

PRACTICE EXAM 21: 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. While confirming that boiler readings are reliable before continued operation, before starting a low-pressure boiler after an extended shutdown, what should be verified first?
 - A. The safety valve discharge is temporarily capped
 - B. The thermostat is set to its highest value
 - C. The water level is visible at the proper gauge-glass level
 - D. The stack damper is fully closed

2. During review of the heating plant before the building opens, what is the primary purpose of a boiler low-water cutoff?
 - A. To regulate chimney draft during ignition under the stated school-building circumstances
 - B. To return condensate directly to the burner
 - C. To raise steam pressure during peak demand
 - D. To stop burner operation when the boiler water level becomes unsafe

3. After a boiler operating safeguard has indicated an abnormal condition, a gauge glass appears full and does not change when the try cocks are operated. What is the best initial response?
 - A. Treat the reading as unreliable and test or clear the gauge-glass connections
 - B. Open the safety valve to lower the water line

- C. Increase firing rate until the level begins moving
- D. Close the feedwater supply for the remainder of the shift

4. While confirming that boiler readings are reliable before continued operation, why is a steam boiler warmed gradually from a cold condition?

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

5. During review of the heating plant before the building opens, what condition most directly suggests incomplete combustion at an oil-fired boiler?

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

6. After a boiler operating safeguard has indicated an abnormal condition, what is the safest action when a burner repeatedly locks out?

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

7. While confirming that boiler readings are reliable before continued operation, what is the purpose of blowing down a gauge glass?

- A. To increase the boiler steaming rate

- B. To lower the boiler-room temperature
- C. To lubricate the gauge-glass valves
- D. To confirm clear connections and reliable water-level indication

8. During review of the heating plant before the building opens, a steam trap has failed open. What is the most likely result?

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

9. After a boiler operating safeguard has indicated an abnormal condition, why should boiler-room combustion-air openings remain unobstructed?

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

10. While confirming that boiler readings are reliable before continued operation, what does a rising stack temperature with unchanged load commonly indicate?

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

11. During review of the heating plant before the building opens, when testing a boiler safety control, what practice is most appropriate?

- A. Adjust the control beyond its listed range
- B. Disable other controls to prevent interruption
- C. Follow the approved procedure and document the result
- D. Leave the boiler unattended during the test

12. After a boiler operating safeguard has indicated an abnormal condition, what is a likely cause of water hammer in steam piping?

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

13. While confirming that boiler readings are reliable before continued operation, what should an operator do before opening a boiler blowdown valve?

- A. Disable the low-water cutoff circuit under the stated school-building circumstances
- B. Raise the water level above the gauge glass
- C. Close every boiler-room ventilation opening under the stated school-building circumstances
- D. Confirm the discharge path is safe and the blowdown system is ready

14. During review of the heating plant before the building opens, a boiler pressure gauge remains at zero while the boiler is clearly steaming. What should be concluded?

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

15. After a boiler operating safeguard has indicated an abnormal condition, why is a burner flame-safeguard control essential?

- A. It shuts fuel flow when an acceptable flame is not proven
- B. It controls condensate pump lubrication under the stated school-building circumstances
- C. It determines the building cleaning schedule under the stated school-building circumstances
- D. It sets domestic-water temperature under the stated school-building circumstances

16. While confirming that boiler readings are reliable before continued operation, what is the best response to a newly discovered boiler-water leak?

- A. Increase firing to evaporate the leaking water under the stated school-building circumstances
- B. Reduce risk, isolate as appropriate, and assess the leak before continued operation
- C. Add sealant without locating the source under the stated school-building circumstances
- D. Ignore it if the feedwater pump can keep up

17. While evaluating a temperature and airflow complaint in an occupied wing, a classroom is warm although the heating valve is closed. What should be checked first?

- A. Whether the valve is actually closing and the actuator linkage is intact
- B. Whether the roof drain is obstructed under the stated school-building circumstances
- C. Whether the fire-alarm panel is normal under the stated school-building circumstances
- D. Whether the cooling-tower basin is full under the stated school-building circumstances

18. After maintenance adjusts a ventilation component or control, what is the main effect of a heavily loaded HVAC air filter?

- A. Lower electrical resistance in lighting circuits
- B. Reduced airflow and increased fan-system resistance
- C. Increased boiler-water level under the stated school-building circumstances
- D. Higher outdoor-air humidity in every season

19. During verification of HVAC response across changing building demand, 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 filter media may change color
- C. The fan can start automatically and cause severe injury
- D. The duct static pressure may become visible

20. While evaluating a temperature and airflow complaint in an occupied wing, what is the purpose of an HVAC economizer?

- A. To bypass all ventilation requirements under the stated school-building circumstances
- B. To increase refrigerant pressure during heating
- C. To add steam directly to supply ductwork
- D. To use suitable outdoor air for cooling when conditions permit

21. After maintenance adjusts a ventilation component or control, what condition is commonly caused by insufficient airflow across an evaporator coil?

- A. Faster exhaust-fan rotation under the stated school-building circumstances
- B. Coil icing and reduced cooling capacity
- C. Increased boiler pressure under the stated school-building circumstances
- D. Higher condensate drain temperature

22. During verification of HVAC response across changing building demand, before changing a belt on an air-handler fan, what must be done?

- A. Reset the fire-alarm control panel under the stated school-building circumstances
- B. Open every supply-air damper fully under the stated school-building circumstances
- C. Disconnect, lock out, and verify the fan's energy source
- D. Close the building's domestic-water valve under the stated school-building circumstances

23. While evaluating a temperature and airflow complaint in an occupied wing, what does short cycling of an HVAC compressor mean?

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

24. After maintenance adjusts a ventilation component or control, why must a condensate drain trap be correctly configured on an air handler?

- A. To allow drainage while preventing unwanted air movement through the drain
- B. To raise fan motor speed under the stated school-building circumstances
- C. To increase refrigerant subcooling under the stated school-building circumstances
- D. To replace the need for a drain pan

25. During verification of HVAC response across changing building demand, a supply fan runs, but several rooms receive little air. What is the best first system-level check?

- A. Drain the domestic-water heater under the stated school-building circumstances
- B. Replace every room thermostat under the stated school-building circumstances
- C. Increase boiler pressure immediately under the stated school-building circumstances
- D. Inspect filter condition, dampers, and obvious duct restrictions

26. While evaluating a temperature and airflow complaint in an occupied wing, what is the purpose of balancing an air-distribution system?

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

27. After maintenance adjusts a ventilation component or control, why are refrigeration service tasks restricted to properly qualified personnel?

- A. Refrigerants, pressure, electricity, and environmental controls create specialized hazards
- B. Thermostats cannot be safely read by custodial staff
- C. Air filters can only be purchased by license holders
- D. Ductwork always contains asbestos insulation under the stated school-building circumstances

28. During verification of HVAC response across changing building demand, what does an unusually noisy fan bearing most directly call for?

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

29. While evaluating a temperature and airflow complaint in an occupied wing, during occupied hours, why should outdoor-air dampers not simply remain closed?

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

30. After maintenance adjusts a ventilation component or control, what should be verified after replacing an HVAC drive belt?

- A. Maximum thermostat setpoint under the stated school-building circumstances
- B. Closed condensate drain valve under the stated school-building circumstances
- C. Proper tension, alignment, guard installation, and rotation
- D. Higher circuit-breaker rating under the stated school-building circumstances

31. Before removing barriers around a completed plumbing repair, before replacing a damaged electrical switch, what is the essential first step?

- A. Remove the equipment grounding conductor under the stated school-building circumstances
- B. De-energize, lock out as applicable, and verify absence of voltage
- C. Turn off the building water supply
- D. Install a larger fuse under the stated school-building circumstances

32. While responding to a water or drainage condition near occupied rooms, what is the purpose of an equipment-grounding conductor?

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

33. After the correct piping section is identified and isolated, a circuit breaker trips repeatedly after being reset. What is the safest response?

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

34. Before removing barriers around a completed plumbing repair, what is the most appropriate tool for confirming that an electrical circuit is de-energized?

- A. A noncontact thermometer under the stated school-building circumstances
- B. A wooden ruler placed near the outlet
- C. A properly rated voltage tester used according to its instructions
- D. A pipe wrench with insulated tape

35. While responding to a water or drainage condition near occupied rooms, what commonly causes a faucet to drip after it is shut off?

- A. A worn or damaged sealing component inside the valve
- B. A clogged roof drain under the stated school-building circumstances
- C. Excessive ventilation in the room under the stated school-building circumstances
- D. A loose lighting ballast under the stated school-building circumstances

36. After the correct piping section is identified and isolated, before opening a clogged sink trap, what should be done?

- A. Increase the domestic-water pressure under the stated school-building circumstances
- B. Energize the nearby disposal continuously under the stated school-building circumstances
- C. Seal the fixture overflow permanently under the stated school-building circumstances
- D. Control water use, place a container below, and wear suitable protection

37. Before removing barriers around a completed plumbing repair, what is the purpose of a plumbing fixture trap?

- A. To retain a water seal that limits sewer-gas entry
- B. To raise pressure at the faucet
- C. To filter all solids from the water supply
- D. To increase water-heater recovery rate under the stated school-building circumstances

38. While responding to a water or drainage condition near occupied rooms, a flush valve continues running after use. What should be checked first?

- A. The classroom supply diffuser under the stated school-building circumstances
- B. The valve's diaphragm or sealing mechanism for debris or wear
- C. The boiler stack damper under the stated school-building circumstances
- D. The branch-circuit grounding electrode under the stated school-building circumstances

39. After the correct piping section is identified and isolated, what does a ground-fault circuit interrupter primarily protect against?

- A. Low domestic-water pressure under the stated school-building circumstances
- B. All possible equipment overloads under the stated school-building circumstances
- C. Mechanical damage to conduit under the stated school-building circumstances
- D. Electric shock from current leaking outside the intended circuit path

40. Before removing barriers around a completed plumbing repair, why should a replacement fuse match the required type and rating?

- A. Any fuse fits every holder safely under the stated school-building circumstances
- B. A larger fuse always reduces energy use
- C. The correct fuse protects conductors and equipment within their designed limits
- D. Fuse rating controls plumbing pressure under the stated school-building circumstances

41. While responding to a water or drainage condition near occupied rooms, a water pipe begins leaking above an electrical panel. What is the priority?

- A. Continue normal occupancy below the leak under the stated school-building circumstances
- B. Protect people, control electrical exposure, and isolate the water source safely
- C. Stand in the water and reset breakers
- D. Open the panel to wipe conductors dry

42. After the correct piping section is identified and isolated, what is the likely effect of closing a valve too quickly in a water line?

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

43. Before removing barriers around a completed plumbing repair, why should extension cords not be used as permanent building wiring?

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

44. While responding to a water or drainage condition near occupied rooms, after repairing a leaking pipe joint, what is the final essential step?

- A. Remove nearby pipe supports under the stated school-building circumstances
- B. Paint the joint before testing under the stated school-building circumstances
- C. Restore service gradually and inspect the joint under operating pressure
- D. Leave the isolation valve closed indefinitely

45. After an impairment requires coordination and temporary safeguards, what is the purpose of a fire-alarm pull station?

- A. To control boiler firing pressure under the stated school-building circumstances
- B. To reset a tripped lighting breaker
- C. To shut off domestic water throughout the school
- D. To let an occupant manually initiate a fire alarm

46. Before increased occupancy for a school or community event, why must fire doors not be wedged open?

- A. They control sprinkler water pressure under the stated school-building circumstances
- B. They serve as primary exits only when locked
- C. They are intended to limit smoke and fire spread when closed
- D. They increase HVAC efficiency only when blocked

47. During a scheduled inspection of fire and emergency systems, a fire-alarm panel displays a trouble signal. What does it generally mean?

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

48. After an impairment requires coordination and temporary safeguards, what should be kept clear around sprinkler heads?

- A. Storage and obstructions that could block the discharge pattern
- B. Every portable fire extinguisher under the stated school-building circumstances
- C. All ceiling tiles within the room
- D. Only noncombustible furniture under the stated school-building circumstances

49. Before increased occupancy for a school or community event, what is the main purpose of a standpipe system?

- A. To provide hose connections for firefighting water within a building
- B. To ventilate boiler combustion gases under the stated school-building circumstances
- C. To remove condensate from air handlers
- D. To supply drinking water at classroom sinks

50. During a scheduled inspection of fire and emergency systems, when emergency lighting fails during a routine test, what is the appropriate response?

- A. Disable the test switch permanently under the stated school-building circumstances
- B. Remove exit signs to avoid confusion under the stated school-building circumstances
- C. Assume normal lighting will always remain available under the stated school-building circumstances
- D. Document the failure and arrange prompt correction while managing the affected risk

51. After an impairment requires coordination and temporary safeguards, why should exit routes remain free of stored materials?

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

52. Before increased occupancy for a school or community event, what is the correct response when a sprinkler control valve is found partly closed without authorization?

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

53. During a scheduled inspection of fire and emergency systems, what is the purpose of an emergency generator serving life-safety loads?

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

54. After an impairment requires coordination and temporary safeguards, during a fire alarm, what should a custodian engineer prioritize?

- A. Use elevators to move occupants faster
- B. Follow the emergency plan, support evacuation, and communicate system information
- C. Silence the alarm before determining its cause
- D. Finish routine preventive maintenance first under the stated school-building circumstances

55. Before increased occupancy for a school or community event, why are fire-protection inspection and test records important?

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

56. During a scheduled inspection of fire and emergency systems, a portable fire extinguisher is missing from its designated location. What should be done?

- A. Report and replace it promptly with the proper type while addressing the impairment
- B. Move the location sign to another corridor under the stated school-building circumstances
- C. Place a bucket of water there instead under the stated school-building circumstances
- D. Wait for the annual inspection under the stated school-building circumstances

57. After recording the sequence and operating conditions associated with the complaint, several lights on one circuit flicker simultaneously. What is the best first inference?

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

58. During a controlled test intended to isolate the failing element, a pump motor hums but its shaft does not turn. What should be done first?

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

59. While evaluating a recurring fault using observed evidence, a room has no heat while adjacent rooms on the same loop are warm. What is the best initial focus?

- A. The entire boiler fuel supply
- B. Local valve, air, trap, control, or terminal-unit conditions
- C. The main utility electrical service
- D. The roof drainage system under the stated school-building circumstances

60. After recording the sequence and operating conditions associated with the complaint, why is a written symptom history useful before troubleshooting intermittent equipment?

- A. It proves the newest part has failed under the stated school-building circumstances
- B. It eliminates the need to inspect the equipment
- C. It permits every safety device to be bypassed
- D. It reveals timing, conditions, and patterns that may not appear during inspection

61. During a controlled test intended to isolate the failing element, a repaired fan vibrates more than before. What should be checked first?

- A. Whether the fire-alarm panel clock is correct
- B. Whether components were reassembled securely and the rotating parts are aligned
- C. Whether restroom cleaner was diluted under the stated school-building circumstances
- D. Whether boiler-water treatment was changed under the stated school-building circumstances

62. While evaluating a recurring fault using observed evidence, 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 increase equipment operating temperature under the stated school-building circumstances
- C. To avoid documenting the original reading under the stated school-building circumstances
- D. To make both instruments show identical serial numbers

63. After recording the sequence and operating conditions associated with the complaint, a floor drain backs up only when several fixtures discharge. What does that pattern suggest?

- A. A thermostat calibration problem under the stated school-building circumstances
- B. A lighting-circuit overload under the stated school-building circumstances
- C. A partial downstream restriction that becomes evident at higher flow
- D. An excessively clean trap seal under the stated school-building circumstances

64. During a controlled test intended to isolate the failing element, after replacing a blown fuse, it opens again immediately. What should happen next?

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

65. While evaluating a recurring fault using observed evidence, an exhaust fan runs backward after electrical work. What is the best response?

- A. Stop it and have rotation and wiring corrected before continued operation
- B. Increase the motor overload setting under the stated school-building circumstances
- C. Block the discharge opening under the stated school-building circumstances
- D. Reverse the fan blades by hand while energized

66. After recording the sequence and operating conditions associated with the complaint, why should baseline readings be recorded when equipment operates normally?

- A. They eliminate the need for visual inspection
- B. They provide comparison values for recognizing deterioration and diagnosing future faults
- C. They replace manufacturer maintenance instructions under the stated school-building circumstances
- D. They prevent the equipment from ever failing

67. During a controlled test intended to isolate the failing element, a ceiling stain grows only during heavy rain. What is the most logical first area to inspect?

- A. The classroom lighting switch under the stated school-building circumstances
- B. The boiler burner nozzle under the stated school-building circumstances
- C. The domestic hot-water thermostat under the stated school-building circumstances
- D. Roof, flashing, drain, or exterior penetration above and up-slope of the stain

68. While evaluating a recurring fault using observed evidence, what is the value of checking the simplest likely causes early in troubleshooting?

- A. It permits safety procedures to be skipped under the stated school-building circumstances
- B. It guarantees the first guess is correct under the stated school-building circumstances
- C. It can resolve common faults efficiently without unnecessary disassembly or parts replacement
- D. It removes the need to verify the repair

69. During inspection of chemical handling and cleaning technique, which cleaning approach is most appropriate for an unknown spill?

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

70. Before the custodial assignment is signed off and the space reopened, why must bleach never be mixed with ammonia-containing cleaners?

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

71. While planning sanitation work for an intensively used school space, what is dwell time for a disinfectant?

- A. The interval between boiler blowdowns under the stated school-building circumstances
- B. The period a surface must remain wet for the product to work as directed
- C. The time needed for a vacuum bag to fill
- D. The drying time for every floor finish under the stated school-building circumstances

72. During inspection of chemical handling and cleaning technique, what should be done before applying floor finish to a stripped floor?

- A. Add solvent to the wet floor under the stated school-building circumstances
- B. Apply finish over remaining slurry under the stated school-building circumstances
- C. Rinse or neutralize as directed and allow the clean floor to dry
- D. Close all exit routes with equipment under the stated school-building circumstances

73. Before the custodial assignment is signed off and the space reopened, why are color-coded cleaning tools useful?

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

74. While planning sanitation work for an intensively used school space, what is the best practice for a wet floor in an occupied corridor?

- A. Apply additional finish immediately under the stated school-building circumstances
- B. Leave equipment unattended across the exit
- C. Turn off corridor lighting under the stated school-building circumstances
- D. Control access, post clear warnings, and dry the area promptly

75. During inspection of chemical handling and cleaning technique, why should a chemical be diluted according to its label?

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

76. Before the custodial assignment is signed off and the space reopened, how should soiled reusable cleaning cloths be handled?

- A. Collect them in a designated manner and launder them before reuse
- B. Use them in food areas without washing
- C. Return them directly to clean storage under the stated school-building circumstances
- D. Leave them wet in a closed bucket indefinitely

77. Before a trained employee starts a powered-equipment task, what should be checked before using a portable ladder?

- A. Whether the boiler is at operating pressure
- B. Whether the nearest outlet is energized under the stated school-building circumstances
- C. Only the paint color of the side rails
- D. Its condition, duty rating, footing, angle or setup, and surrounding hazards

78. After a tool is tagged out because inspection shows an abnormal condition, why should a mushroomed striking-tool head be removed from service?

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

79. During review of safe equipment setup and work-area protection, what is the safest choice when a power-tool guard interferes with a cut?

- A. Use the correct guarded tool and method rather than removing the guard
- B. Increase tool speed beyond its rating under the stated school-building circumstances
- C. Tie the guard open for better visibility under the stated school-building circumstances
- D. Hold the workpiece by hand near the blade

80. Before a trained employee starts a powered-equipment task, before clearing a jam from snow-removal equipment, what should be done?

- A. Increase throttle to discharge the jam under the stated school-building circumstances
- B. Shut it down, isolate energy, and wait for moving parts to stop
- C. Reach into the chute while the engine idles
- D. Tip the running machine toward the operator under the stated school-building circumstances

81. After a tool is tagged out because inspection shows an abnormal condition, why is the correct wrench size important?

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

82. During review of safe equipment setup and work-area protection, what should be done with a damaged extension-cord jacket exposing conductors?

- A. Use it only in wet locations under the stated school-building circumstances
- B. Place the damage beneath a rug under the stated school-building circumstances
- C. Remove the cord from service and arrange proper repair or replacement
- D. Cover it with paper and continue using it

83. Before a trained employee starts a powered-equipment task, 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 under the stated school-building circumstances
- C. It changes alternating current to direct current under the stated school-building circumstances
- D. It eliminates the need for a wheel guard

84. After preparation exposes the condition of the underlying material, what is the most important step before repainting a peeling surface?

- A. Polish the surface with floor wax under the stated school-building circumstances
- B. Apply a thick finish coat over the peeling paint
- C. Keep the underlying surface continuously wet under the stated school-building circumstances
- D. Identify and correct moisture or adhesion causes, then remove loose material

85. Before approving primer and finish application beyond the sample area, why is primer used on many bare or repaired surfaces?

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

86. While identifying why an existing finish has failed, what causes lap marks when rolling wall paint?

- A. Mixing the same batch consistently under the stated school-building circumstances
- B. Using compatible paint and primer under the stated school-building circumstances
- C. Maintaining a wet edge during application under the stated school-building circumstances
- D. Allowing an edge to dry before the adjoining area is blended

87. After preparation exposes the condition of the underlying material, before disturbing an old unknown coating, what is the safest approach?

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

88. Before approving primer and finish application beyond the sample area, why should painting materials be stored with labels intact and containers closed?

- A. Labels prevent every coating from expiring under the stated school-building circumstances
- B. Closed containers make all products nonflammable under the stated school-building circumstances
- C. Labels preserve hazard and use information while closures limit spills and vapors
- D. Open containers improve long-term storage under the stated school-building circumstances

89. When several incidents compete for limited facilities staff, 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. Ask students to identify it closely under the stated school-building circumstances
- C. Wait until the end of the week under the stated school-building circumstances
- D. Mask the odor with air freshener under the stated school-building circumstances

90. While evaluating whether temporary controls adequately reduce risk, two urgent repairs compete for one available worker: a leaking drinking fountain and an exposed energized conductor. Which gets priority?

- A. Neither repair until both can be completed together
- B. Whichever request arrived first regardless of risk under the stated school-building circumstances
- C. The exposed energized conductor because it presents the more immediate severe hazard
- D. The drinking fountain because it is used more often

91. Before choosing the safest and most effective immediate course of action, repeated complaints occur only after a particular evening activity. What is the best next step?

- A. Dismiss the complaints as coincidence under the stated school-building circumstances
- B. Compare schedules, loads, controls, and observations during that activity
- C. Replace all building equipment immediately under the stated school-building circumstances
- D. Change unrelated daytime cleaning products under the stated school-building circumstances

92. When several incidents compete for limited facilities staff, a supervisor is unsure whether a damaged ceiling area is safe. What is the best decision?

- A. Conceal the damage with paint under the stated school-building circumstances
- B. Allow occupancy until material falls under the stated school-building circumstances
- C. Ask occupants to avoid looking upward
- D. Restrict access and obtain qualified evaluation before reopening the area

93. While evaluating whether temporary controls adequately reduce risk, what is the best basis for choosing between two repair options?

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

94. Before another expenditure is approved from the remaining balance, a supply order is much larger than normal. What should be done before approval?

- A. Discard previous inventory records under the stated school-building circumstances
- B. Split it into undocumented purchases under the stated school-building circumstances
- C. Approve it because larger orders are always cheaper
- D. Verify usage history, inventory, unit quantities, price, and the operational need

95. During review of a facilities order against available funding, eighty-one packages of supplies cost \$24 each. What is the total before fees?

- A. \$1,944
- B. \$1,934
- C. \$1,844
- D. \$2,044

96. After comparing vendor billing with quantities actually received, a maintenance allocation has \$25,800 before an approved \$17,925 project is charged. What remains?

- A. \$7,975
- B. \$7,775
- C. \$7,875
- D. \$8,875

97. Before another expenditure is approved from the remaining balance, why should receipts and purchase records be reconciled promptly?

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

98. While interpreting a written directive containing several linked requirements, a directive says, "Complete the inspection before occupancy and submit the form by 10:00 a.m." What is required?

- A. Complete either task at any time that day
- B. Submit the form before inspecting the area under the stated school-building circumstances
- 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. After identifying every stated deadline, restriction, and required action, a memo states that only trained employees may use a new floor machine. What is the correct interpretation?

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

100. Before briefing the crew assigned to a detailed maintenance order, 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 under the stated school-building circumstances
- B. All listed details because each can affect safe and timely completion
- C. Only the room number under the stated school-building circumstances
- D. Only the employee's preferred tool under the stated school-building circumstances

Practice Exam 21: Answer Key and Explanations

1. C — 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. D — 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. A — 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. B — 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. C — 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. A — 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. D — 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. B — 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. A — 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. C — 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. B — 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. D — 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. C — 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. A — 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. B — 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. A — 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. B — 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. C — 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. D — 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. B — 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. C — 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. D — 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. A — 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. D — 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. A — 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. C — 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. D — 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. C — 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. B — 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. A — 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. C — 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. A — 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. D — 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. A — 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. B — 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. D — 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. C — 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. B — 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. A — 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. C** — 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. D** — 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. C** — 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. B** — 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. A** — 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. A** — 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. C** — 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. B — 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. D — 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. A — 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. C — 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. A — 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. B — 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. D — 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. B — 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. C — 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. A — 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. D — 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. C — 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. D — 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. B — 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. C — 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. A — 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. A — 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. B — 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. B — 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. D — 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. A — 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. D — 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. B — 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. C — 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. C — 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. B — 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. D — 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. D — 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. A — \$1,944 is the best response because eighty-one multiplied by twenty-four equals one thousand nine hundred forty-four dollars, which can be checked as 1,620 plus 324. 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. C — \$7,875 is the best response because twenty-five thousand eight hundred minus seventeen thousand nine hundred twenty-five leaves seven thousand eight hundred seventy-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. C — 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. B — 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.