

PRACTICE EXAM 16: ASE C1 SIMULATION (50 QUESTIONS)

Recommended time: 75 minutes. Domain distribution: 23 Communications / 18 Product Knowledge / 9 Shop Operations. Content angles distinctly different from Exams 1–9, 11, and 12.

1. A customer says they need the vehicle ready by Friday because of a family wedding. The consultant should:
 - A. Confirm the deadline, assess what the shop can realistically deliver, and communicate honestly about feasibility
 - B. Promise Friday completion regardless of the actual time required to complete the customer's repair work today
 - C. Refuse the timeline request and tell the customer to schedule around the shop's standard turnaround time
 - D. Charge the customer a "deadline fee" automatically because of the specific completion date that was given

2. The harmonic balancer (crank pulley damper) on the front of the engine functions to:
 - A. Filter the engine's lubricating oil before it reaches the main bearings inside the crankshaft assembly
 - B. Drive the engine's water pump and alternator directly through a chain inside the timing cover
 - C. Dampen torsional vibrations in the crankshaft to prevent crank failure and reduce engine vibration
 - D. Generate the alternating current the alternator needs through its rotating magnetic field assembly

3. The most common engine oil pump on modern passenger vehicles is:
 - A. A piston pump driven by a small electric motor located inside the oil pan below the engine
 - B. A diaphragm pump pulsed by intake manifold vacuum to provide lubrication for the entire engine
 - C. A gerotor or gear pump driven by the crankshaft directly or via chain, providing engine oil pressure
 - D. A centrifugal pump driven by the camshaft inside the cylinder head above the timing chain area

4. Automotive lifts in a repair shop must be inspected:
 - A. Once every five years by a manufacturer technician and never need any inspection in between for routine use
 - B. Only when a lift visibly malfunctions or shows damage that an employee happens to notice during use today

C. Only at the shop's discretion since lift inspection is not currently regulated by any specific safety standards

D. Daily by the operator before use and annually by a certified inspector, with inspection records maintained

5. A customer asks the consultant whether they should purchase an extended service contract for their vehicle. The consultant should:

A. Pressure the customer to purchase whatever extended contract product the shop is selling at the time today

B. Discuss general factors like age, repair history, and coverage scope, then recommend the customer research options today

C. Refuse to discuss extended service contracts and direct the customer to research the topic entirely on their own

D. Tell the customer that extended service contracts are always a waste of money for every customer

6. The oil pressure relief valve in an engine's oil pump functions to:

A. Direct unfiltered oil back to the oil pan whenever the oil filter becomes too clogged to flow through

B. Open the bypass passage when engine oil temperature exceeds a defined threshold during operation

C. Open and divert oil back to the pan when pressure exceeds the oil pump's designed maximum operating pressure

D. Maintain engine oil temperature within a defined range by routing some oil through the engine's oil cooler

7. A customer asks whether the shop offers financing options for an unexpectedly large repair bill. The consultant should:

A. Refuse to discuss financing options because financing falls outside the shop's normal service offerings today

B. Tell the customer they must pay the entire amount in cash before the vehicle leaves the shop today

C. Direct the customer to apply for a personal loan at their bank without any further conversation today

D. Explain any financing partnerships the shop has, discuss eligibility briefly, and let the customer decide on whether to apply

8. A customer repeatedly cuts off the consultant mid-explanation during the visit. The consultant should:

A. Match the customer's interruption pattern by cutting them off the same way they cut off the consultant

B. Pause respectfully, let the customer finish, and ask if there is something specific they want addressed first

C. Stop talking entirely and refuse to provide any further information until the customer apologizes

D. Speak louder and faster to talk over the customer and finish the sentence regardless of any interruption

9. An engine oil cooler on a vehicle functions to:

- A. Cool the engine's lubricating oil using compressed refrigerant from the air conditioning system
- B. Cool the engine coolant by routing it through the oil pan before the coolant returns to the radiator
- C. Cool the engine oil by routing it through a small heat exchanger (air-cooled or coolant-cooled) for heavy use
- D. Cool the engine's intake air after the air filter on the way to the throttle body intake system

10. A customer asks the consultant if the shop offers pre-purchase inspections (PPI) for a used vehicle they are considering buying. The consultant should:

- A. Refuse the service because pre-purchase inspections are outside the shop's standard service offerings today
- B. Charge a deliberately inflated PPI fee to discourage the customer from requesting that type of service today
- C. Tell the customer that the shop never performs pre-purchase inspections and refer them somewhere else entirely
- D. Explain the PPI process, the typical scope (mechanical and visual), and the fee, then schedule the inspection

11. Variable valve lift technology (such as VTEC, MultiAir, Valvetronic) provides:

- A. Constant valve timing regardless of engine speed or load throughout the entire vehicle operating range today
- B. Variable valve opening height and duration, allowing the engine to optimize breathing across the operating range today
- C. Complete elimination of the engine's camshaft, replaced by electrically actuated valves at every cylinder
- D. Mechanical phasing of the camshaft to retard or advance valve timing without changing the lift height

12. A customer asks whether the shop offers Saturday or weekend service hours. The consultant should:

- A. Provide accurate information about the shop's actual daily operating hours and weekend service availability for customers
- B. Refuse to share the shop's hours with the customer in order to avoid weekend appointment requests
- C. Tell the customer that all weekend appointments cost double the standard weekday labor rate at this shop
- D. Direct the customer to find the shop's hours on Google without confirming the actual hours during the conversation

13. A part needed for a customer's repair must be specially ordered with a longer lead time. The consultant should:

- A. Order the part automatically without consulting the customer and add the cost to the customer's invoice

- B. Refuse to perform the repair because the part is not in standard stock at the shop's parts inventory today
- C. Communicate the lead time to the customer, obtain authorization, and schedule the repair around parts arrival
- D. Substitute a different non-equivalent part to avoid the special order without informing the customer at all

14. A customer at intake says their spouse "knows more about cars" and the consultant should call their spouse to discuss. The consultant should:

- A. Verify the registered owner, address the customer present primarily, and call the spouse only with clear permission
- B. Refuse to perform any work until the spouse comes to the shop in person regardless of the present customer's wishes
- C. Tell the customer that the shop does not discuss any service over the phone with anyone other than the customer
- D. Call the spouse immediately without any further conversation with the customer who actually came in to the shop

15. A customer attempts to pay with a personal check, which the shop does not accept per its current payment policy. The consultant should:

- A. Refuse the check rudely and tell the customer they should have known the shop's payment policy in advance
- B. Politely explain the shop's payment policy, list the accepted payment methods, and offer the customer alternatives
- C. Accept the check against the shop's policy to keep this particular customer happy at this specific visit today
- D. Charge the customer a "non-standard payment fee" for offering a check before refusing to accept it from them

16. A variable geometry turbocharger (VGT) differs from a conventional fixed-geometry turbocharger in that the VGT:

- A. Uses two separate turbochargers — one for low RPM and one for high RPM — switched by a valve
- B. Operates without any exhaust gas flow at all, driven instead by an electric motor on the turbo shaft
- C. Eliminates the need for any wastegate by simply venting excess exhaust pressure into the atmosphere
- D. Uses adjustable vanes inside the turbine housing to vary exhaust flow angles for reduced lag and broader boost

17. A customer arrives with a vehicle that is visibly leaking a liquid in the shop's parking lot. The consultant should:

- A. Acknowledge the leak immediately, ask the customer about it, and recommend an inspection of the vehicle's fluids

- B. Ignore the leak because the customer did not specifically request that the leak be addressed during the visit
- C. Refuse service entirely because of the leak's presence on the shop's parking lot surface area outside today
- D. Charge the customer a "spill cleanup fee" before any service work is initiated on the customer's vehicle

18. The coolant reservoir on the side of a modern engine's cooling system is a:

- A. Pressurized fuel tank for the engine's emergency fuel reserve during normal vehicle operation conditions
- B. Pneumatic accumulator that stores compressed air for the vehicle's air suspension system at any time
- C. Coolant overflow tank that captures expansion as coolant heats and returns it as the coolant cools
- D. Hydraulic reservoir for the vehicle's power steering and braking systems during normal vehicle operation

19. A customer brings a folder of service records and asks the consultant to help them understand the history. The consultant should:

- A. Refuse the request because reviewing service records falls outside the consultant's normal service role today
- B. Charge a "records review" fee before the consultant agrees to look at the service history with the customer
- C. Review the records with the customer, explain what each item means, and identify any gaps or trends for them
- D. Glance briefly at the folder and tell the customer everything looks fine without any actual records review

20. A customer arrives with an infant and stroller in the shop's lobby. The consultant should:

- A. Welcome the family, offer accommodating space (chair, room for the stroller), and complete the intake efficiently
- B. Refuse to serve the customer until they make alternative childcare arrangements before any future visit today
- C. Insist the customer leaves the infant outside in the vehicle during the entire intake conversation at the counter
- D. Charge the customer an "extra occupant" fee for the additional people taking up the shop lobby space today

21. A mechanical engine cooling fan with a viscous fan clutch operates by:

- A. Spinning at the same speed as the water pump continuously regardless of engine temperature throughout the day
- B. Engaging the fan more firmly as engine temperature rises via a temperature-sensitive silicone fluid coupling inside

- C. Spinning only in reverse direction during high-temperature conditions to pull air out of the engine compartment
- D. Operating only when the engine is shut off to provide residual cooling for a short period after operation

22. The exhaust resonator on a vehicle's exhaust system functions to:

- A. Increase exhaust backpressure to improve the engine's low-RPM torque output during routine normal driving conditions
- B. Filter exhaust gas particulates before they reach the catalytic converter inside the exhaust system today
- C. Convert exhaust gas energy into electrical current to recharge the vehicle's battery during normal operation
- D. Cancel specific exhaust frequencies through internal chambers and tubes to reduce drone and noise

23. The cetane rating of diesel fuel indicates the fuel's:

- A. Ignition quality, specifically how quickly diesel fuel ignites under the heat of compression in the cylinder
- B. Total energy content per gallon, measured in British Thermal Units across all available diesel grades sold
- C. Cold-weather flow point, indicating the lowest temperature at which the diesel fuel will still flow normally today
- D. Resistance to bacterial growth in the fuel tank during long-term storage of the diesel fuel between uses

24. A shop's policy for borrowed or shared tools between technicians should:

- A. Allow tools to circulate informally without tracking to keep the shop's workflow moving quickly throughout day
- B. Forbid all tool sharing between technicians regardless of how brief the loan or how routine the situation might be
- C. Document borrowed-tool movements (who borrowed, when returned) to prevent any loss and ensure tool availability
- D. Permanently assign every tool to one technician with no sharing allowed in the shop facility at any time

25. The consultant notices that a customer's contact phone number on file appears to be incorrect (calls go to a wrong number). The consultant should:

- A. Tactfully verify the phone number with the customer at the next opportunity and update the customer's file accordingly
- B. Send a postcard to the customer's home address instead of attempting to verify the phone number entirely today
- C. Tell the customer that they entered their own phone number incorrectly and embarrass them at the counter today

D. Continue calling the wrong number repeatedly because the customer should answer their own phone number always

26. A customer asks the consultant to put the invoice in someone else's name (e.g., a business or family member). The consultant should:

- A. Refuse the request bluntly without considering any of the customer's possible legitimate business reasons today
- B. Verify the arrangement, confirm who is authorizing the payment, and follow the shop's invoicing policy accordingly
- C. Issue the invoice in any name the customer requests without verifying the arrangement or authorization details
- D. Charge the customer a "third-party invoicing fee" before agreeing to put the invoice in someone else's name

27. The auto stop-start system on a modern vehicle:

- A. Permanently disables the vehicle's electric power steering during stops at any traffic signal during driving
- B. Increases fuel consumption at idle by adding an additional load on the alternator for accessories
- C. Generates a brake assist boost when the vehicle is stopped at idle for any extended period of time
- D. Shuts the engine off when the vehicle stops and restarts it when the brake releases for fuel savings

28. The main bearings inside an engine support the:

- A. Camshaft journals as the camshaft rotates inside the cylinder head during normal engine operation
- B. Connecting rod ends at their attachment points to the crankshaft journals during engine operation
- C. Wrist pin connections between the connecting rod's small end and the piston during normal engine operation
- D. Crankshaft journals as the crankshaft rotates inside the engine block during normal engine operation

29. The hill start assist (HSA) feature on a modern vehicle functions to:

- A. Hold brake pressure briefly after the driver releases the brake pedal on an incline, before they begin to accelerate
- B. Lock the parking brake automatically whenever the vehicle is parked on a steep grade above ten degrees of incline
- C. Disable the engine's stop-start system entirely whenever the vehicle is parked or stopped on any grade or incline
- D. Engage the four-wheel drive system automatically whenever the vehicle is detected to be on a slope at all

30. The small round metal disks visible on the side of an engine block (sometimes called "freeze plugs" or "core plugs") are:

- A. Sensors that monitor the temperature of the engine block at different points during normal engine operation
- B. Drain plugs the technician removes to drain engine oil during a scheduled engine oil change service visit
- C. Components of the engine's ignition system that distribute high voltage to each cylinder's individual spark plug today
- D. Casting holes left from the manufacturing process and sealed afterward to contain coolant in the engine block

31. A customer asks if the shop will sell them parts only (without installation) for a DIY repair at home. The consultant should:

- A. Refuse the request bluntly and tell the customer the shop only sells parts paired with installation labor today
- B. Check the shop's parts-only sales policy, communicate clearly, and either provide the parts or explain why not
- C. Sell the parts at deeply discounted prices to encourage the customer to attempt their own DIY repair at home
- D. Provide free parts to the customer in exchange for a promise of future visits to the shop for installation work

32. A customer pushes back on a recommendation and says, "I'll just have someone else look at it." The consultant should:

- A. Pressure the customer to authorize the recommendation immediately so they do not take it to a competitor
- B. Respect the decision, provide a written summary of the findings, and welcome the customer's return after consideration
- C. Refuse to release the vehicle until the customer authorizes the recommended work at the shop's stated price
- D. Lower the price automatically to undercut the unknown competitor regardless of the merits of the customer's decision

33. A part that arrived from a vendor and is incorrect for the customer's vehicle should be:

- A. Returned to the vendor per the vendor's return process and the correct part ordered with documentation of error
- B. Installed anyway to keep the repair moving forward regardless of whether the part is correct for the vehicle
- C. Discarded entirely and the cost charged to the customer's invoice as a "wrong part" line item on the bill
- D. Stored on the shop's shelf indefinitely with the hope that a future vehicle may need that incorrect part

34. Daytime running lights (DRL) on a modern vehicle function to:

- A. Provide additional rear illumination to assist the driver's depth perception during forward vehicle operation
- B. Replace the headlight system entirely during day or night driving for the vehicle's complete illumination needs
- C. Increase the vehicle's daytime visibility to other drivers by illuminating front-facing lights during operation
- D. Reduce the load on the vehicle's battery by running on the alternator's surplus output during normal driving

35. A customer wants the shop to install their own oil they purchased online (rather than shop-supplied oil). The consultant should:

- A. Refuse the request bluntly and require the customer to use shop-supplied oil for all oil change services
- B. Accept the customer's oil and waive the labor charge to compensate the customer for sourcing their own oil
- C. Accept the oil without any documentation or warranty disclosure to keep the conversation simple at intake
- D. Check the shop's customer-supplied parts policy, explain warranty implications, and proceed if the policy permits

36. At payment time, the consultant notices that the customer's saved payment card on file has expired. The consultant should:

- A. Politely inform the customer of the expiration, request an updated card, and process the payment normally today
- B. Refuse all service entirely until the customer provides a current credit card with a valid expiration date
- C. Charge the expired card anyway and tell the customer to deal with their bank if the charge is rejected
- D. Tell the customer that an expired card means they cannot use any credit card at the shop ever again

37. The shop's customer database (containing names, addresses, phone numbers, payment info) should be:

- A. Stored in an unsecured spreadsheet on the consultant's personal laptop for fast reference whenever needed daily
- B. Shared freely with parts vendors and other businesses without customer consent for marketing or other reasons
- C. Posted publicly on the shop's website for marketing purposes and customer convenience and easy reference
- D. Protected with appropriate access controls, retention policies, and basic data security practices throughout the shop

38. A balance shaft inside an engine functions to:

- A. Distribute oil pressure evenly throughout the engine block by running parallel to the main crankshaft

- B. Counteract secondary vibration forces created by the piston motion in certain engine designs and configurations
- C. Provide a backup drive for the camshaft if the primary timing chain or belt should fail in operation
- D. Generate the electrical signal the engine control module uses to determine the current crankshaft position

39. A customer arrives at the shop just as the doors are unlocked at the official opening time. The consultant should:

- A. Welcome the customer warmly, complete the intake, and treat them with the same care as any other arriving customer
- B. Tell the customer they should have waited a few minutes after opening to give the shop time to prepare
- C. Refuse to begin the intake until at least fifteen minutes after the shop's official opening has fully passed
- D. Charge an "early arrival fee" to discourage customers from arriving at the shop's actual opening time later

40. The "break-in" period for a brand-new vehicle is typically:

- A. Eliminated entirely on modern vehicles because new engines are now fully ready from the factory immediately
- B. A 500-mile period during which the customer must use only synthetic oil exclusively in the new engine today
- C. The first 500-1,000 miles during which the manufacturer recommends varied driving and avoidance of extreme loads
- D. A 50,000-mile period during which the engine should not exceed 3,000 RPM under any driving condition

41. The shop's insurance coverage for technician test drives of customer vehicles is typically:

- A. Provided under the shop's garage liability policy, which covers technician operation of customer vehicles at work
- B. The personal responsibility of the technician, who must purchase additional insurance to cover any test drive activity
- C. Charged separately to each customer at the time of the visit before any test drive can be performed at all today
- D. Not provided by any shop because no insurance company offers coverage for technician test drives in any context

42. After a repair, a customer asks the consultant to remove personal items they left in the vehicle (e.g., loose change in the cup holder). The consultant should:

- A. Refuse the request because removing personal items is outside the shop's standard service offerings completely

- B. Charge a separate "item retrieval fee" for the consultant's time spent removing the customer's personal items today
- C. Throw away any personal items in the vehicle without the customer's permission to keep the shop floor clean
- D. Briefly retrieve the items as a courtesy if they are clearly identified and easily accessible, then return them

43. A customer asks the consultant whether the shop is hiring. The consultant should:

- A. Provide honest information about current openings if any exist, and direct the customer to the proper hiring process
- B. Refuse to discuss employment matters with customers regardless of whether the customer is qualified for any position
- C. Pretend the shop is not hiring even when openings exist, to avoid awkward conversations during the customer's visit
- D. Tell the customer that the consultant has no idea whether the shop is hiring and direct them to leave shop today

44. A customer asks why labor rates have increased since their previous visit several years ago. The consultant should:

- A. Refuse to discuss labor rate increases and tell the customer the rate is what it is at this service
- B. Apologize repeatedly and offer the customer a significant discount to make up for the labor rate increase today
- C. Explain the factors driving labor rate adjustments (wages, training, equipment, regulatory costs) honestly to the customer
- D. Pretend rates have not changed and present the new rate as if it were the rate the shop always charged

45. A healthy engine at warm idle typically produces what manifold vacuum reading on a vacuum gauge?

- A. 0 inHg, since modern engines no longer produce manifold vacuum at any operating condition
- B. A steady reading of approximately 17-22 inHg, with minimal needle fluctuation at warm idle
- C. A widely varying reading of 0-30 inHg with rapid fluctuation across the entire gauge range
- D. Above 40 inHg, since modern fuel-injection engines produce very high manifold vacuum at idle continuously

46. A customer asks why sales tax was applied to a portion of their repair invoice. The consultant should:

- A. Refuse to discuss taxes and direct the customer to the state Department of Revenue without any further explanation
- B. Explain that sales tax applies to parts (and labor in some states) per applicable tax law and the shop's documentation
- C. Remove the tax from the invoice to keep the customer happy regardless of the actual state's sales tax law

D. Tell the customer that the shop is required to charge an arbitrary tax rate on every repair regardless of law

47. The shop's vehicle service history records should be retained for:

- A. One week, after which the records are routinely deleted to save the shop's storage space on its server
- B. One month, after which the records become irrelevant to the customer's ongoing vehicle maintenance discussions
- C. Until the customer requests deletion regardless of any legal record-retention requirements for repair facilities
- D. The period required by state law (typically three to seven years) or longer for ongoing customer relationship purposes

48. A shop's courtesy shuttle service for customers who need a ride home or to work is typically:

- A. Operated for free without any insurance or driver qualification requirements at the shop facility on every day
- B. Required by federal regulation at every automotive repair shop with more than five service bays at the facility
- C. A discretionary customer-service offering with shop-defined hours, range, and qualified driver requirements policy
- D. Available only on weekends because regular weekday traffic prevents the shuttle from operating efficiently today

49. A customer asks for the diagnostic findings in writing before authorizing any repair work. The consultant should:

- A. Refuse the request and tell the customer that diagnostic findings are only communicated verbally to the customer
- B. Provide a written summary of the technician's diagnostic findings, the recommended repair, and the cost estimate
- C. Charge an additional "documentation fee" for putting the diagnostic findings into a written format for customers
- D. Provide a verbal summary only and tell the customer to write it down themselves if they want a written record

50. After presenting a recommendation, the customer is silent for several seconds. The consultant should:

- A. Fill the silence immediately by repeating the recommendation in different words at the same time today
- B. Allow the silence, let the customer process the information, and follow up with an open question briefly later
- C. Withdraw the recommendation completely to relieve any pressure on the customer's decision-making process

D. Pressure the customer to authorize immediately to take advantage of the moment of silent decision today

Practice Exam 16 – Answer Explanations

1. A — A specific-event deadline requires honest assessment: confirm the deadline clearly, evaluate whether the shop can realistically deliver by then given parts, complexity, and current workload, and communicate honestly about feasibility. Reflexive promises set up missed commitments; refusing the request fails the customer's reasonable timing need; surcharging an inquiry is inappropriate.

2. C — The harmonic balancer dampens torsional vibrations in the crankshaft using a rubber-isolated outer ring that absorbs the rotational oscillations the firing pulses create. Without it, the crankshaft would suffer fatigue cracks and the engine would vibrate severely. Oil filtration, accessory drive, and current generation describe other components.

3. C — Most modern engines use a gerotor (or gear) oil pump driven by the crankshaft — either directly off the crank nose or via a short chain — pulling oil from the pan and pressurizing it through the engine's lubrication galleries. Electric, diaphragm, and centrifugal pumps are not standard primary oil-pump designs in passenger vehicles.

4. D — Automotive lifts require a daily pre-use inspection by the operator (chains, cables, safety locks, hydraulic leaks, hose condition) and an annual inspection by a certified ALI/ANSI-qualified inspector, with both records maintained on file. The other options would leave the shop's most critical safety equipment unmonitored.

5. B — Extended service contract decisions depend on the customer's specific situation — vehicle age, repair history to date, coverage scope (powertrain only vs comprehensive), deductible structure, and provider reputation — and the consultant's role is to discuss these general factors and direct the customer to make an informed decision. Pressure selling, refusing to help, and blanket dismissal all fail the request.

6. C — The oil pressure relief valve is a spring-loaded bypass inside the oil pump (or near its outlet) that opens when pressure rises above the pump's designed maximum — typically at cold start or high RPM — diverting excess oil back to the pan and protecting the system from over-pressure damage to filters, seals, and galleries.

7. D — Repair financing is a legitimate customer-service offering, and many shops partner with consumer financing programs (Synchrony Car Care, Snap Finance, EasyPay) — explaining the available partnerships, eligibility, and process is the appropriate response. Refusal, cash-only demands, or punting to the customer's bank fail customers who need a path to authorize necessary repairs.

8. B — A customer who repeatedly cuts off the consultant is usually trying to surface a specific concern, and the productive response is to pause, let them finish, and ask what they specifically want addressed first — that lets the customer's priority be heard before the conversation continues. Matching the interruption, going silent, or talking louder each escalate the dynamic rather than resolve it.

9. C — The engine oil cooler is a small heat exchanger — either air-cooled (a small radiator mounted in the airflow) or coolant-cooled (a stacked-plate exchanger plumbed into the engine's coolant loop) — that removes heat from the engine oil during heavy use or sustained high load. Refrigerant cooling, coolant cooling via the oil pan, and intake-air cooling describe different systems.

10. D — Pre-purchase inspections are a recognized service offering at many independent shops, and the customer deserves an honest explanation of the shop's PPI process (mechanical inspection, visual condition, road test, scan), the typical scope, the fee, and a scheduled appointment. Refusing, surcharging to discourage, or referring elsewhere all fail a routine commercial-service request.

11. B — Variable valve lift systems vary the actual valve opening height and duration — separately from cam phasing — so the engine can use a low-lift profile for fuel-efficient part-load operation and a high-lift profile for high-RPM power. Honda VTEC, BMW Valvetronic, and Fiat MultiAir are common examples. Constant timing, camless valves, and timing-only phasing describe different concepts.

12. A — Operating hours are basic shop information, and the customer's question deserves an honest answer about the shop's actual hours (including any Saturday service availability) so they can plan accordingly. Hiding hours, surcharging weekend appointments arbitrarily, or punting to Google all fail a routine inquiry that takes ten seconds to answer correctly.

13. C — A special-order part needing extended lead time requires a clear customer conversation: explain the expected lead time, obtain authorization to proceed with the order (and any required deposit), and schedule the repair around when the part will arrive at the shop. Silent ordering, refusing the repair, or substituting non-equivalent parts each fail standard parts-management procedure.

14. A — Repair authorizations belong to the registered owner, and the consultant should verify who that is, address them as the primary decision-maker, and contact the spouse only with the owner's explicit permission — respecting the customer present rather than dismissing them. Refusing to begin, blanket phone restrictions, or routing entirely to the absent spouse each fail the customer who came to the shop.

15. B — A non-accepted payment method calls for a polite, professional explanation: the shop's actual accepted methods (credit, debit, cash, mobile pay, financing partners), a brief reason if relevant, and an offer of alternatives the customer can use to complete the transaction. Rude refusal, against-policy acceptance, or invented surcharges each handle the moment poorly.

16. D — A variable geometry turbocharger uses adjustable vanes (or a sliding nozzle ring) inside the turbine housing to vary the angle and effective area of exhaust gas flow across the turbine — narrower at low RPM (faster spool, less lag), wider at high RPM (more flow, broader boost range). Twin turbos, electric drive, and atmospheric venting describe other forced-induction concepts.

17. A — A visibly leaking vehicle on the lot is a service opportunity and a safety responsibility — acknowledge the leak immediately, ask the customer if they know about it, and recommend an inspection to identify the fluid and source (oil, coolant, brake fluid, fuel, transmission fluid each indicate different urgency). Ignoring, refusing service, or charging cleanup fees fail the customer's interest and the shop's role.

18. C — The coolant reservoir is the overflow/recovery tank that accommodates coolant volume expansion as the system heats (coolant expands roughly 4% from cold to operating temperature) and pulls coolant back into the radiator as the system cools — maintaining a properly filled cooling loop without air pockets. It is not fuel, air-suspension, or steering-fluid related.

19. C — A customer bringing service records is asking for help interpreting their vehicle's history — reviewing the records together, explaining what each service entry means, identifying gaps (missed maintenance) or trends (recurring issues), is exactly the consultant's role and a strong relationship-building moment. Refusal, surcharges, and dismissive glances each waste the opportunity.

20. A — A customer with an infant and stroller deserves the same warm welcome as any other customer, with practical accommodation (a chair near the counter, room for the stroller) and an efficient intake that respects the family's situation. Refusing service, demanding the infant stay in the vehicle, or surcharging for occupancy each fail basic hospitality and respect for the customer.

21. B — A viscous (thermal) fan clutch contains silicone fluid whose viscosity changes with temperature: as engine compartment air heats, a bimetallic spring opens a valve that lets more silicone fluid into the working chamber, increasing the clutch's grip and spinning the fan faster. Continuous spinning, reverse operation, and post-shutdown operation describe behaviors other than the viscous clutch's design.

22. D — The exhaust resonator is a tuned acoustic chamber (often with perforated tubes and internal baffles) designed to cancel specific exhaust frequencies — typically low-RPM drone — through destructive interference, reducing cabin noise without significantly restricting flow. It does not increase backpressure, filter particulates, or generate electricity.

23. A — The cetane number rates diesel fuel's ignition quality — specifically the delay between fuel injection and the start of combustion under the heat of compression in the cylinder. Higher cetane means faster ignition, smoother combustion, and easier cold starting. Energy content, cold flow, and biological stability are measured by different specifications.

24. C — Documented borrowed-tool movement (who borrowed, when borrowed, when returned, condition on return) prevents tool loss, supports timely return so other technicians can work, and creates accountability without preventing the legitimate sharing that shops require. Untracked circulation, total prohibition, or permanent assignment each create operational friction.

25. A — A phone number that produces wrong-number calls is a data-quality issue, handled by tactful verification at the next customer touchpoint ("I want to make sure I have your number right — is it ...?") and a file update. Postcards, embarrassment, and persistent wrong-number calling all fail the routine data-hygiene fix.

26. B — Third-party invoicing requests (business name, family member, fleet account) call for verification of the actual business arrangement, confirmation of who is authorizing the payment, and adherence to the shop's invoicing policy — including any required signed authorization. Blanket refusal, no-questions issuance, or arbitrary fees each mishandle a routine request.

27. D — Auto stop-start systems shut the engine off when the vehicle stops (foot on brake, transmission in drive, hood closed, climate satisfied) and restart it instantly when the brake is released or the throttle is touched — saving fuel and reducing emissions during idle periods. Power-steering disable, increased idle consumption, and brake-boost generation describe other functions.

28. D — The main bearings sit between the crankshaft's main journals and the engine block, supporting the crankshaft as it rotates and providing the oil-film bearing surface that prevents metal-to-metal contact. Connecting rod bearings, camshaft bearings, and wrist pin bushings are separate bearings serving other parts of the rotating assembly.

29. A — Hill start assist holds brake pressure for roughly two seconds after the driver releases the brake pedal on a detected incline, preventing the vehicle from rolling backward while the driver moves their foot to the accelerator. Automatic parking brake, stop-start disable, and AWD engagement describe other features.

30. D — Core plugs (often called freeze plugs) are casting holes left from the engine block manufacturing process — used to extract sand cores from inside the block after casting — then sealed with shallow steel cups pressed into the openings to contain coolant in the water jacket. They are not sensors, oil-drain plugs, or ignition components.

31. B — Parts-only sales vary by shop policy — some shops do, some don't, some do only for established customers — and the appropriate response is to check the policy, communicate clearly to the customer, and either provide the parts (typically without labor warranty on DIY installation) or explain the policy reason. Refusal, dumping pricing, or barter pricing each handle the request poorly.

32. B — A customer announcing they'll seek another opinion is exercising their right to do so, and the relationship-preserving response is to respect the decision, provide a written summary of the findings (so the next shop has accurate information to work with), and welcome the customer's return after consideration. Pressure, refusal to release, and reflexive discounting each undermine trust.

33. A — Wrong parts get returned to the vendor per the vendor's return process (RMA, restocking conditions, time window), the correct part is ordered, and the error is documented for vendor-quality tracking and shop-process review. Installing wrong parts is dangerous and unprofessional; charging customers for vendor errors is unethical; indefinite shelf storage clutters parts inventory.

34. C — Daytime running lights are forward-facing lights (low-output headlights, dedicated LEDs, or modified high beams) that illuminate during vehicle operation regardless of ambient light — making the vehicle more visible to other drivers and demonstrating reduced daytime collision rates in studies that supported the regulation. They do not provide rear illumination or replace the headlight system.

35. D — Customer-supplied oil is a legitimate but consequential request — the shop's policy on customer-supplied parts, the warranty implications (the shop typically cannot warranty the oil itself or oil-related issues), and any required acknowledgment must be discussed before the work proceeds. Blanket refusal, free labor, or undocumented acceptance each fail proper handling.

36. A — An expired card on file is a routine situation — politely inform the customer ("I see the card on file has expired — could I get an updated one?"), capture the new card information, and process the payment normally. Refusing service, attempting the expired charge anyway, or telling the customer they can never use a credit card all overreact to a one-second update.

37. D — Customer database security is a real obligation — access controls (who can see the data), retention policies (how long records are kept), and basic data security practices (encryption, secure storage, no unauthorized sharing) protect the customers and the shop's exposure to data breach claims. Open spreadsheets, vendor sharing, and public posting each create unacceptable risk.

38. B — Balance shafts are weighted shafts (or pairs of counter-rotating shafts) inside an engine that counteract the secondary inertial forces produced by the piston motion in certain configurations — most commonly inline four-cylinder engines, where these forces would otherwise produce noticeable vibration at higher RPM. They are not oil-pressure distributors, backup cam drives, or position sensors.

39. A — A customer at opening time is a customer ready to be served, and the consultant should welcome them warmly, complete the intake, and treat them with the same care as any other customer arriving during the day. Reproaching the customer, refusing to begin, or surcharging the arrival each fail the basic welcome that every customer deserves.

40. C — The factory break-in period on a brand-new vehicle typically runs the first 500 to 1,000 miles, during which the manufacturer recommends varied driving (different speeds, light to moderate loads), avoidance of full-throttle acceleration, avoidance of sustained high-RPM operation, and avoidance of towing or heavy hauling. Break-in is not eliminated, not synthetic-oil-restricted, and not 50,000 miles.

41. A — Garage liability insurance is the standard shop coverage that includes operation of customer vehicles by the shop's employees during the normal course of work — diagnostic road tests, moving vehicles in the lot, post-repair verification drives. Individual technician insurance, per-test customer charges, and uninsurable claims each misrepresent how shops actually carry this routine risk.

42. D — Brief retrieval of clearly identified, easily accessible items (a wallet on the seat, a phone in the cup holder) is a small customer courtesy that takes a moment and reinforces care for the customer's property. Refusal, surcharging, or unauthorized disposal each fail a small reasonable request that costs the shop almost nothing to handle.

43. A — A customer asking about employment is potentially a future colleague — provide honest information about current openings if any exist (or note when openings typically appear), and direct them to the proper application process (online form, hiring manager, hiring email). Refusing, lying, or punting to ignorance each fail a fellow potential professional.

44. C — Labor rate increases deserve honest explanation: technician wages have risen (skilled labor shortages), training investments increase (electric vehicle and ADAS certifications), diagnostic equipment costs more, and regulatory compliance has expanded. Customers respond well to honest cost transparency. Refusal, panic discounting, or pretending rates haven't changed each fail the inquiry.

45. B — A healthy warm-engine idle produces a steady manifold vacuum reading of approximately 17 to 22 inches of mercury (with minor pulse fluctuation), reflecting the engine's normal pumping action against the closed throttle plate. Zero, wildly fluctuating, and above 40 inHg readings indicate engine problems (broken valves, ignition issues) or impossible physics (atmospheric pressure caps at about 30 inHg).

46. B — Sales tax on automotive repair varies by state (some tax parts only, some tax both parts and labor, a few exempt repairs entirely), and the customer deserves an honest explanation of which line items are taxed and why, supported by the shop's documentation. Refusal, customer-pleasing removal, or arbitrary-rate claims each fail a legitimate inquiry.

47. D — Service record retention is governed by state law (commonly three to seven years for repair records), often extended further for the customer-relationship value of accurate service history — a vehicle's service history follows it across owners, supports warranty claims, and helps the shop plan future service. Week-long, month-long, or customer-controlled retention all violate typical state requirements.

48. C — Courtesy shuttles are a discretionary customer-service offering, defined by the shop's policy: hours of operation, geographic range, driver qualifications and insurance, vehicle requirements. The service is not unregulated free-for-all, not federally mandated, and not weekend-only. The policy structure protects both the shop and the customers being transported.

49. B — A written diagnostic summary before authorization is a reasonable customer request — many states actually require it for repairs above a defined threshold — and providing the technician's findings, the recommended repair, and the cost estimate in writing supports both the customer's decision and the shop's authorization documentation. Refusing, surcharging, or shifting the burden to the customer each fail standard practice.

50. B — A silent customer is processing information, and the productive response is to allow the silence (resisting the urge to fill it), let the customer think, and then follow up with an open question ("What questions do you have so far?") rather than filling, withdrawing, or pressuring. Comfortable silence is one of the most underused tools in customer-facing sales conversations.