parts

37. If a forward collision warning intermittently misses a stopped vehicle and the radar passes self-test, the most appropriate next step is to:

A. Reprogram the instrument cluster module to a newer software version

B. Replace the multifunction forward camera assembly as the first step

C. Perform a dynamic recalibration before any visual inspection occurs

D. Inspect the radar's aim, mounting, and any front fascia obstruction

38. ADAS data on the Composite Vehicle is communicated primarily over which network?

A. The ADAS CAN bus connecting the system's various ADAS modules

B. A wireless link established individually between each sensor pair

C. The low-speed body circuit shared with the exterior lighting loads

D. A point-to-point analog harness with no shared digital bus at all

39. Which feature relies primarily on the forward-facing camera rather than on radar?

A. Maintaining a set following distance behind a detected lead vehicle

B. Warning of a vehicle present in the adjacent rear blind spot zone

C. Reading posted speed limit signs positioned along the roadway ahead

D. Alerting to cross traffic while the vehicle is backing out slowly

40. If the calibration target is placed slightly off-center from the vehicle axis during a static camera calibration, the most likely outcome is:

A. A marginally inaccurate calibration causing in-lane steering drift

B. A faster calibration because the camera scans a wider visual area

C. An automatic switch to a dynamic calibration to correct the offset

D. No measurable effect because the camera centers its own reference

41. When several ADAS features fail at once after minor front-end work, the fastest path to an accurate diagnosis is to:

A. Replace the forward radar and camera together as a precaution first

B. Clear all codes and return the vehicle without any further testing

C. Pre-scan, review codes and network status, then test systematically

D. Recalibrate every sensor on the vehicle before scanning for codes

42. The single most critical requirement for static forward camera target placement is:

A. A backlight source illuminating the rear face of the target board

B. Correct distance and centering relative to the vehicle reference axis

C. A 45-degree tilt of the target toward the front bumper of the vehicle

D. Placement several feet behind the vehicle's rear bumper line area

43. If a technician must turn off an ADAS feature for a road test, the intended method on the Composite Vehicle is to use:

A. The dedicated ADAS fuse pulled directly from the underhood fuse box

B. A factory scan tool session that the manufacturer must authorize first

C. The forward camera connector disconnected by hand at the mirror base

D. The ADAS control panel switch located inside the vehicle cabin area

44. If a required calibration is skipped after a sensor-affecting repair, the most likely consequence is:

A. A sharp and immediate decrease in the vehicle's overall fuel economy

B. An ADAS feature operating inaccurately or failing to function properly

C. Erratic transmission shifting behavior occurring at highway road speeds

D. A faster-than-normal battery discharge during routine vehicle driving

45. Which sequence correctly represents the proper ADAS repair workflow after a sensor-affecting collision repair?

A. Calibrate first, then repair, then pre-scan, then a road test only

B. Pre-scan, repair, calibrate per procedure, then post-scan to verify

C. Clear codes, repair, then return the vehicle with no further scan

D. Post-scan, replace all sensors, then pre-scan as the closing step

46. Understanding which modules share a given bus segment during a communication-fault diagnosis primarily helps the technician to:

A. Select the correct engine oil viscosity for the verification road test

B. Determine the proper tire inflation pressure for the calibration setup

C. Choose the appropriate wiper blade length for the test road drive

D. Narrow the fault to the affected bus and its connected ADAS modules

47. Which module is identified as the primary node for ADAS CAN bus communication among the rear corner radars?

A. The left rear corner radar module designated as the primary node

B. The right rear corner radar module nearest the exhaust system outlet

C. The forward radar module mounted behind the front fascia panel area

D. The instrument cluster module located within the dashboard assembly

48. A vehicle must be established to its correct geometry before a forward camera calibration. The references that define that geometry are:

A. The odometer reading and engine hours stored in the cluster memory

B. The vehicle's thrust line and centerline geometric reference axes

C. The radar transmit frequency and ultrasonic firmware revision level

D. The battery state of charge and the engine coolant temperature value

49. If overhead lighting in the service bay is dim during a static radar calibration, the most likely effect on the radar procedure is that it will be:

A. Improved because reduced glare sharpens the radar's target return

B. Degraded because the radar relies on visible light to see the target

C. Largely unaffected because radar uses radio reflections, not light

D. Converted to a camera procedure to compensate for the dim lighting

50. A medium-range radar specified at 0–160 meters is best suited to support which feature?

A. Close-range park assist maneuvering within one meter of an obstacle

B. Reading posted speed limit signs positioned along the roadway ahead

C. Forward detection for adaptive cruise control and collision warning

D. Detecting painted lane markings used by the lane keep assist function

Answer Key & Full Answer Explanations

1. A — A below-spec ride height makes the calibration inaccurate because the sensor aim no longer matches the reference. Calibration assumes the specified height, so a low stance tilts the aim. The camera does not self-level, and a low stance does not speed up or improve the result.

2. C — Correct target distance and centering let the camera establish an accurate aim reference relative to the vehicle. That geometric relationship is what the camera learns. It does not raise voltage, select the procedure type, or disconnect from the bus.

3. C — Reflective metal near the target corrupts the calibration because stray reflections distort the radar return. Radar relies on clean returns from the intended target. The metal does not reinforce the signal, get ignored, or convert the procedure to camera-based.

4. A — Disconnecting the battery to clear codes is not a valid calibration prerequisite. Correct ride height, properly inflated and evenly worn tires, and a level floor are valid prerequisites that establish accurate aim. Clearing codes by disconnect erases data and does nothing to prepare the vehicle geometrically.

5. C — With the switched-ignition feed open, the module fails to power up or operate when the ignition is turned on, despite battery voltage being present. Both sources are needed for normal operation. It does not run normally, change frequency, or overcharge a resistor.

6. C — A windshield replacement changes the camera's mounting reference and forward aim, which is why recalibration is required. The new glass shifts the camera reference. It does not reset ultrasonic firmware, alter radar frequency, or reprogram the PCM.

7. B — A dynamic calibration on a route with faded lane markings will fail to complete because the camera cannot read the markings. The procedure depends on clear markings while driving. It does not complete faster, switch to static automatically, or improve in accuracy.

8. D — Blind spot warning depends on the rear corner radar to detect vehicles in the adjacent rear-lane blind spot zone reliably at speed. That is the radar's role in this feature. Forward detection, sign reading, and close-range parking are other systems' functions.

9. A — Loss of the left rear corner radar, which is primary, most directly affects ADAS CAN bus communication for which that module is primary. The reference assigns it that role. Camera sign recognition, front ultrasonic sensing, and cluster gauge sweep are unrelated to this module's role.

10. C — ACC following distance is adjusted through the instrument cluster module (ICM) interface in the dash, per the reference. That is the documented driver interface. A rotary dial, scan tool, or console touchscreen are not specified for this.

11. B — A rear corner radar replaced but not initialized will fail to communicate properly until initialization is performed. The reference requires initialization to restore communication. It does not communicate immediately, change frequency, or recalibrate the camera.

12. D — The medium-range forward radar covers about 0 to 160 meters (0–525 ft) per the reference. This range supports forward functions like ACC and collision warning. The 30-meter, sub-5-meter, and 500-meter options contradict the specification.

13. D — Repairing or replacing the bent bracket, then aiming and calibrating the radar, is correct because a bent bracket misaims an otherwise good module. Radar does not self-compensate for physical misalignment. The camera and ultrasonic options are unrelated.

14. A — ACC becomes active in any forward gear above about 5 mph (8.0 km/h) per the reference. That is the documented activation threshold. The 25 mph, 45 mph, and no-limit options are incorrect.

15. D — A routine cabin air filter replacement would not require a forward camera recalibration. A windshield replacement, a camera module replacement, and a ride-height change from a lift all disturb the camera reference and do require recalibration. The cabin filter does not affect camera aim.

16. B — A camera-specific loss of sign recognition, with radar normal, points to the forward-facing camera, its calibration, or lens condition. Sign recognition is an image-based camera function. Rear radars, ultrasonic sensors, and the ACC switch are not involved.

17. B — A pre-scan documents the fault codes present before the repair is started, creating a baseline record. It identifies pre-existing faults for the shop and customer. It does not clear codes without record, raise voltage, or reset TPMS.

18. A — Both rear corner radars offline while the rest of the network communicates points to an open or fault in the private CAN bus shared by the two radars. Their shared bus means one fault can disable both. A forward radar bracket, cabin filter, or windshield camera would not produce this pattern.

19. B — The ultrasonic sensors provide a close-range input analyzed for use by the overall ADAS system, per the reference, consistent with park-assist sensing. They are short-range devices. They do not drive ACC, read lane markings, or feed sign recognition.

20. A — A static calibration on a sloped floor will be inaccurate because the tilted vehicle misaims the camera. Static calibration assumes the vehicle sits level on its reference geometry. The camera does not compensate for slope, switch to dynamic, or improve from the angle.

21. D — Verifying radar aim and inspecting the fascia for material or paint buildup is the best next check for false FCW after a fascia repair. Excess material in front of the radar or a slight aim error can cause false alerts even with a good bracket. Cluster replacement, ultrasonic init, and a transmission reflash do not address this.

22. C — A fault in the ADAS CAN bus segment serving those modules explains multiple ADAS "no communication" reports while powertrain modules respond. The pattern localizes to the shared ADAS network. A single sensor, a dirty lens, or a PCM processor failure would not knock out multiple ADAS modules at once.

23. C — The 120-ohm component terminates the private CAN bus correctly to prevent signal reflections. Proper termination maintains reliable corner-radar communication. It does not reduce supply voltage, convert returns to digital, or filter camera image noise.

24. D — Restoring correct ride height, then re-aiming and calibrating the radar, addresses the root cause when a lift raises elevation readings. The lift changes vehicle attitude and shifts radar aim. Replacing or reflashing modules does not correct a physical aim change.

25. B — Rear cross traffic alert is most useful when backing out of a parking spot into traffic crossing from the sides. RCTA warns of vehicles approaching from the sides while reversing. Highway cruising, forward parking, and sign reading are not RCTA scenarios.

26. D — A radar that communicates but reports implausible data after a collision is best explained by its physical aim or mounting being disturbed. Bus communication is intact, so the fault is mechanical aim. A lost cluster setting, ultrasonic init, or open resistor would present differently.

27. B — Capturing stored and pending codes along with network status is the appropriate first step for an intermittent communication fault. Gathering data before acting preserves the evidence needed to trace the problem. Replacing parts or clearing codes first destroys that evidence.

28. A — Testing the affected module's power, ground, and bus continuity best isolates a one-sided "lost communication" fault. This pinpoints supply, ground, or bus-path issues before replacing parts. Replacing both modules, recalibrating the camera, or reflashing the cluster wastes effort.

29. D — Sensor reference geometry depends on a correct vehicle thrust line, which is why thrust-angle correction matters before calibration. Alignment establishes the geometric axes ADAS aiming references. It does not change radar clock timing or fuel injection, and it is not unrelated.

30. C — A camera calibration following the vehicle's specified procedure is the remaining required step. Initialization alone does not establish the camera's aim reference, so erratic lane keep assist persists. Resetting TPMS, reinitializing ultrasonics, or replacing the radar does not address camera referencing.

31. A — A post-scan confirms the codes are resolved and the systems operate correctly, closing out the repair. It validates the work after calibration. Documenting pre-existing faults is the pre-scan's role, and the post-scan does not raise voltage or set thrust line.

32. A — Underinflated, unevenly worn tires alter the ride height and therefore the sensor aim toward the road, so they must be corrected first. Calibration assumes the specified reference height. Tire condition does not change radar frequency, discharge the battery, or raise bus noise for this reason.

33. B — The forward radar module and multifunction forward camera are the primary inputs for several forward ADAS features, per the reference. Multiple functions rely on these two sensors. They are not mere warning outputs, ultrasonic-only components, or fully isolated units.

34. D — Repeating the drive on a route that allows the required speed to be sustained is correct when logging shows the speed was rarely held. Dynamic calibration needs sustained specified speed to complete. Switching to static, replacing the camera, or initializing radars does not address the unmet drive condition.

35. B — Cycling the ignition OFF then back ON causes ACC to default to the ON state, per the reference. This documented default behavior must be recognized when verifying status. The disabled, locked-out, and retained-setting options contradict the reference.

36. D — The bracket and forward radar module are serviced separately as distinct parts, per the reference. This allows bracket service without replacing the module. They are not welded as a unit, self-aiming, or dynamic-only.

37. D — Inspecting the radar's aim, mounting, and any front fascia obstruction is the appropriate next step when the module self-tests good but misses stopped vehicles intermittently. Physical misalignment or obstruction commonly causes missed targets. Reprogramming the cluster, replacing the camera, or recalibrating first does not address radar aim.

38. A — ADAS data is communicated over the ADAS CAN bus connecting the ADAS modules, per the reference. This shared network is the backbone for ADAS communication. A wireless link, the body lighting circuit, and a point-to-point analog harness are incorrect.

39. C — Reading posted speed limit signs is a forward-facing camera function. Sign recognition is image-based, unlike radar ranging. Following-distance keeping, blind spot warning, and rear cross traffic alert are radar-based functions.

40. A — A target placed slightly off-center produces a marginally inaccurate calibration causing in-lane steering drift. Static camera accuracy depends on precise centering. It does not speed up calibration, switch to dynamic, or have no effect.

41. C — Pre-scanning, reviewing codes and network status, then testing systematically is the fastest path to an accurate diagnosis when several features fail after front-end work. This gathers evidence before acting. Blanket replacement, clearing codes, or recalibrating everything first are inefficient and risk masking the fault.

42. B — Correct distance and centering relative to the vehicle reference axis is the single most critical static camera target placement requirement. Accuracy depends on this precise geometric relationship. Backlighting, a 45-degree tilt, and rear placement are not the governing requirement.

43. D — The ADAS control panel switch in the cabin is the intended method to turn an ADAS feature off for a road test, per the reference. It is the designed cabin-level disable control. Pulling a fuse, a factory-only session, or unplugging the camera are not the specified method.

44. B — Skipping a required calibration most likely results in an ADAS feature operating inaccurately or failing to function. A misreferenced sensor cannot perform reliably. Fuel economy, transmission shifting, and battery drain are not the relevant consequences.

45. B — The proper workflow is pre-scan, repair, calibrate per procedure, then post-scan to verify. The pre-scan documents codes, calibration restores reference after repair, and the post-scan confirms resolution. The other sequences omit or misorder essential steps.

46. D — Knowing which modules share a bus segment lets the technician narrow the fault to the affected bus and its connected ADAS modules. Network mapping is a diagnostic aid for communication faults. Oil viscosity, tire pressure, and wiper length are irrelevant to that purpose.

47. A — The left rear corner radar module is designated as the primary node for ADAS CAN bus communication, per the reference. The reference assigns this role specifically to the left rear unit. The right rear radar, forward radar, and cluster module are not the primary node.

48. B — The vehicle's thrust line and centerline geometric reference axes define vehicle geometry for camera calibration. Targets are positioned relative to these axes. Odometer/engine hours, radar frequency/firmware, and battery/coolant values do not define this geometry.

49. C — Dim overhead lighting leaves a static radar calibration largely unaffected because radar uses radio reflections, not visible light. Lighting matters for cameras, not radar ranging. It does not improve the return, degrade it, or force a camera procedure.

50. C — A 0–160 meter medium-range radar is best suited to forward detection for adaptive cruise control and collision warning. That range matches forward ranging functions. Close-range park assist, sign reading, and lane marking detection are handled by other sensors.