

PRACTICE EXAM 10 SIMULATION

1. A customer phones in a part request using a vague description. The specialist's most accurate first move is to:

- A. Ask clarifying questions to determine the component and application
- B. Fill the order exactly as the words were stated
- C. Quote the cheapest option to end the call
- D. Refuse the order without a part number

2. Which practice most directly prevents a part-number transposition error on a phone order?

- A. Quoting the price before the number
- B. Writing the number only after the call
- C. Shortening the number to its last digits
- D. Reading each character back aloud as it is recorded

3. A customer is angry about a wrong part on a down truck. The specialist's best first step is to:

- A. Quote the correct part's price immediately
- B. Explain the company return policy in detail
- C. Point out the customer's incomplete information
- D. Listen fully without interrupting or defending

4. What is the primary purpose of recording a lost sale?

- A. To calculate sales commission
- B. To penalize the late supplier

- C. To inform stocking of unmet demand
- D. To document a difficult customer

5. A specialist promises a special-order arrival date that slips by two days. The best action is to:

- A. Cancel the order to avoid the call
- B. Resell the part to a walk-in
- C. Call proactively with an honest updated timeline
- D. Wait silently until it arrives

6. Why must the same vehicle and component details be gathered whether the inquiry is by phone, counter, or email?

- A. The information needed is the same; only the method changes
- B. Email orders never require confirmation
- C. Phone customers always outrank counter customers
- D. The counter requires less information than the phone

7. A customer says only "it's a Freightliner" and expects a clutch lookup. The specialist recognizes this:

- A. Fully determines the correct clutch alone
- B. Sets the axle gear ratio automatically
- C. Narrows little without VIN and drivetrain details
- D. Identifies the engine and transmission precisely

8. In the parts sale sequence, presenting alternative parts comes immediately before:

- A. Determining the customer's need
- B. Closing the sale

- C. Greeting the customer
- D. Identifying the part

9. A feature stated as "heavier-duty bearing" becomes a benefit when expressed as:

- A. The bearing's part number
- B. The bearing's material composition
- C. The shelf location of the unit
- D. Fewer failures and less downtime for the fleet

10. A customer questions a \$60 core charge on a reman alternator. The accurate explanation is that it is:

- A. A non-refundable remanufacturing fee
- B. A government excise tax
- C. A penalty for choosing reman
- D. A refundable deposit returned with the old unit

11. A budget-focused customer has a rebuildable old unit. The best-matched option is:

- A. A remanufactured unit with a core charge
- B. The most expensive OE part
- C. A salvage part of unknown condition
- D. Refusing to offer any alternative

12. A customer buying brake shoes for a tandem's drive axles is most completely served when the specialist also addresses:

- A. A new windshield and wipers
- B. The fuel filter and air cleaner

- C. Hardware kits, drums if worn, and wheel seals
- D. A replacement steering gear box

13. Recommending a premium part for a light-duty truck the owner will sell in two months is:

- A. Appropriate upselling
- B. Required by ASE rules
- C. Overselling, since it serves the sale not the need
- D. Impossible, since premium parts won't fit

14. An OES part is best described as:

- A. Made by the OE supplier under its own brand
- B. A salvaged used component
- C. The cheapest economy grade
- D. Identical to OE in brand and price

15. A customer asks why a reman starter costs less than new. The accurate framing is that it is:

- A. An untested used part with no standard
- B. Rebuilt to specification at lower cost, with a core charge
- C. Always inferior to a new unit
- D. More expensive than new once the core is added

16. Promoting a delivery service to a busy repair shop is an example of:

- A. Overselling an unneeded part
- B. Value-adding service promotion

- C. A prohibited sales tactic
- D. A way to avoid recording the sale

17. A medium-duty truck's brake complaint mentions a "master cylinder." The specialist concludes the truck has:

- A. A hydraulic (or air-over-hydraulic) brake system
- B. An air brake system with spring chambers
- C. A walking-beam suspension fault
- D. A turbocharger oil leak

18. On a heavy-truck air brake system, the parking brake is held by:

- A. Continuous air pressure in the service chamber
- B. Spring force inside the spring brake chamber
- C. Hydraulic fluid from the master cylinder
- D. An electric motor on the brake drum

19. Which term identifies the friction component of a drum brake?

- A. Brake pads
- B. Brake shoes and linings
- C. Brake rotor
- D. Brake caliper

20. The valve designed to reduce brake lag at the rear of a long truck is the:

- A. Relay valve near the rear chambers
- B. Master cylinder

- C. Cabin blend door
- D. Alternator regulator

21. Applying the service and spring parking brakes simultaneously, which can damage components, is called:

- A. Brake lag
- B. Brake fade
- C. Compounding
- D. Air balancing

22. A spring brake chamber provides emergency braking because:

- A. It stores hydraulic fluid for backup
- B. Its spring applies the brake when air is lost
- C. It draws battery current to lock the wheel
- D. It raises engine compression to slow the truck

23. An ABS warning light with normal braking most likely involves:

- A. The master cylinder and brake fluid
- B. Wheel speed sensors, tone rings, or a modulator
- C. The clutch disc and pressure plate
- D. The water pump and thermostat

24. The component that multiplies pushrod force and takes up lining wear in an S-cam brake is the:

- A. Treadle valve
- B. Governor

- C. Slack adjuster
- D. Double check valve

25. An air dryer cartridge is a maintenance item that:

- A. Increases the alternator output
- B. Stores air for emergency braking
- C. Removes moisture and oil to protect air valves
- D. Adjusts the shoe-to-drum clearance

26. The battery rating that most directly reflects cold-weather starting ability is:

- A. Group size
- B. Cold cranking amps
- C. Reserve capacity
- D. Amp-hour deep-cycle rating

27. A truck repeatedly kills its batteries even after replacement. The likely overlooked cause is:

- A. A clogged diesel particulate filter
- B. A worn front brake lining
- C. A misaligned front axle
- D. A weak alternator or corroded cables

28. A fuse that keeps blowing should be handled by:

- A. Installing a higher-rated fuse
- B. Supplying the correct-rated fuse and noting a fault to diagnose

- C. Bypassing it with a jumper
- D. Telling the customer protection is unnecessary

29. The two simultaneous functions of the starter solenoid are to:

- A. Engage the drive into the ring gear and close the high-current circuit
- B. Charge the battery and regulate voltage
- C. Cool the intake and meter fuel
- D. Apply the brakes and release the clutch

30. A 15-amp circuit needs repair wire. The correct gauge is determined by:

- A. The harness color
- B. The truck's model year
- C. Whichever spool is nearest
- D. The current the circuit must carry

31. A truck cranks slowly. Before selling a starter, the specialist should first check:

- A. The diesel particulate filter
- B. The batteries' charge and the cables
- C. The front-end alignment
- D. The cabin air filter

32. The component that connects and disconnects the engine from a manual transmission is the:

- A. Differential
- B. Universal joint

- C. Clutch
- D. Torque converter

33. An automated manual transmission (AMT) is best understood as one that:

- A. Uses a torque converter and has no clutch
- B. Requires double-clutching every shift
- C. Keeps a friction clutch but shifts without a clutch pedal
- D. Contains no internal gears

34. A driveline vibration that worsens with speed and clunks on acceleration points to a worn:

- A. Heater core
- B. Cabin air filter
- C. Power steering reservoir
- D. Universal joint

35. On a tandem-drive truck, torque is split between the two drive axles by the:

- A. Quick-release valve
- B. Inter-axle differential (power divider)
- C. Charge-air cooler
- D. Slack adjuster

36. When replacing a carrier in one axle of a tandem, the new ratio must:

- A. Be numerically higher than the other axle
- B. Be numerically lower than the other axle

- C. Match the opposite drive axle exactly
- D. Be unrelated to the other axle

37. A numerically higher axle ratio (such as 4.56) generally provides:

- A. More pulling power and startability under load
- B. The best highway fuel economy
- C. Reduced torque to the drive wheels
- D. A lower engine speed at cruise

38. A shop quotes axle parts but must first confirm the gear ratio from the:

- A. Differential or axle housing tag
- B. Truck's exterior paint code
- C. Customer's verbal estimate alone
- D. Cab interior trim level

39. A complete clutch must be rated to handle the engine's:

- A. Paint code
- B. Axle ratio
- C. HVAC setting
- D. Torque output

40. The component that allows the driveshaft to change length as the suspension moves is the:

- A. Universal joint
- B. Ring and pinion

- C. Slip joint (slip yoke)
- D. Pitman arm

41. The component that maintains an air-suspension truck's ride height regardless of load is the:

- A. Height control (leveling) valve
- B. Power divider
- C. Pitman arm
- D. Slack adjuster

42. A vocational tandem that "walks" over rough terrain on a pivoting beam uses a:

- A. Pure air-bag suspension
- B. Walking-beam suspension
- C. MacPherson strut suspension
- D. Coil-spring suspension

43. The steering linkage component that connects the two steer wheels so they turn together is the:

- A. Tie rod and its ends
- B. Pitman arm alone
- C. Power steering pump
- D. Drag link alone

44. Worn kingpins and bushings most directly cause:

- A. Loss of engine oil pressure
- B. Air conditioning compressor failure

- C. Steering looseness and uneven tire wear
- D. Battery discharge

45. The alignment angle most directly responsible for rapid uneven tire wear, adjusted through the tie rod, is:

- A. Caster
- B. Camber
- C. Ride height
- D. Toe

46. The component that bolts to the steering gear's output shaft and converts its rotation into linkage motion is the:

- A. Pitman arm
- B. Tie rod end
- C. Wheel bearing
- D. Shock absorber

47. A kingpin set fitted to a specific front axle includes pins, bushings, thrust bearings, and:

- A. A blower motor resistor
- B. A DEF injector
- C. A radiator cap
- D. Seals

48. A customer reports a sweet smell, fogged windshield, and coolant loss. The likely failed HVAC part is the:

- A. Evaporator
- B. Condenser
- C. Heater core
- D. Receiver-drier

49. Whenever the A/C refrigerant system is opened, the component that must be replaced is the:

- A. Front leaf spring
- B. Clutch disc
- C. Brake drum
- D. Receiver-drier

50. A newer truck uses neither R-12 nor R-134a. The refrigerant it most likely uses is:

- A. R-22 household refrigerant
- B. R-1234yf
- C. Engine coolant
- D. Diesel exhaust fluid

51. A truck has no airflow from the vents in any mode. The shared component that likely failed is the:

- A. Blower motor
- B. A/C compressor clutch
- C. Expansion valve
- D. Heater control valve

52. The component that cools and dehumidifies cab air inside the HVAC case is the:

- A. Heater core
- B. Condenser at the front
- C. Evaporator
- D. Power steering reservoir

53. A diesel engine ignites its fuel by means of:

- A. A spark fired by an ignition coil
- B. The heat of highly compressed air
- C. A continuously energized glow plug
- D. An electric arc from the alternator

54. An inframe overhaul kit contains liners, pistons, rings, bearings, and:

- A. A complete aftertreatment system
- B. Gaskets to rebuild the engine in the chassis
- C. A new automatic transmission
- D. The truck's batteries and starter

55. The diesel service item that protects injection components from contamination and water is the:

- A. Cabin air filter
- B. Brake air dryer
- C. Fuel filter and water separator
- D. Power steering filter

56. A turbocharger increases engine power by:

- A. Forcing more air into the cylinders using exhaust energy
- B. Reducing the engine's compression ratio
- C. Storing electrical energy for the starter
- D. Lowering the coolant temperature

57. The charge-air cooler improves combustion because it:

- A. Filters soot from the exhaust
- B. Cools the compressed intake air, raising its density
- C. Stores DEF for the SCR system
- D. Lubricates the turbocharger bearing

58. The component that circulates coolant through the engine and radiator is the:

- A. Oil pump
- B. Fuel transfer pump
- C. Power steering pump
- D. Water pump

59. Selecting the correct low-ash oil for an emissions diesel matters because the wrong oil can:

- A. Raise the cold cranking amps
- B. Improve air-conditioning performance
- C. Change the axle gear ratio
- D. Damage the diesel particulate filter

60. The consumable fluid the SCR system injects to reduce NOx is:

- A. Engine coolant
- B. Power steering fluid
- C. Diesel Exhaust Fluid (DEF)
- D. R-134a refrigerant

61. The emissions component that traps soot and periodically burns it off is the:

- A. Diesel oxidation catalyst
- B. Diesel particulate filter (DPF)
- C. EGR cooler
- D. SCR catalyst

62. A replacement turbo failed again within weeks. The likely unaddressed root cause involves the:

- A. Front brake friction material
- B. Cabin air filter element
- C. Steering tie rod ends
- D. Oil supply or charge-air system

63. The EGR system lowers NO_x by:

- A. Generating the spark to ignite fuel
- B. Storing air for the parking brakes
- C. Converting hydraulic pressure into braking
- D. Recirculating exhaust to lower combustion temperature

64. A shop buys 10 units at \$8 and 10 at \$12, then sells 10 under FIFO. The cost of goods sold per unit is:

- A. \$12 (the newest cost)
- B. \$10 (the average)
- C. \$8 (the oldest cost)
- D. The lowest cost recorded

65. A part sells 5 units per week with a 4-week lead time. The reorder point must cover lead-time demand of at least:

- A. 20 units plus safety stock
- B. 5 units plus safety stock
- C. 4 units plus safety stock
- D. Zero units

66. A department fills 276 of 300 requested lines from stock. Its fill rate is:

- A. 92%
- B. 76%
- C. 24%
- D. 100%

67. Economic Order Quantity (EOQ) identifies the order size that:

- A. Always orders the supplier's maximum
- B. Minimizes the combined ordering and holding costs
- C. Eliminates the need for safety stock
- D. Guarantees a 100% fill rate

68. A cycle count finds 46 units where the system shows 50. The 4-unit difference is recorded as:

- A. Inventory shrinkage
- B. A supersession
- C. A core credit
- D. An economic order quantity

69. A perpetual inventory system is characterized by:

- A. Updating records only at an annual count
- B. Tracking only high-value parts
- C. Counting only when a customer disputes a charge
- D. Updating stock records continuously with each transaction

70. Returned cores sitting unshipped past the supplier's window represent:

- A. Scrap with no remaining value
- B. Personal property of the counter staff
- C. Proof of a fraudulent sale
- D. Lost credit, since unreturned cores forfeit their value

Answer Key & Explanations

1. A — Ask clarifying questions to determine the component and application. Vague descriptions require questioning to reach a precise identification before quoting. Filling the words literally risks a wrong part.

2. D — Reading each character back aloud as it is recorded. Verbalizing each character surfaces transposition errors immediately on a phone order. It is the single best accuracy guard.

3. D — Listen fully without interrupting or defending. De-escalation begins with full listening, which lowers the emotional temperature. Blame and policy lectures escalate the conflict.

4. C — To inform stocking of unmet demand. A lost sale records demand the operation could not fill, guiding stocking decisions. It is valuable inventory intelligence.
5. C — Call proactively with an honest updated timeline. Proactive, honest communication on a delay preserves trust. Silence or canceling damages the relationship.
6. A — The information needed is the same; only the method changes. Every channel requires the same vehicle and component details, gathered differently. Neither channel inherently outranks another.
7. C — Narrows little without VIN and drivetrain details. A model name alone spans many configurations on heavy trucks. The VIN and drivetrain details produce one correct part.
8. B — Closing the sale. The sequence runs greet → determine need → identify → present options → close → follow through, so presenting options precedes the close. The other orderings are wrong.
9. D — Fewer failures and less downtime for the fleet. A benefit expresses the customer advantage the feature delivers — here uptime and reliability. Composition and part numbers are features.
10. D — A refundable deposit returned with the old unit. The core charge is a refundable deposit, not a fee or tax. Returning the core recovers it.
11. A — A remanufactured unit with a core charge. A reman unit matches the budget-focused customer with a rebuildable core. It fits the priority better than OE, salvage, or refusing alternatives.
12. C — Hardware kits, drums if worn, and wheel seals. A drum reline needs the hardware, drums if worn, and the wheel seals exposed during the job. Anticipating these completes the repair.
13. C — Overselling, since it serves the sale not the need. Pushing a premium part on a light-duty, soon-to-be-sold truck serves the sale rather than the customer. That is overselling.
14. A — Made by the OE supplier under its own brand. OES parts come from the OE supplier branded by the supplier, offering OE-level quality at lower cost. They are neither salvage nor economy grade.

15. B — Rebuilt to specification at lower cost, with a core charge. A reman starter is restored to a defined standard, sold below new with a core charge. It is not untested or inferior.

16. B — Value-adding service promotion. Promoting delivery to a busy shop is relevant, value-adding service. It is not overselling or prohibited.

17. A — A hydraulic (or air-over-hydraulic) brake system. A "master cylinder" is a hydraulic-system component, signaling the truck is not on pure air brakes. Identifying the system type guides the right parts.

18. B — Spring force inside the spring brake chamber. The parking brake is held by spring force, with air used to release it. Loss of air applies, not releases, the brake.

19. B — Brake shoes and linings. Drum brakes use shoes and linings; pads, rotors, and calipers are disc-brake terms. Correct terminology prevents a wrong part.

20. A — Relay valve near the rear chambers. The relay valve supplies the rear chambers on signal, cutting the lag of air traveling the truck's length. It exists specifically to reduce brake lag.

21. C — Compounding. Applying the service and spring brakes together stacks their forces and can damage components. Anti-compounding features prevent it.

22. B — Its spring applies the brake when air is lost. The spring brake chamber holds the spring compressed with air; losing air applies the brake. This is the fail-safe mechanism.

23. B — Wheel speed sensors, tone rings, or a modulator. An ABS light with normal braking points to the ABS electronic layer, not the foundation brakes. Sensors, tone rings, and modulators are the likely parts.

24. C — Slack adjuster. The slack adjuster multiplies the chamber pushrod force and takes up lining wear via the S-camshaft. Automatic versions do this continuously.

25. C — Removes moisture and oil to protect air valves. The air dryer cartridge keeps moisture and oil out of the system, protecting downstream valves. A failed dryer leads to costly valve damage.

26. B — Cold cranking amps. CCA expresses cold-weather starting power directly. Group size and reserve capacity measure other attributes.

27. D — A weak alternator or corroded cables. Repeatedly killed batteries point to a weak alternator or corroded cables in the charging loop. Addressing the loop prevents another failure.

28. B — Supplying the correct-rated fuse and noting a fault to diagnose. A blowing fuse signals an underlying fault, so the correct-rated fuse plus a diagnosis note is right. Upsizing or bypassing defeats protection.

29. A — Engage the drive into the ring gear and close the high-current circuit. The solenoid pushes the drive into the ring gear and closes the heavy-current path simultaneously. It performs both at once.

30. D — The current the circuit must carry. Wire gauge must match the circuit's current so it does not overheat. Color and model year do not set it.

31. B — The batteries' charge and the cables. Slow cranking usually traces to weak batteries or corroded cables, so these are checked before selling a starter. This avoids an unnecessary part.

32. C — Clutch. The clutch connects and disconnects the engine from a manual transmission. A torque converter fills this role in an automatic.

33. C — Keeps a friction clutch but shifts without a clutch pedal. An AMT is a manual gearbox with automated actuators and a friction clutch, just no clutch pedal. It is not a torque-converter automatic.

34. D — Universal joint. A speed-related vibration with a clunk on acceleration is a classic worn-U-joint symptom. U-joints are a top driveline wear part.

35. B — Inter-axle differential (power divider). On a tandem the power divider splits torque between the two drive axles. It exists only on dual-drive configurations.

36. C — Match the opposite drive axle exactly. Both drive axles on a tandem must share the same ratio, or they fight each other and cause damage. The new carrier's ratio must match.

37. A — More pulling power and startability under load. A higher numeric ratio multiplies torque more for pulling and startability. It trades away highway economy.

38. A — Differential or axle housing tag. The axle tag lists the make, model, and ratio, the authoritative source since axles are sometimes re-gear. Paint and guesses are unreliable.

39. D — Torque output. The clutch must handle the engine's torque output, so an underrated clutch fails early. Paint and HVAC settings are irrelevant.

40. C — Slip joint (slip yoke). The splined slip joint lets the driveshaft change length as the suspension moves; U-joints handle angle. The ring and pinion and pitman arm serve other roles.

41. A — Height control (leveling) valve. The leveling valve maintains ride height by adding or releasing air as load changes. A fault leaves the truck sitting unevenly.

42. B — Walking-beam suspension. A pivoting beam that keeps both tandem axles in contact over rough ground defines the walking-beam design. Strut and coil designs are not used this way.

43. A — Tie rod and its ends. The tie rod links the two steer wheels so they turn together, with its ends a top wear item. The drag link connects the gear to the wheel.

44. C — Steering looseness and uneven tire wear. Worn kingpins and bushings produce steering play and uneven tire wear. They have no effect on oil pressure, A/C, or batteries.

45. D — Toe. Incorrect toe scrubs the tires and is the leading alignment cause of rapid uneven wear, set through the tie rod. This links worn tie rod ends to tire wear.

46. A — Pitman arm. The pitman arm bolts to the steering gear's output shaft and converts its rotation into linkage motion. The drag link then carries motion to the wheel.

47. D — Seals. A kingpin set fitted to the axle includes pins, bushings, thrust bearings, and seals. The other listed items belong to unrelated systems.

48. C — Heater core. A sweet smell, fogged windshield, and coolant loss are classic signs of a leaking heater core, which carries engine coolant inside the case. It links HVAC to the cooling system.

49. D — Receiver-drier. Opening the refrigerant system compromises the drier's desiccant, so it must be replaced. Selling a compressor without it is incomplete.

50. B — R-1234yf. R-1234yf is the newest refrigerant, succeeding R-12 and R-134a. The progression runs R-12 → R-134a → R-1234yf.

51. A — Blower motor. The blower moves cab air in every mode, so its failure kills all airflow regardless of setting. It is the shared air-handling element.

52. C — Evaporator. Inside the HVAC case the evaporator cools and dehumidifies the cab air. The heater core warms; the condenser sits at the front.

53. B — The heat of highly compressed air. Diesels use compression ignition, so they have no spark plugs. Glow plugs only aid cold starting.

54. B — Gaskets to rebuild the engine in the chassis. An inframe kit bundles liners, pistons, rings, bearings, and gaskets to overhaul the engine without removing it. Aftertreatment and transmissions are separate.

55. C — Fuel filter and water separator. The fuel filter and water separator remove contaminants and water that would destroy injectors. They are critical service items.

56. A — Forcing more air into the cylinders using exhaust energy. The turbocharger uses exhaust gas energy to pack more air into the engine for more power. It does not lower compression or store energy.

57. B — Cools the compressed intake air, raising its density. Compressing air heats it and lowers density; the charge-air cooler restores density for better combustion. Denser air supports more efficient power.

58. D — Water pump. The water pump circulates coolant through the engine and radiator. The oil and fuel pumps move different fluids.

59. D — Damage the diesel particulate filter. Emissions diesels require low-ash oil; the wrong oil can harm the DPF. Matching the specification protects the aftertreatment.

60. C — Diesel Exhaust Fluid (DEF). DEF is the consumable the SCR injects to reduce NO_x into nitrogen and water. It is consumed continuously.

61. B — Diesel particulate filter (DPF). The DPF traps soot and periodically regenerates by burning it off. The DOC oxidizes pollutants and the SCR reduces NO_x.

62. D — Oil supply or charge-air system. A repeat turbo failure usually means an unaddressed oil-supply or charge-air problem. Fixing the cause prevents another failure.

63. D — Recirculating exhaust to lower combustion temperature. EGR routes some exhaust back to the intake, lowering peak combustion temperature and the NO_x formed. It works with the DPF and SCR.

64. C — \$8 (the oldest cost). Under FIFO the first units in are sold first, so the 10 sold are the oldest \$8 units. Cost of goods sold reflects the oldest cost.

65. A — 20 units plus safety stock. At 5 units per week over a 4-week lead time, demand during replenishment is 20 units, plus safety stock. The reorder point must cover lead-time demand.

66. A — 92%. Filling 276 of 300 lines is $276 \div 300 = 0.92$, a 92% fill rate. Fill rate measures the share of demand met from stock.

67. B — Minimizes the combined ordering and holding costs. EOQ is the order size that minimizes total ordering plus holding cost. It does not maximize quantity or eliminate safety stock.

68. A — Inventory shrinkage. A shortfall between the physical count (46) and the system (50) is shrinkage from loss or error. Cycle counts surface it for investigation.

69. D — Updating stock records continuously with each transaction. A perpetual system updates records continuously with each receipt and sale. A periodic system updates only at intervals.

70. D — Lost credit, since unreturned cores forfeit their value. Cores must be returned within the program window to recover their credit; missing it forfeits the value. Unreturned cores are lost money.