PRACTICE EXAM 7: SCHOOL CUSTODIAN-ENGINEER SIMULATION (100 QUESTIONS)

This standalone practice exam contains 100 multiple-choice questions based on the knowledge and abilities identified for NYC DCAS Custodian Engineer (Board of Education) Exam No. 6042. Select the single best answer for each question. A score of 70% is considered passing. Calculators are not permitted on the official examination; DCAS does not publish the official question count or time limit.

1. During a winter readiness walk-through, before starting a low-pressure boiler after an extended shutdown, what should be verified first?

A. The thermostat is set to its highest value
B. The water level is visible at the proper gauge-glass level
C. The safety valve discharge is temporarily capped
D. The stack damper is fully closed

2. After a plant alarm clears but before restart, what is the primary purpose of a boiler low-water cutoff?

A. To stop burner operation when the boiler water level becomes unsafe
B. To return condensate directly to the burner
C. To regulate chimney draft during ignition for the building condition described in the scenario
D. To raise steam pressure during peak demand

3. While reviewing safe boiler operating sequence with a relief worker, a gauge glass appears full and does not change when the try cocks are operated. What is the best initial response?

A. Increase firing rate until the level begins moving
B. Close the feedwater supply for the remainder of the shift
C. Treat the reading as unreliable and test or clear the gauge-glass connections

D. Open the safety valve to lower the water line

4. During a winter readiness walk-through, why is a steam boiler warmed gradually from a cold condition?

A. To eliminate the need for combustion air
B. To prevent all condensate from returning
C. To make the water-level control respond faster
D. To limit uneven thermal expansion and stress

5. After a plant alarm clears but before restart, what condition most directly suggests incomplete combustion at an oil-fired boiler?

A. Stable flame with normal draft
B. Normal fuel pressure at the burner
C. A clear stack plume during steady firing
D. Dark smoke and soot accumulation

6. While reviewing safe boiler operating sequence with a relief worker, what is the safest action when a burner repeatedly locks out?

A. Hold the reset button continuously
B. Increase the fuel pressure at once
C. Investigate and correct the cause before resetting again
D. Bypass the flame safeguard temporarily

7. During a winter readiness walk-through, what is the purpose of blowing down a gauge glass?

A. To increase the boiler steaming rate
B. To confirm clear connections and reliable water-level indication
C. To lubricate the gauge-glass valves

D. To lower the boiler-room temperature

8. After a plant alarm clears but before restart, a steam trap has failed open. What is the most likely result?

A. Live steam enters the condensate return system
B. The chimney draft immediately reverses
C. The safety valve setting increases
D. The boiler cannot receive makeup water

9. While reviewing safe boiler operating sequence with a relief worker, why should boiler-room combustion-air openings remain unobstructed?

A. They provide the only path for condensate return
B. They set the boiler safety-valve pressure
C. They prevent water from entering the gauge glass
D. The burner needs sufficient air for safe, complete combustion

10. During a winter readiness walk-through, what does a rising stack temperature with unchanged load commonly indicate?

A. The condensate receiver is completely empty
B. The safety valve has been reset too low
C. Heat-transfer surfaces may be accumulating soot or scale
D. The room thermostat is accurately calibrated

11. After a plant alarm clears but before restart, when testing a boiler safety control, what practice is most appropriate?

A. Adjust the control beyond its listed range
B. Follow the approved procedure and document the result

C. Leave the boiler unattended during the test
D. Disable other controls to prevent interruption

12. While reviewing safe boiler operating sequence with a relief worker, what is a likely cause of water hammer in steam piping?

A. Excess insulation on a dry return
B. A fully open air vent on startup
C. A properly operating thermostatic trap
D. Condensate collecting where steam moves through the line

13. During a winter readiness walk-through, what should an operator do before opening a boiler blowdown valve?

A. Confirm the discharge path is safe and the blowdown system is ready
B. Raise the water level above the gauge glass
C. Disable the low-water cutoff circuit for the building condition described in the scenario
D. Close every boiler-room ventilation opening for the building condition described in the scenario

14. After a plant alarm clears but before restart, a boiler pressure gauge remains at zero while the boiler is clearly steaming. What should be concluded?

A. The boiler water is necessarily below the crown sheet
B. The gauge or its connection may be defective and requires verification
C. The burner is receiving too much combustion air
D. The safety valve must be leaking continuously

15. While reviewing safe boiler operating sequence with a relief worker, why is a burner flame-safeguard control essential?

A. It determines the building cleaning schedule for the building condition described in the scenario

B. It sets domestic-water temperature for the building condition described in the scenario
C. It shuts fuel flow when an acceptable flame is not proven
D. It controls condensate pump lubrication for the building condition described in the scenario

16. During a winter readiness walk-through, what is the best response to a newly discovered boiler-water leak?

A. Reduce risk, isolate as appropriate, and assess the leak before continued operation
B. Increase firing to evaporate the leaking water for the building condition described in the scenario
C. Ignore it if the feedwater pump can keep up
D. Add sealant without locating the source for the building condition described in the scenario

17. After a zone complaint persists through one operating cycle, a classroom is warm although the heating valve is closed. What should be checked first?

A. Whether the fire-alarm panel is normal for the building condition described in the scenario
B. Whether the valve is actually closing and the actuator linkage is intact
C. Whether the roof drain is obstructed for the building condition described in the scenario
D. Whether the cooling-tower basin is full for the building condition described in the scenario

18. While verifying an air handler after scheduled service, what is the main effect of a heavily loaded HVAC air filter?

A. Higher outdoor-air humidity in every season
B. Lower electrical resistance in lighting circuits
C. Reduced airflow and increased fan-system resistance
D. Increased boiler-water level for the building condition described in the scenario

19. During a morning indoor-air-quality check, why should an air-handling unit be locked out before reaching into its fan section?

A. The supply-air temperature may rise slightly
B. The duct static pressure may become visible
C. The filter media may change color
D. The fan can start automatically and cause severe injury

20. After a zone complaint persists through one operating cycle, what is the purpose of an HVAC economizer?

A. To use suitable outdoor air for cooling when conditions permit
B. To bypass all ventilation requirements for the building condition described in the scenario
C. To add steam directly to supply ductwork
D. To increase refrigerant pressure during heating

21. While verifying an air handler after scheduled service, what condition is commonly caused by insufficient airflow across an evaporator coil?

A. Coil icing and reduced cooling capacity
B. Higher condensate drain temperature
C. Faster exhaust-fan rotation for the building condition described in the scenario
D. Increased boiler pressure for the building condition described in the scenario

22. During a morning indoor-air-quality check, before changing a belt on an air-handler fan, what must be done?

A. Open every supply-air damper fully for the building condition described in the scenario
B. Reset the fire-alarm control panel for the building condition described in the scenario
C. Close the building’s domestic-water valve for the building condition described in the scenario
D. Disconnect, lock out, and verify the fan’s energy source

23. After a zone complaint persists through one operating cycle, what does short cycling of an HVAC compressor mean?

A. The thermostat displays only outdoor temperature
B. The condensate drain remains dry during heating
C. The compressor starts and stops more frequently than intended
D. The fan rotates in the wrong direction continuously

24. While verifying an air handler after scheduled service, why must a condensate drain trap be correctly configured on an air handler?

A. To increase refrigerant subcooling for the building condition described in the scenario
B. To allow drainage while preventing unwanted air movement through the drain
C. To replace the need for a drain pan
D. To raise fan motor speed for the building condition described in the scenario

25. During a morning indoor-air-quality check, a supply fan runs, but several rooms receive little air. What is the best first system-level check?

A. Inspect filter condition, dampers, and obvious duct restrictions
B. Replace every room thermostat for the building condition described in the scenario
C. Drain the domestic-water heater for the building condition described in the scenario
D. Increase boiler pressure immediately for the building condition described in the scenario

26. After a zone complaint persists through one operating cycle, what is the purpose of balancing an air-distribution system?

A. To eliminate all outdoor air
B. To deliver designed airflow to each served space
C. To keep every thermostat at one setting
D. To make every duct the same physical length

27. While verifying an air handler after scheduled service, why are refrigeration service tasks restricted to properly qualified personnel?

A. Air filters can only be purchased by license holders
B. Ductwork always contains asbestos insulation for the building condition described in the scenario
C. Refrigerants, pressure, electricity, and environmental controls create specialized hazards
D. Thermostats cannot be safely read by custodial staff

28. During a morning indoor-air-quality check, what does an unusually noisy fan bearing most directly call for?

A. Opening all fire doors for ventilation
B. Increasing the fan breaker size for the building condition described in the scenario
C. Immediate adjustment of boiler-water treatment for the building condition described in the scenario
D. Prompt inspection of lubrication, alignment, mounting, and bearing condition

29. After a zone complaint persists through one operating cycle, during occupied hours, why should outdoor-air dampers not simply remain closed?

A. Open dampers prevent every coil from freezing
B. Required ventilation helps dilute indoor contaminants
C. Closed dampers disable all lighting controls
D. Closed dampers increase domestic-water pressure

30. While verifying an air handler after scheduled service, what should be verified after replacing an HVAC drive belt?

A. Proper tension, alignment, guard installation, and rotation
B. Higher circuit-breaker rating for the building condition described in the scenario
C. Maximum thermostat setpoint for the building condition described in the scenario
D. Closed condensate drain valve for the building condition described in the scenario

31. During response to a localized utility failure, before replacing a damaged electrical switch, what is the essential first step?

A. Remove the equipment grounding conductor for the building condition described in the scenario
B. Install a larger fuse for the building condition described in the scenario
C. Turn off the building water supply
D. De-energize, lock out as applicable, and verify absence of voltage

32. After shutting down the affected branch safely, what is the purpose of an equipment-grounding conductor?

A. To increase voltage at the load for the building condition described in the scenario
B. To regulate water pressure in metallic piping
C. To provide a low-impedance fault-current path that helps protective devices operate
D. To carry normal return current in place of the neutral

33. While testing a completed plumbing or electrical repair, a circuit breaker trips repeatedly after being reset. What is the safest response?

A. Hold the breaker handle in the on position
B. Leave it off and locate the overload or fault before restoring service
C. Bypass the breaker with a jumper for the building condition described in the scenario
D. Replace it with a higher-rated breaker for the building condition described in the scenario

34. During response to a localized utility failure, what is the most appropriate tool for confirming that an electrical circuit is de-energized?

A. A properly rated voltage tester used according to its instructions
B. A wooden ruler placed near the outlet
C. A noncontact thermometer for the building condition described in the scenario
D. A pipe wrench with insulated tape

35. After shutting down the affected branch safely, what commonly causes a faucet to drip after it is shut off?

A. A clogged roof drain for the building condition described in the scenario
B. A loose lighting ballast for the building condition described in the scenario
C. Excessive ventilation in the room for the building condition described in the scenario
D. A worn or damaged sealing component inside the valve

36. While testing a completed plumbing or electrical repair, before opening a clogged sink trap, what should be done?

A. Energize the nearby disposal continuously for the building condition described in the scenario
B. Control water use, place a container below, and wear suitable protection
C. Seal the fixture overflow permanently for the building condition described in the scenario
D. Increase the domestic-water pressure for the building condition described in the scenario

37. During response to a localized utility failure, what is the purpose of a plumbing fixture trap?

A. To filter all solids from the water supply
B. To raise pressure at the faucet
C. To retain a water seal that limits sewer-gas entry
D. To increase water-heater recovery rate for the building condition described in the scenario

38. After shutting down the affected branch safely, a flush valve continues running after use. What should be checked first?

A. The boiler stack damper for the building condition described in the scenario
B. The classroom supply diffuser for the building condition described in the scenario
C. The valve’s diaphragm or sealing mechanism for debris or wear
D. The branch-circuit grounding electrode for the building condition described in the scenario

39. While testing a completed plumbing or electrical repair, what does a ground-fault circuit interrupter primarily protect against?

A. Electric shock from current leaking outside the intended circuit path
B. All possible equipment overloads for the building condition described in the scenario
C. Mechanical damage to conduit for the building condition described in the scenario
D. Low domestic-water pressure for the building condition described in the scenario

40. During response to a localized utility failure, why should a replacement fuse match the required type and rating?

A. Any fuse fits every holder safely for the building condition described in the scenario
B. Fuse rating controls plumbing pressure for the building condition described in the scenario
C. A larger fuse always reduces energy use
D. The correct fuse protects conductors and equipment within their designed limits

41. After shutting down the affected branch safely, a water pipe begins leaking above an electrical panel. What is the priority?

A. Protect people, control electrical exposure, and isolate the water source safely
B. Stand in the water and reset breakers
C. Continue normal occupancy below the leak for the building condition described in the scenario
D. Open the panel to wipe conductors dry

42. While testing a completed plumbing or electrical repair, what is the likely effect of closing a valve too quickly in a water line?

A. A permanent reduction in electrical voltage
B. A loss of fire-alarm supervision
C. An increase in boiler combustion air
D. A pressure surge commonly called water hammer

43. During response to a localized utility failure, why should extension cords not be used as permanent building wiring?

A. They prevent every circuit breaker from tripping for the building condition described in the scenario
B. They reduce water pressure in nearby piping for the building condition described in the scenario
C. They are intended for temporary use and are vulnerable to damage and overload
D. They always supply direct current for the building condition described in the scenario

44. After shutting down the affected branch safely, after repairing a leaking pipe joint, what is the final essential step?

A. Remove nearby pipe supports for the building condition described in the scenario
B. Restore service gradually and inspect the joint under operating pressure
C. Leave the isolation valve closed indefinitely
D. Paint the joint before testing for the building condition described in the scenario

45. While preparing the building for a large public event, what is the purpose of a fire-alarm pull station?

A. To shut off domestic water throughout the school
B. To let an occupant manually initiate a fire alarm
C. To control boiler firing pressure for the building condition described in the scenario
D. To reset a tripped lighting breaker

46. During an after-hours life-safety round, why must fire doors not be wedged open?

A. They are intended to limit smoke and fire spread when closed
B. They serve as primary exits only when locked
C. They control sprinkler water pressure for the building condition described in the scenario
D. They increase HVAC efficiency only when blocked

47. After a supervisory signal or impairment is reported, a fire-alarm panel displays a trouble signal. What does it generally mean?

A. The sprinkler system has discharged for the building condition described in the scenario
B. The building is safe to ignore until inspection
C. A system fault needs investigation even though an alarm condition is not indicated
D. A confirmed fire exists in every zone for the building condition described in the scenario

48. While preparing the building for a large public event, what should be kept clear around sprinkler heads?

A. All ceiling tiles within the room
B. Only noncombustible furniture for the building condition described in the scenario
C. Every portable fire extinguisher for the building condition described in the scenario
D. Storage and obstructions that could block the discharge pattern

49. During an after-hours life-safety round, what is the main purpose of a standpipe system?

A. To remove condensate from air handlers
B. To ventilate boiler combustion gases for the building condition described in the scenario
C. To provide hose connections for firefighting water within a building
D. To supply drinking water at classroom sinks

50. After a supervisory signal or impairment is reported, when emergency lighting fails during a routine test, what is the appropriate response?

A. Remove exit signs to avoid confusion for the building condition described in the scenario
B. Disable the test switch permanently for the building condition described in the scenario
C. Assume normal lighting will always remain available for the building condition described in the scenario
D. Document the failure and arrange prompt correction while managing the affected risk

51. While preparing the building for a large public event, why should exit routes remain free of stored materials?

A. Obstructions can delay evacuation and increase trip or fire hazards
B. Stored material improves corridor fire resistance
C. Exit routes are only used by maintenance staff
D. Narrow routes make occupants move faster

52. During an after-hours life-safety round, what is the correct response when a sprinkler control valve is found partly closed without authorization?

A. Remove the valve-position indicator for the building condition described in the scenario
B. Treat it as an impairment, notify responsible parties, and restore protection under procedure
C. Silence all fire-alarm signals for the building condition described in the scenario
D. Leave it partly closed to conserve water for the building condition described in the scenario

53. After a supervisory signal or impairment is reported, what is the purpose of an emergency generator serving life-safety loads?

A. To replace all routine utility service
B. To eliminate the need for emergency lighting batteries
C. To supply designated critical equipment when normal power fails
D. To operate every receptacle in the school indefinitely

54. While preparing the building for a large public event, during a fire alarm, what should a custodian engineer prioritize?

A. Follow the emergency plan, support evacuation, and communicate system information
B. Finish routine preventive maintenance first for the building condition described in the scenario
C. Use elevators to move occupants faster
D. Silence the alarm before determining its cause

55. During an after-hours life-safety round, why are fire-protection inspection and test records important?

A. They replace all physical inspections for the building condition described in the scenario
B. They document system condition, impairments, corrective action, and required follow-up
C. They are used only to calculate utility bills
D. They guarantee no future equipment failure

56. After a supervisory signal or impairment is reported, a portable fire extinguisher is missing from its designated location. What should be done?

A. Move the location sign to another corridor for the building condition described in the scenario
B. Wait for the annual inspection for the building condition described in the scenario
C. Place a bucket of water there instead for the building condition described in the scenario
D. Report and replace it promptly with the proper type while addressing the impairment

57. While using baseline readings to narrow the failure source, several lights on one circuit flicker simultaneously. What is the best first inference?

A. Every lamp failed independently at the same instant for the building condition described in the scenario
B. A shared supply, connection, or circuit problem is more likely than several lamp failures
C. The boiler-water level is low for the building condition described in the scenario
D. The domestic-water pressure is too high for the building condition described in the scenario

58. During a repeatable equipment-fault investigation, a pump motor hums but its shaft does not turn. What should be done first?

A. Strike the motor housing while energized for the building condition described in the scenario
B. Leave it humming until it begins turning for the building condition described in the scenario
C. Increase breaker size and restart repeatedly for the building condition described in the scenario
D. De-energize it and check for mechanical binding or a failed starting component

59. After ruling out the most obvious local cause, a room has no heat while adjacent rooms on the same loop are warm. What is the best initial focus?

A. Local valve, air, trap, control, or terminal-unit conditions
B. The entire boiler fuel supply
C. The roof drainage system for the affected room
D. The main utility electrical service

60. While using baseline readings to narrow the failure source, why is a written symptom history useful before troubleshooting intermittent equipment?

A. It eliminates the need to inspect the equipment
B. It permits every safety device to be bypassed
C. It reveals timing, conditions, and patterns that may not appear during inspection
D. It proves the newest part has failed for the building condition described in the scenario

61. During a repeatable equipment-fault investigation, a repaired fan vibrates more than before. What should be checked first?

A. Whether restroom cleaner was diluted for the building condition described in the scenario
B. Whether the fire-alarm panel clock is correct
C. Whether components were reassembled securely and the rotating parts are aligned
D. Whether boiler-water treatment was changed for the building condition described in the scenario

62. After ruling out the most obvious local cause, what is the best reason to compare an abnormal reading with a known-good instrument?

A. To determine whether the condition or the measuring device is faulty
B. To avoid documenting the original reading for the building condition described in the scenario
C. To increase equipment operating temperature for the building condition described in the scenario
D. To make both instruments show identical serial numbers

63. While using baseline readings to narrow the failure source, a floor drain backs up only when several fixtures discharge. What does that pattern suggest?

A. A lighting-circuit overload for the building condition described in the scenario
B. A partial downstream restriction that becomes evident at higher flow
C. An excessively clean trap seal for the building condition described in the scenario
D. A thermostat calibration problem for the building condition described in the scenario

64. During a repeatable equipment-fault investigation, after replacing a blown fuse, it opens again immediately. What should happen next?

A. Bridge the fuse holder temporarily for the building condition described in the scenario
B. Keep replacing fuses until one remains intact
C. Install a fuse with a much larger rating
D. De-energize and locate the short circuit or fault before another replacement

65. After ruling out the most obvious local cause, an exhaust fan runs backward after electrical work. What is the best response?

A. Block the discharge opening for the building condition described in the scenario
B. Increase the motor overload setting for the building condition described in the scenario
C. Reverse the fan blades by hand while energized
D. Stop it and have rotation and wiring corrected before continued operation

66. While using baseline readings to narrow the failure source, why should baseline readings be recorded when equipment operates normally?

A. They prevent the equipment from ever failing
B. They provide comparison values for recognizing deterioration and diagnosing future faults
C. They eliminate the need for visual inspection
D. They replace manufacturer maintenance instructions for the building condition described in the scenario

67. During a repeatable equipment-fault investigation, a ceiling stain grows only during heavy rain. What is the most logical first area to inspect?

A. The classroom lighting switch for the building condition described in the scenario
B. The domestic hot-water thermostat for the building condition described in the scenario
C. Roof, flashing, drain, or exterior penetration above and up-slope of the stain
D. The boiler burner nozzle for the building condition described in the scenario

68. After ruling out the most obvious local cause, what is the value of checking the simplest likely causes early in troubleshooting?

A. It can resolve common faults efficiently without unnecessary disassembly or parts replacement
B. It permits safety procedures to be skipped for the building condition described in the scenario
C. It removes the need to verify the repair
D. It guarantees the first guess is correct for the building condition described in the scenario

69. While correcting a surface-care practice before reopening the area, which cleaning approach is most appropriate for an unknown spill?

A. Mix bleach and ammonia to neutralize it
B. Restrict access, identify the material, and follow the applicable spill procedure
C. Use bare hands to determine its texture
D. Spread the spill over a larger area

70. During a contamination-control inspection, why must bleach never be mixed with ammonia-containing cleaners?

A. The mixture can release dangerous toxic gases
B. The ammonia prevents every chemical reaction
C. The mixture produces only harmless water vapor
D. The mixture becomes an approved neutral detergent

71. After selecting supplies for an occupied-area cleaning task, what is dwell time for a disinfectant?

A. The interval between boiler blowdowns for the building condition described in the scenario
B. The drying time for every floor finish for the building condition described in the scenario
C. The time needed for a vacuum bag to fill
D. The period a surface must remain wet for the product to work as directed

72. While correcting a surface-care practice before reopening the area, what should be done before applying floor finish to a stripped floor?

A. Apply finish over remaining slurry for the building condition described in the scenario
B. Close all exit routes with equipment for the building condition described in the scenario
C. Rinse or neutralize as directed and allow the clean floor to dry
D. Add solvent to the wet floor for the building condition described in the scenario

73. During a contamination-control inspection, why are color-coded cleaning tools useful?

A. They make every chemical compatible
B. They help prevent cross-contamination between areas
C. They replace required personal protective equipment
D. They eliminate the need to clean the tools

74. After selecting supplies for an occupied-area cleaning task, what is the best practice for a wet floor in an occupied corridor?

A. Leave equipment unattended across the exit
B. Apply additional finish immediately for the building condition described in the scenario
C. Turn off corridor lighting for the building condition described in the scenario
D. Control access, post clear warnings, and dry the area promptly

75. While correcting a surface-care practice before reopening the area, why should a chemical be diluted according to its label?

A. Correct concentration supports performance while limiting residue, damage, and exposure
B. A stronger mixture is always safer
C. Labels apply only to unopened containers
D. Dilution changes every disinfectant into soap

76. During a contamination-control inspection, how should soiled reusable cleaning cloths be handled?

A. Use them in food areas without washing
B. Leave them wet in a closed bucket indefinitely
C. Collect them in a designated manner and launder them before reuse
D. Return them directly to clean storage for the building condition described in the scenario

77. After a tool fails its pre-use inspection, what should be checked before using a portable ladder?

A. Whether the nearest outlet is energized for the building condition described in the scenario
B. Whether the boiler is at operating pressure
C. Only the paint color of the side rails
D. Its condition, duty rating, footing, angle or setup, and surrounding hazards

78. While choosing equipment for a task near occupants and building systems, why should a mushroomed striking-tool head be removed from service?

A. It makes the handle electrically grounded
B. It prevents the tool from being stored
C. Fragments can break away and cause impact injuries
D. It increases the tool’s cutting accuracy

79. During a hands-on maintenance safety briefing, what is the safest choice when a power-tool guard interferes with a cut?

A. Increase tool speed beyond its rating for the building condition described in the scenario
B. Use the correct guarded tool and method rather than removing the guard
C. Hold the workpiece by hand near the blade
D. Tie the guard open for better visibility for the building condition described in the scenario

80. After a tool fails its pre-use inspection, before clearing a jam from snow-removal equipment, what should be done?

A. Shut it down, isolate energy, and wait for moving parts to stop
B. Increase throttle to discharge the jam for the building condition described in the scenario
C. Tip the running machine toward the operator for the building condition described in the scenario
D. Reach into the chute while the engine idles

81. While choosing equipment for a task near occupants and building systems, why is the correct wrench size important?

A. It increases electrical circuit voltage
B. It replaces the need for eye protection
C. It sharpens the fastener threads
D. It reduces slipping and damage to the fastener

82. During a hands-on maintenance safety briefing, what should be done with a damaged extension-cord jacket exposing conductors?

A. Place the damage beneath a rug for the building condition described in the scenario
B. Use it only in wet locations for the building condition described in the scenario
C. Remove the cord from service and arrange proper repair or replacement
D. Cover it with paper and continue using it

83. After a tool fails its pre-use inspection, when using a bench grinder, why is the tool rest kept properly adjusted?

A. It supports the work and limits the gap where material could jam
B. It increases the wheel's rated speed for the building condition described in the scenario
C. It eliminates the need for a wheel guard
D. It changes alternating current to direct current for the building condition described in the scenario

84. While diagnosing why a recently applied finish failed, what is the most important step before repainting a peeling surface?

A. Apply a thick finish coat over the peeling paint
B. Identify and correct moisture or adhesion causes, then remove loose material
C. Keep the underlying surface continuously wet for the building condition described in the scenario
D. Polish the surface with floor wax for the building condition described in the scenario

85. During review of a proposed interior coating job, why is primer used on many bare or repaired surfaces?

A. It removes all moisture from walls
B. It makes incompatible coatings safe to mix
C. It promotes adhesion, seals porosity, and supports a uniform finish
D. It replaces every required finish coat

86. After surface preparation reveals an unexpected condition, what causes lap marks when rolling wall paint?

A. Allowing an edge to dry before the adjoining area is blended
B. Using compatible paint and primer for the building condition described in the scenario
C. Mixing the same batch consistently for the building condition described in the scenario
D. Maintaining a wet edge during application for the building condition described in the scenario

87. While diagnosing why a recently applied finish failed, before disturbing an old unknown coating, what is the safest approach?

A. Dry-sand it immediately without containment
B. Mix the debris into fresh paint
C. Burn it off with an open flame
D. Assess potential hazardous content and follow required controls

88. During review of a proposed interior coating job, why should painting materials be stored with labels intact and containers closed?

A. Labels prevent every coating from expiring for the building condition described in the scenario
B. Labels preserve hazard and use information while closures limit spills and vapors
C. Open containers improve long-term storage for the building condition described in the scenario
D. Closed containers make all products nonflammable for the building condition described in the scenario

89. When immediate controls must be chosen before a permanent repair, a strong chemical odor is reported in an occupied classroom. What is the best first decision?

A. Protect occupants, restrict the area, and investigate the source using the emergency procedure
B. Wait until the end of the week for the building condition described in the scenario
C. Ask students to identify it closely for the building condition described in the scenario
D. Mask the odor with air freshener for the building condition described in the scenario

90. While ranking competing work orders by credible risk, two urgent repairs compete for one available worker: a leaking drinking fountain and an exposed energized conductor. Which gets priority?

A. The drinking fountain because it is used more often
B. The exposed energized conductor because it presents the more immediate severe hazard
C. Neither repair until both can be completed together
D. Whichever request arrived first regardless of risk for the building condition described in the scenario

91. During an urgent facilities coordination meeting, repeated complaints occur only after a particular evening activity. What is the best next step?

A. Dismiss the complaints as coincidence for the building condition described in the scenario
B. Change unrelated daytime cleaning products for the building condition described in the scenario
C. Replace all building equipment immediately for the building condition described in the scenario
D. Compare schedules, loads, controls, and observations during that activity

92. When immediate controls must be chosen before a permanent repair, a supervisor is unsure whether a damaged ceiling area is safe. What is the best decision?

A. Conceal the damage with paint for the building condition described in the scenario
B. Ask occupants to avoid looking upward
C. Restrict access and obtain qualified evaluation before reopening the area
D. Allow occupancy until material falls for the building condition described in the scenario

93. While ranking competing work orders by credible risk, what is the best basis for choosing between two repair options?

A. Personal preference for a familiar brand only
B. Verified condition, safety, effectiveness, lifecycle cost, and operational impact
C. The option requiring no documentation for the building condition described in the scenario
D. The option with the highest initial price

94. During a month-end supply-account review, a supply order is much larger than normal. What should be done before approval?

A. Split it into undocumented purchases for the building condition described in the scenario
B. Discard previous inventory records for the building condition described in the scenario
C. Verify usage history, inventory, unit quantities, price, and the operational need

D. Approve it because larger orders are always cheaper

95. Before certifying a maintenance purchase for payment, thirty-six cases of supplies cost $18 each. What is the total before fees?

A. $638
B. $668
C. $618
D. $648

96. While comparing the requested quantity with documented consumption, a repair reserve has $8,900 before an approved $6,235 project is charged. What remains?

A. $2,665
B. $2,565
C. $3,665
D. $2,765

97. During a month-end supply-account review, why should receipts and purchase records be reconciled promptly?

A. To detect errors, document expenditures, and maintain an accurate available balance
B. To permit duplicate payment of invoices for the building condition described in the scenario
C. To hide differences until year-end for the building condition described in the scenario
D. To eliminate the need for authorization for the building condition described in the scenario

98. Before dispatching staff from a detailed work order, a directive says, “Complete the inspection before occupancy and submit the form by 10:00 a.m.” What is required?

A. Submit the form before inspecting the area for the building condition described in the scenario
B. Complete either task at any time that day

C. Begin the inspection at 10:00 a.m. after occupancy
D. Finish the inspection before occupancy and submit the form by 10:00 a.m.

99. While checking a directive for conditions that must all be satisfied, a memo states that only trained employees may use a new floor machine. What is the correct interpretation?

A. Any employee may operate it with verbal permission
B. Untrained employees must not operate the machine until trained
C. The restriction applies only outside school hours
D. Training is optional for experienced cleaners

100. During interpretation of a revised operations memo, a work order lists a room number, reported symptom, access restriction, and completion deadline. Which detail should be reviewed before dispatch?

A. Only the completion deadline for the building condition described in the scenario
B. Only the employee's preferred tool for the building condition described in the scenario
C. All listed details because each can affect safe and timely completion
D. Only the room number for the building condition described in the scenario

Practice Exam 7: Answer Key and Explanations

1. B — The water level is visible at the proper gauge-glass level is the best response because adequate water must be confirmed before firing because heating a dry or severely low-water boiler can damage pressure parts and create a dangerous condition. The safest answer preserves automatic protection and relies on verified plant indications instead of forcing operation through an unresolved abnormal condition.

2. A — To stop burner operation when the boiler water level becomes unsafe is the best response because the low-water cutoff interrupts the firing circuit before exposed heating surfaces overheat, making it a critical operating safety control rather than a pressure or draft device. The answer preserves protection and relies on plant indications instead of forcing operation through an unresolved abnormal condition.

3. C — Treat the reading as unreliable and test or clear the gauge-glass connections is the best response because blocked gauge-glass connections can trap water and create a false reading, so the operator must verify the water-level indication before relying on it or continuing firing. The answer preserves protection and relies on plant indications instead of forcing operation through an unresolved condition.

4. D — To limit uneven thermal expansion and stress is the best response because slow warming allows metal sections and connected piping to expand more uniformly, reducing thermal shock, leakage, and stress that can occur when cold equipment is heated too rapidly. The safest answer preserves protection and relies on verified plant indications instead of forcing operation through an unresolved abnormal condition.

5. D — Dark smoke and soot accumulation is the best response because dark smoke and soot show that fuel is not burning completely, commonly because atomization, air supply, mixing, or burner adjustment is inadequate. The safest answer preserves automatic protection and relies on verified plant indications instead of forcing operation through an unresolved abnormal condition.

6. C — Investigate and correct the cause before resetting again is the best response because repeated reset attempts can introduce unburned fuel or conceal a control failure; the cause must be diagnosed before another controlled start is attempted. The safest answer preserves automatic protection and relies on verified plant indications instead of forcing operation through an unresolved abnormal condition.

7. B — To confirm clear connections and reliable water-level indication is the best response because the blowdown procedure checks that steam and water passages are open and that the indicated level responds properly instead of remaining falsely fixed. The safest answer preserves automatic protection and relies on verified plant indications instead of forcing operation through an unresolved abnormal condition.

8. A — Live steam enters the condensate return system is the best response because an open trap no longer separates steam from condensate, wasting energy and potentially overheating or pressurizing return piping beyond its intended operating condition. The safest answer preserves automatic protection and relies on verified plant indications instead of forcing operation through an unresolved abnormal condition.

9. D — The burner needs sufficient air for safe, complete combustion is the best response because restricted combustion air can cause unstable or incomplete burning and poor draft, creating soot, carbon monoxide, flame failure, and inefficient operation. The safest answer preserves automatic protection and relies on verified plant indications instead of forcing operation through an unresolved abnormal condition.

10. C — Heat-transfer surfaces may be accumulating soot or scale is the best response because deposits insulate heating surfaces, so more heat escapes up the stack instead of transferring into the boiler water under the same load. The safest answer preserves automatic protection and relies on verified plant indications instead of forcing operation through an unresolved abnormal condition.

11. B — Follow the approved procedure and document the result is the best response because safety controls require prescribed testing under controlled conditions, followed by documentation, so abnormal operation is recognized without creating a new hazard. The safest answer preserves automatic protection and relies on verified plant indications instead of forcing operation through an unresolved abnormal condition.

12. D — Condensate collecting where steam moves through the line is the best response because fast-moving steam can drive pooled condensate into fittings and valves, producing impact, noise, and possible damage; drainage and trap performance should be checked. The safest answer preserves automatic protection and relies on verified plant indications instead of forcing operation through an unresolved abnormal condition.

13. A — Confirm the discharge path is safe and the blowdown system is ready is the best response because blowdown releases hot water and steam with considerable energy, so the receiving system, valve sequence, and personnel clearance must be confirmed first. The safest answer preserves automatic protection and relies on verified plant indications instead of forcing operation through an unresolved abnormal condition.

14. B — The gauge or its connection may be defective and requires verification is the best response because visible steam production conflicts with a zero pressure indication, so the instrument and siphon or connection cannot be trusted until independently checked. The safest answer preserves automatic protection and relies on verified plant indications instead of forcing operation through an unresolved abnormal condition.

15. C — It shuts fuel flow when an acceptable flame is not proven is the best response because the safeguard prevents continued fuel admission after ignition failure or flame loss, reducing the chance that combustible fuel will accumulate in the furnace. The safest answer preserves automatic protection and relies on verified plant indications instead of forcing operation through an unresolved abnormal condition.

16. A — Reduce risk, isolate as appropriate, and assess the leak before continued operation is the best response because a leak may worsen under heat and pressure or indicate failed pressure parts, so safe isolation and qualified assessment take priority over maintaining output. The safest answer preserves protection and relies on plant indications instead of forcing operation through an unresolved abnormal condition.

17. B — Whether the valve is actually closing and the actuator linkage is intact is the best response because a commanded position does not prove mechanical closure; a loose linkage, failed actuator, or leaking valve can continue admitting heating medium. A HVAC response checks airflow and control fundamentals first, then confirms that the correction restores comfort without reducing ventilation or equipment protection.

18. C — Reduced airflow and increased fan-system resistance is the best response because a dirty filter restricts airflow, raises pressure loss, can reduce comfort and ventilation, and may cause coils or equipment to operate outside normal conditions. A disciplined HVAC response checks airflow and

control fundamentals first, then confirms that the correction restores comfort without reducing ventilation or equipment protection.

19. D — The fan can start automatically and cause severe injury is the best response because automatic controls can start a fan without warning, so energy isolation and verification are required before hands or tools enter the moving-equipment area. A disciplined HVAC response checks airflow and control fundamentals first, then confirms that the correction restores comfort without reducing ventilation or equipment protection.

20. A — To use suitable outdoor air for cooling when conditions permit is the best response because an economizer reduces mechanical cooling demand by modulating outdoor and return air when outdoor conditions can help satisfy the cooling load. A disciplined HVAC response checks airflow and control fundamentals first, then confirms that the correction restores comfort without reducing ventilation or equipment protection.

21. A — Coil icing and reduced cooling capacity is the best response because low airflow reduces heat delivered to the coil, allowing its surface temperature to fall below freezing and ice to further block airflow. A disciplined HVAC response checks airflow and control fundamentals first, then confirms that the correction restores comfort without reducing ventilation or equipment protection.

22. D — Disconnect, lock out, and verify the fan’s energy source is the best response because belt replacement exposes the worker to rotating parts and stored tension; verified energy isolation prevents unexpected startup while guards are removed. A disciplined HVAC response checks airflow and control fundamentals first, then confirms that the correction restores comfort without reducing ventilation or equipment protection.

23. C — The compressor starts and stops more frequently than intended is the best response because frequent cycling can result from control, airflow, charge, or load problems and stresses the compressor because repeated starts are electrically and mechanically demanding. A disciplined HVAC response checks airflow and control fundamentals first, then confirms that the correction restores comfort without reducing ventilation or equipment protection.

24. B — To allow drainage while preventing unwanted air movement through the drain is the best response because air-handler pressure can prevent drainage or pull air through an untrapped line, leading to overflow, leakage, and microbial growth in standing water. A HVAC response checks airflow and control fundamentals first, then confirms that the correction restores comfort without reducing ventilation or equipment protection.

25. A — Inspect filter condition, dampers, and obvious duct restrictions is the best response because low delivery across several spaces suggests a shared airflow restriction or control position, so common components should be checked before individual terminals are replaced. A disciplined HVAC response checks airflow and control fundamentals first, then confirms that the correction restores comfort without reducing ventilation or equipment protection.

26. B — To deliver designed airflow to each served space is the best response because balancing adjusts dampers and outlets so measured airflow matches design needs, supporting comfort, ventilation, and stable operation throughout the system. A disciplined HVAC response checks airflow and control fundamentals first, then confirms that the correction restores comfort without reducing ventilation or equipment protection.

27. C — Refrigerants, pressure, electricity, and environmental controls create specialized hazards is the best response because refrigeration work can expose personnel to high pressure, electrical energy, cold burns, oxygen displacement, and regulated refrigerant handling requirements. A disciplined HVAC response checks airflow and control fundamentals first, then confirms that the correction restores comfort without reducing ventilation or equipment protection.

28. D — Prompt inspection of lubrication, alignment, mounting, and bearing condition is the best response because noise can be an early sign of inadequate lubrication, looseness, misalignment, or bearing damage; continued operation may enlarge the failure. A disciplined HVAC response checks airflow and control fundamentals first, then confirms that the correction restores comfort without reducing ventilation or equipment protection.

29. B — Required ventilation helps dilute indoor contaminants is the best response because occupied spaces generate carbon dioxide, odors, and other contaminants, so proper outdoor-air delivery is an important part of indoor air quality. A disciplined HVAC response checks airflow and control fundamentals first, then confirms that the correction restores comfort without reducing ventilation or equipment protection.

30. A — Proper tension, alignment, guard installation, and rotation is the best response because a new belt must track correctly without overloading bearings or slipping, and the guard must be restored before the unit returns to service. A disciplined HVAC response checks airflow and control fundamentals first, then confirms that the correction restores comfort without reducing ventilation or equipment protection.

31. D — De-energize, lock out as applicable, and verify absence of voltage is the best response because opening the circuit is not enough by itself; the worker must control the energy source and test for absence of voltage before touching conductors. Effective repair practice controls electrical and water energy, uses the correct test method, and proves the repaired system under operating conditions.

32. C — To provide a low-impedance fault-current path that helps protective devices operate is the best response because grounding connects exposed conductive parts to a fault path so a short circuit produces enough current to open the breaker or fuse promptly. Effective repair practice controls electrical and water energy, uses the correct test method, and proves the repaired system under operating conditions.

33. B — Leave it off and locate the overload or fault before restoring service is the best response because repeated tripping indicates a continuing abnormal condition; defeating or upsizing protection without analysis can overheat conductors and create shock or fire hazards. Effective repair practice controls electrical and water energy, uses the correct test method, and proves the repaired system under operating conditions.

34. A — A properly rated voltage tester used according to its instructions is the best response because a tester provides electrical evidence, but it must be rated, checked, and used correctly because appearance and switch position cannot prove absence of voltage. Effective repair practice controls electrical and water energy, uses the correct test method, and proves the repaired system under operating conditions.

35. D — A worn or damaged sealing component inside the valve is the best response because a deteriorated washer, cartridge, seat, or seal can no longer stop flow completely, so internal inspection is more relevant than unrelated building systems. Effective repair practice controls electrical and water energy, uses the correct test method, and proves the repaired system under normal operating conditions.

36. B — Control water use, place a container below, and wear suitable protection is the best response because the trap contains wastewater and may release suddenly; controlling inflow and preparing containment reduces exposure, slipping, and property damage. Effective repair practice controls electrical and water energy, uses the correct test method, and proves the repaired system under normal operating conditions.

37. C — To retain a water seal that limits sewer-gas entry is the best response because the trap's standing water separates occupied space from the drainage system atmosphere; loss of the seal can allow odors and potentially harmful gases inside. Effective repair practice controls electrical and water energy, uses the correct test method, and proves the repaired system under normal operating conditions.

38. C — The valve's diaphragm or sealing mechanism for debris or wear is the best response because a flushometer that will not close usually has an internal sealing or bypass problem, so its water-control components should be inspected after isolation. Effective repair practice controls electrical and water energy, uses the correct test method, and proves the repaired system under normal operating conditions.

39. A — Electric shock from current leaking outside the intended circuit path is the best response because a GFCI compares current leaving and returning and opens rapidly when a difference suggests leakage through an unintended path, possibly a person. Effective repair practice controls electrical and water energy, uses the correct test method, and proves the repaired system under normal operating conditions.

40. D — The correct fuse protects conductors and equipment within their designed limits is the best response because installing an incorrect or oversized fuse can defeat overcurrent protection, allowing wiring or equipment to overheat before the fuse opens. Effective repair practice controls electrical and water energy, uses the correct test method, and proves the repaired system under normal operating conditions.

41. A — Protect people, control electrical exposure, and isolate the water source safely is the best response because water contacting energized equipment creates an immediate shock and fire hazard; access should be controlled while qualified personnel isolate the involved systems. Effective repair practice controls electrical and water energy, uses the correct test method, and proves the repaired system under normal operating conditions.

42. D — A pressure surge commonly called water hammer is the best response because rapidly stopping moving water converts velocity into a pressure wave that can bang piping, loosen supports, and damage valves or fittings. Effective repair practice controls electrical and water energy, uses the correct test method, and proves the repaired system under normal operating conditions.

43. C — They are intended for temporary use and are vulnerable to damage and overload is the best response because flexible cords can be pinched, abraded, covered, or overloaded and do not provide the protected, fixed installation expected of permanent wiring. Effective repair practice controls electrical and water energy, uses the correct test method, and proves the repaired system under operating conditions.

44. B — Restore service gradually and inspect the joint under operating pressure is the best response because a repair is not proven until the system is returned carefully to service and checked for leakage, movement, and normal operation under pressure. Effective repair practice controls electrical and water energy, uses the correct test method, and proves the repaired system under normal operating conditions.

45. B — To let an occupant manually initiate a fire alarm is the best response because a pull station provides a recognizable manual means of reporting a fire so notification and emergency procedures can begin without waiting for detection. Any condition that can reduce detection, notification, suppression, emergency power, or egress capability must be treated as an impairment until protection is restored.

46. A — They are to limit smoke and fire spread when closed is the best response because a fire door is part of a compartmentation system; an wedge defeats its ability to close and protect corridors, stairs, or spaces. Any condition that can reduce detection, notification, suppression, emergency power, or egress capability must be treated as an impairment until protection is restored.

47. C — A system fault needs investigation even though an alarm condition is not indicated is the best response because trouble signals commonly identify loss of power, an open circuit, disabled component, or other impairment that can reduce system reliability. Any condition that can reduce detection, notification, suppression, power, or egress capability must be treated as an impairment until protection is restored.

48. D — Storage and obstructions that could block the discharge pattern is the best response because sprinkler effectiveness depends on heat reaching the element and water distributing across its intended area; nearby storage can delay operation or obstruct spray. Any condition that can reduce detection, notification, suppression, emergency power, or egress capability must be treated as an impairment until protection is restored.

49. C — To provide hose connections for firefighting water within a building is the best response because standpipes provide a dependable internal water supply at hose outlets, reducing the distance firefighters must stretch hose from an exterior apparatus. Any condition that can reduce detection, notification, suppression, emergency power, or egress capability must be treated as an impairment until protection is restored.

50. D — Document the failure and arrange prompt correction while managing the affected risk is the best response because lighting must support safe egress when power is lost, so a failed unit represents an impairment requiring timely action and records. condition that can reduce detection, notification, suppression, emergency power, or egress capability must be treated as an impairment until protection is restored.

51. A — Obstructions can delay evacuation and increase trip or fire hazards is the best response because an exit path must remain recognizable and passable under stressful, low-visibility conditions; storage reduces clear width and can introduce additional fuel. Any condition that can reduce detection, notification, suppression, emergency power, or egress capability must be treated as an impairment until protection is restored.

52. B — Treat it as an impairment, notify responsible parties, and restore protection under procedure is the best response because a partly closed control valve can restrict sprinkler flow, so the condition requires controlled restoration, notification, and verification rather than informal adjustment. condition that can reduce detection, notification, suppression, power, or egress must be treated as an impairment until protection is restored.

53. C — To supply designated critical equipment when normal power fails is the best response because emergency power supports selected loads such as egress lighting, alarms, or other required systems; capacity and transfer arrangements are intentionally limited. Any condition that can reduce detection, notification, suppression, emergency power, or egress capability must be treated as an impairment until protection is restored.

54. A — Follow the emergency plan, support evacuation, and communicate system information is the best response because emergency procedures require coordinated life-safety actions and accurate information; routine work and convenience cannot take priority over evacuation and response. Any condition that can reduce detection, notification, suppression, emergency power, or egress capability must be treated as an impairment until protection is restored.

55. B — They document system condition, impairments, corrective action, and required follow-up is the best response because records create an accountable history that helps responsible parties identify overdue work, recurring defects, and whether protection was restored after a problem. Any condition that can reduce detection, notification, suppression, emergency power, or egress capability must be treated as an impairment until protection is restored.

56. D — Report and replace it promptly with the type while addressing the impairment is the best response because a missing extinguisher leaves the planned coverage incomplete; prompt replacement and documentation restore readiness without assuming an improvised substitute is suitable. Any condition that can reduce detection, notification, suppression, power, or egress capability must be treated as an impairment until protection is restored.

57. B — A shared supply, connection, or circuit problem is more likely than several lamp failures is the best response because when loads show the symptom together, a upstream component is a lead than

unrelated failures at each fixture. A repeatable sequence of observations is more valuable than guessing because it links the reported symptom to a load, component, or operating state.

58. D — De-energize it and check for binding or a starting component is the best response because a stalled motor draws current and can overheat quickly, so energy should be removed before checking the load, bearings, or start circuit. A repeatable sequence of observations is more valuable than guessing because it links the reported symptom to a load, component, or operating state.

59. A — Local valve, air, trap, control, or terminal-unit conditions is the best response because normal heat nearby suggests the central source and much of the distribution path are working, narrowing the fault to the affected branch or terminal. A repeatable sequence of observations is more valuable than guessing because it links the reported symptom to a load, component, or operating state.

60. C — It reveals timing, conditions, and patterns that may not appear during inspection is the best response because intermittent failures can disappear before a technician arrives; loads, weather, alarms, sounds, and times help reproduce and isolate the condition. A repeatable sequence of observations is more valuable than guessing because it links the reported symptom to a load, component, or operating state.

61. C — Whether components were reassembled and the parts are aligned is the best response because a new symptom immediately after service often relates to the work performed, such as loose hardware, misalignment, damaged blades, or incorrect belt tension. A repeatable sequence of observations is more valuable than guessing because it links the reported symptom to a load, component, or operating state.

62. A — To determine whether the condition or the measuring device is faulty is the best response because troubleshooting depends on trustworthy evidence; an independent measurement can prevent unnecessary repairs caused by a failed sensor, gauge, or test instrument. A repeatable sequence of observations is more valuable than guessing because it links the reported symptom to a load, component, or operating state.

63. B — A partial downstream restriction that becomes evident at higher flow is the best response because a partly blocked drain may pass small flows but cannot carry combined discharge, causing water to rise at the lowest available opening. A repeatable sequence of observations is more valuable than guessing because it links the reported symptom to a load, component, or operating state.

64. D — De-energize and locate the short circuit or fault before another replacement is the best response because immediate repeat operation shows the fault remains; repeated replacement or oversized protection risks conductor and equipment damage without correcting the cause. A repeatable sequence of observations is more valuable than guessing because it links the reported symptom to a load, component, or operating state.

65. D — Stop it and have rotation and wiring corrected before continued operation is the best response because incorrect rotation reduces performance and may affect motor cooling or equipment loading, so the installation should be corrected and safely. A repeatable sequence of observations is more valuable than guessing because it links the reported symptom to a specific load, component, or operating state.

66. B — They provide comparison values for recognizing deterioration and diagnosing future faults is the best response because normal amperage, pressure, temperature, vibration, and other trends make subtle changes easier to identify before they become major failures. A repeatable sequence of observations is more valuable than guessing because it links the reported symptom to a specific load, component, or operating state.

67. C — Roof, flashing, drain, or penetration above and up-slope of the stain is the best response because the weather-related pattern points to exterior water entry rather than an always-pressurized interior pipe, though water may travel before becoming visible. A repeatable sequence of observations is more valuable than guessing because it links the reported symptom to a load, component, or operating state.

68. A — It can resolve common faults efficiently without unnecessary disassembly or parts replacement is the best response because power availability, settings, filters, valves, and loose connections commonly explain symptoms and can be checked systematically before invasive work begins. A repeatable sequence of observations is more valuable than guessing because it links the reported symptom to a load, component, or operating state.

69. B — Restrict access, identify the material, and follow the applicable spill procedure is the best response because unknown materials may be corrosive, toxic, reactive, or infectious, so identification and controlled response must precede product selection and cleanup. Safe custodial work follows the product label and contamination-control plan while keeping occupants away from wet, reactive, or otherwise hazardous conditions.

70. A — The mixture can release dangerous toxic gases is the best response because combining incompatible cleaners can create hazardous airborne compounds; labels and safety information must be followed instead of improvising chemical mixtures. Safe custodial work follows the product label and contamination-control plan while keeping occupants away from wet, reactive, or otherwise hazardous conditions.

71. D — The period a surface must remain wet for the product to work as directed is the best response because disinfection depends on sufficient contact between the properly prepared product and the surface; wiping it away too soon can reduce effectiveness. Safe custodial work follows the product label and contamination-control plan while keeping occupants away from wet, reactive, or hazardous conditions.

72. C — Rinse or neutralize as directed and allow the clean floor to dry is the best response because residue, soil, or moisture can interfere with bonding and appearance, so the prepared surface must meet the finish manufacturer’s requirements. Safe custodial work follows the product label and contamination-control plan while keeping occupants away from wet, reactive, or otherwise hazardous conditions.

73. B — They help prevent cross-contamination between areas is the best response because dedicated colors make it easier to keep restroom, food-service, classroom, and other tools separated, reducing

transfer of soil and microorganisms. Safe custodial work follows the product label and contamination-control plan while keeping occupants away from wet, reactive, or otherwise hazardous conditions.

74. D — Control access, post clear warnings, and dry the area promptly is the best response because slip risk must be made visible and physically managed while the moisture is removed, especially where students and staff may approach unexpectedly. Safe custodial work follows the product label and contamination-control plan while keeping occupants away from wet, reactive, or otherwise hazardous conditions.

75. A — Correct concentration supports performance while limiting residue, damage, and exposure is the best response because too little product may not work, while excessive concentration can waste material, leave residue, damage surfaces, or increase worker and occupant exposure. Safe custodial work follows the product label and contamination-control plan while keeping occupants away from wet, reactive, or otherwise hazardous conditions.

76. C — Collect them in a designated manner and launder them before reuse is the best response because controlled collection prevents cross-contamination, while proper laundering removes soil and reduces microbial load before cloths return to service. Safe custodial work follows the product label and contamination-control plan while keeping occupants away from wet, reactive, or otherwise hazardous conditions.

77. D — Its condition, duty rating, footing, angle or setup, and surrounding hazards is the best response because a ladder must support the user and task on stable footing without defects, electrical exposure, door traffic, or an unsafe climbing configuration. Removing defective equipment from service and controlling stored energy are essential before a guard, jam, cord, wheel, or rotating part is handled.

78. C — Fragments can break away and cause impact injuries is the best response because deformed metal edges can chip when struck, sending sharp fragments toward the worker or bystanders; dressing or replacement is required before reuse. Removing defective equipment from service and controlling stored energy are essential before a guard, jam, cord, wheel, or rotating part is handled.

79. B — Use the guarded tool and method rather than removing the guard is the best response because a guard is to separate the user from moving parts and debris; task setup or tool selection should change instead of defeating protection. Removing defective equipment from service and controlling stored energy are essential before a guard, jam, cord, wheel, or part is handled.

80. A — Shut it down, isolate energy, and wait for moving parts to stop is the best response because stored rotation or restart can move the auger unexpectedly, so shutdown and energy control must occur before the obstruction is approached. Removing defective equipment from service and controlling stored energy are essential before a guard, jam, cord, wheel, or rotating part is handled.

81. D — It reduces slipping and damage to the fastener is the best response because a properly fitting wrench contacts the flats securely, allowing controlled torque while reducing rounded fasteners, knuckle injuries, and sudden loss of balance. Removing defective equipment from service and controlling stored energy are essential before a guard, jam, cord, wheel, or rotating part is handled.

82. C — Remove the cord from service and arrange proper repair or replacement is the best response because exposed conductors create shock, short-circuit, and fire hazards; temporary concealment does not restore insulation or strain relief to a safe condition. Removing defective equipment from service and controlling stored energy are essential before a guard, jam, cord, wheel, or rotating part is handled.

83. A — It supports the work and limits the gap where material could jam is the best response because a small, correctly adjusted gap helps control the workpiece and reduces the chance it will be pulled between the rest and grinding wheel. Removing equipment from service and controlling stored energy are essential before a guard, jam, cord, wheel, or part is handled.

84. B — Identify and correct moisture or adhesion causes, then remove loose material is the best response because new coating will fail if the source of peeling remains or unstable material is left beneath it, making diagnosis and preparation essential. Surface moisture, contamination, unstable coating, and incompatible materials should be resolved before application because a finish cannot compensate for a defective substrate.

85. C — It promotes adhesion, seals porosity, and supports a uniform finish is the best response because the appropriate primer creates a suitable bond between substrate and topcoat, reducing uneven absorption, staining, and premature coating failure. Surface moisture, contamination, unstable coating, and incompatible materials should be resolved before application because a finish cannot compensate for a defective substrate.

86. A — Allowing an edge to dry before the area is blended is the best response because working into a drying edge produces overlapping areas with different film thickness or sheen; maintaining a wet edge helps the coating level uniformly. Surface moisture, contamination, unstable coating, and incompatible materials should be resolved before application because a finish cannot compensate for a defective substrate.

87. D — Assess potential hazardous content and follow required controls is the best response because older coatings may contain hazardous materials, and uncontrolled sanding or heating can create contaminated dust or fumes requiring specialized procedures. Surface moisture, contamination, unstable coating, and incompatible materials should be resolved before application because a finish cannot compensate for a defective substrate.

88. B — Labels preserve hazard and use information while closures limit spills and vapors is the best response because proper identification supports safe selection and emergency response, while secure closures reduce evaporation, contamination, ignition risk, and accidental release. Surface moisture, contamination, unstable coating, and incompatible materials should be resolved before application because a finish cannot compensate for a defective substrate.

89. A — Protect occupants, restrict the area, and investigate the source using the procedure is the best response because an unknown odor may indicate a hazardous release, so exposure control and structured assessment must occur before routine comfort measures or continued occupancy. The preferred response controls the most harm first, communicates the disruption, and gathers the information needed for a lasting correction.

90. B — The exposed energized conductor because it presents the more immediate severe hazard is the best response because risk-based prioritization considers severity and immediacy; exposed electricity can cause fatal shock or fire and requires access control and qualified correction first. The preferred response controls the most serious harm first, communicates the disruption, and gathers the information needed for a lasting correction.

91. D — Compare schedules, loads, controls, and observations during that activity is the best response because the shared timing is evidence that occupancy, equipment use, or control schedules may contribute; targeted observation can test the pattern efficiently. The preferred response controls the most serious credible harm first, communicates the disruption, and gathers the information needed for a lasting correction.

92. C — Restrict access and obtain qualified evaluation before reopening the area is the best response because when structural or overhead stability is uncertain, temporary access control is a proportionate precaution while competent assessment determines the repair. The preferred response controls the most serious credible harm first, communicates the disruption, and gathers the information needed for a lasting correction.

93. B — Verified condition, safety, effectiveness, lifecycle cost, and operational impact is the best response because a defensible decision weighs evidence and consequences rather than one factor, helping the custodian engineer choose a safe and economical long-term solution. The preferred response controls the most serious credible harm first, communicates the disruption, and gathers the information needed for a lasting correction.

94. C — Verify usage history, inventory, unit quantities, price, and the operational need is the best response because review prevents overstock, waste, and errors while still allowing justified seasonal or project demand to be supported with reliable information. The calculation or record should be independently checked so commitments, receipts, and remaining funds agree before another expenditure is authorized.

95. D — $648 is the best response because thirty-six multiplied by eighteen equals six hundred forty-eight dollars, which can be checked as 360 plus 288. The calculation or record should be independently checked so commitments, receipts, and remaining funds agree before another expenditure is authorized. The distractors either contradict the evidence, bypass a safeguard, or concern a different building function.

96. A — $2,665 is the best response because eight thousand nine hundred minus six thousand two hundred thirty-five leaves two thousand six hundred sixty-five dollars. The calculation or record should be independently checked so commitments, receipts, and remaining funds agree before another expenditure is authorized. The distractors either contradict the evidence, bypass a safeguard, or concern a different building function.

97. A — To detect errors, document expenditures, and maintain an accurate available balance is the best response because timely reconciliation connects what was ordered, received, and paid, making missing goods, pricing errors, duplicate charges, and budget differences easier to correct. The calculation or

record should be independently checked so commitments, receipts, and remaining funds agree before another expenditure is authorized.

98. D — Finish the inspection before occupancy and submit the form by 10:00 a.m. is the best response because the conjunction requires both actions, and each has a distinct timing condition; reading only the deadline would miss the occupancy restriction. Every stated condition remains operative unless the directive itself creates an exception, so the reader must not substitute custom, preference, or convenience.

99. B — Untrained employees must not operate the machine until trained is the best response because the word only limits operation to the trained group; experience or convenience does not create an exception that the memo does not state. Every stated condition remains operative unless the directive itself creates an exception, so the reader must not substitute custom, preference, or convenience.

100. C — All listed details because each can affect safe and completion is the best response because the location identifies the job, the symptom guides preparation, the restriction affects entry, and the deadline supports scheduling; omitting one can delay or compromise the response. Every condition remains unless the directive creates an exception, so the reader must not substitute custom, preference, or convenience.