

PRACTICE EXAM 4: CHST SIMULATION

(200 QUESTIONS)

DOMAIN 1 — Hazard and Risk Identification and Control (Q1–73)

1. The general fall protection trigger height for construction work under Subpart M is:

- A. 4 feet to a lower level
- B. 8 feet to a lower level
- C. 10 feet to a lower level
- D. 6 feet to a lower level

2. Under OSHA, a "competent person" is one who:

- A. holds a professional engineer license
- B. is the highest-paid worker on the crew
- C. has completed a 10-hour awareness course
- D. can identify hazards and is authorized to correct them

3. In risk terminology, a "hazard" is best defined as:

- A. the probability that harm occurs
- B. a source with the potential to cause harm
- C. the calculated severity score of an event
- D. the residual exposure remaining after controls

4. The most effective level on the hierarchy of controls is:

- A. elimination of the hazard
- B. installation of engineering controls
- C. application of administrative controls
- D. issuance of personal protective equipment

5. On the hierarchy of controls, personal protective equipment is considered:

- A. the most reliable available control
- B. an engineering control by classification
- C. the least effective control level
- D. equal in effectiveness to substitution

6. A protective system is required in an excavation when its depth reaches:

- A. 5 feet or greater, unless in stable rock
- B. 6 feet or greater in all soil types
- C. 4 feet or greater regardless of soil
- D. 8 feet or greater in any condition

7. The maximum allowable slope for Type C soil is:

- A. 0.75:1 from the horizontal
- B. 1.5:1 from the horizontal
- C. 1:1 from the horizontal
- D. vertical with no sloping

8. In a trench 4 feet or deeper, a means of egress must be within a lateral travel distance of:

- A. 10 feet
- B. 50 feet
- C. 25 feet
- D. 100 feet

9. Excavated spoil must be kept back from the edge of an open trench by at least:

- A. 6 inches
- B. 6 feet
- C. 4 feet
- D. 2 feet

10. A space qualifies as a confined space when it is large enough to enter, has limited egress, and:

- A. is not designed for continuous occupancy
- B. contains a hazardous atmosphere
- C. requires a written entry permit
- D. is located below ground level

11. The correct order for testing a confined-space atmosphere is:

- A. flammability, oxygen, then toxicity
- B. toxicity, oxygen, then flammability
- C. oxygen, flammability, then toxicity
- D. toxicity, flammability, then oxygen

12. The minimum acceptable oxygen concentration for confined-space entry is:

- A. 16.0%
- B. 19.5%
- C. 20.9%
- D. 23.5%

13. Oxygen concentrations above which level are considered oxygen-enriched?

- A. 20.9%
- B. 22.0%
- C. 21.5%
- D. 23.5%

14. Confined-space entry generally requires the flammable atmosphere to be below:

- A. 10% of the LEL
- B. 25% of the LEL
- C. 50% of the LEL
- D. 5% of the LEL

15. A GFCI that protects personnel trips at a ground-fault current of approximately:

- A. 20 amperes
- B. 1 ampere
- C. 5 milliamperes
- D. 100 milliamperes

16. When GFCIs are not used on a construction site, the accepted alternative is:

- A. using only double-insulated tools
- B. an Assured Equipment Grounding Conductor Program
- C. inspection by a licensed electrician
- D. installing permanent wiring only

17. After isolating and locking out equipment, the required next step before work begins is to:

- A. verify zero energy and release stored energy
- B. notify the safety director in writing
- C. apply a second backup lock
- D. document the procedure number

18. Compared with a tag, a lock provides superior protection because it:

- A. is easier to read at a distance
- B. lasts longer outdoors
- C. identifies the authorized worker
- D. physically prevents operation of the device

19. The arc flash boundary is the distance at which incident energy equals:

- A. 8 cal/cm²
- B. 40 cal/cm²
- C. 1.2 cal/cm²
- D. 0.1 cal/cm²

20. A standard guardrail top rail must be set at a nominal height of approximately:

- A. 36 inches
- B. 42 inches
- C. 48 inches
- D. 30 inches

21. A guardrail top rail must withstand an applied force of at least:

- A. 200 pounds
- B. 150 pounds
- C. 100 pounds
- D. 50 pounds

22. A guardrail midrail must withstand an applied force of at least:

- A. 200 pounds
- B. 100 pounds
- C. 150 pounds
- D. 250 pounds

23. Fall protection on a supported scaffold is required at a platform height of:

- A. 6 feet
- B. 10 feet
- C. 4 feet
- D. 15 feet

24. A scaffold must support its own weight plus how many times the maximum intended load?

- A. 2 times
- B. 6 times
- C. 1.5 times
- D. 4 times

25. Suspension ropes on a suspended scaffold require a safety factor of:

- A. 4 times the intended load
- B. 2 times the intended load
- C. 6 times the intended load
- D. 10 times the intended load

26. An extension ladder should be set so the base distance equals what fraction of the working length?

- A. one-quarter
- B. one-half
- C. one-third
- D. one-eighth

27. A non-engineered fall-arrest anchorage must support at least how much per attached worker?

- A. 1,800 pounds
- B. 3,600 pounds
- C. 2,500 pounds
- D. 5,000 pounds

28. With a full-body harness, the maximum arresting force permitted on the worker is:

- A. 5,000 pounds
- B. 1,800 pounds
- C. 900 pounds
- D. 2,500 pounds

29. Body belts are prohibited for fall arrest because they:

- A. concentrate arrest forces on the abdomen
- B. cannot connect to any lanyard
- C. are too costly to maintain
- D. excessively restrict worker movement

30. A worker left motionless in a harness after an arrested fall is at risk of:

- A. immediate cardiac arrest
- B. hypothermia from restriction
- C. suspension trauma
- D. forearm compartment syndrome

31. The maximum free fall distance permitted in a personal fall arrest system is:

- A. 2 feet
- B. 6 feet
- C. 4 feet
- D. 12 feet

32. As the angle between a sling leg and the horizontal load surface decreases, the tension in each leg:

- A. stays the same
- B. decreases proportionally
- C. is unaffected by the angle
- D. increases

33. A synthetic sling with no legible capacity tag must be:

- A. removed from service
- B. used at half its capacity
- C. limited to loads under 500 pounds
- D. inspected visually and returned to use

34. Under Subpart CC, the minimum clearance from an energized line up to 50 kV is:

- A. 20 feet
- B. 35 feet
- C. 10 feet
- D. 15 feet

35. When the load travels out of the operator's line of sight, the lift requires:

- A. a slower hoisting speed
- B. an experienced rigger only
- C. a ground-level spotter
- D. a qualified signal person

36. During a lift, a STOP signal must be obeyed when given by:

- A. only the designated signal person
- B. anyone who observes a hazard
- C. only the crane operator
- D. only the lift director

37. As a crane's operating radius increases, its rated lifting capacity:

- A. decreases
- B. increases
- C. stays constant
- D. doubles

38. A bench grinder work rest must be adjusted to within how much of the wheel?

- A. 1/2 inch
- B. 1/4 inch
- C. 1/8 inch
- D. 1 inch

39. A bench grinder tongue (spark) guard must be kept within how much of the wheel?

- A. 1/8 inch
- B. 1/4 inch
- C. 1/2 inch
- D. 1 inch

40. A powder-actuated tool may be operated only by:

- A. any worker over 18
- B. a foreman on the crew
- C. a licensed electrician
- D. a trained, certified operator

41. A fire watch after hot work must be maintained for at least:

- A. 10 minutes
- B. 60 minutes
- C. 30 minutes
- D. 15 minutes

42. Under NFPA 51B, combustibles should be relocated or protected within what distance of hot work?

- A. 35 feet
- B. 50 feet
- C. 20 feet
- D. 10 feet

43. The three elements of the fire triangle are fuel, heat, and:

- A. carbon dioxide
- B. nitrogen
- C. pressure
- D. oxygen

44. A fire in energized electrical equipment is classified as:

- A. Class A
- B. Class C
- C. Class B
- D. Class K

45. Oxygen and acetylene cylinders in storage must be separated by at least:

- A. 20 feet or a rated barrier
- B. 5 feet with no barrier
- C. 10 feet or a screen
- D. 50 feet in all cases

46. To prevent static ignition when transferring a flammable liquid between metal containers:

- A. wear nitrile gloves
- B. use a plastic funnel
- C. bond and ground the containers
- D. pour as quickly as possible

47. The OSHA permissible exposure limit for respirable crystalline silica (8-hour TWA) is:

- A. $100 \mu\text{g}/\text{m}^3$
- B. $50 \mu\text{g}/\text{m}^3$
- C. $25 \mu\text{g}/\text{m}^3$
- D. $250 \mu\text{g}/\text{m}^3$

48. The action level for respirable crystalline silica is:

- A. 50 $\mu\text{g}/\text{m}^3$
- B. 100 $\mu\text{g}/\text{m}^3$
- C. 10 $\mu\text{g}/\text{m}^3$
- D. 25 $\mu\text{g}/\text{m}^3$

49. On the silica standard's Table 1, water delivery to suppress dust is an example of:

- A. respiratory protection
- B. an administrative control
- C. an engineering control
- D. worker rotation

50. Welding stainless steel primarily generates which toxic fume?

- A. hexavalent chromium
- B. lead
- C. asbestos
- D. silica

51. OSHA's permissible noise exposure is 90 dBA for how long, using a 5-dB exchange rate?

- A. 4 hours
- B. 2 hours
- C. 16 hours
- D. 8 hours

52. Under OSHA's 5-dB exchange rate, exposure at 95 dBA is permitted for:

- A. 8 hours
- B. 4 hours
- C. 2 hours
- D. 1 hour

53. A Safety Data Sheet is organized into a standardized number of sections totaling:

- A. 8
- B. 12
- C. 16
- D. 20

54. Under the current Hazard Communication Standard, the chemical hazard document is the:

- A. Safety Data Sheet
- B. Material Safety Data Sheet
- C. Chemical Hazard Bulletin
- D. Product Information Record

55. A tight-fitting respirator will not protect a worker who:

- A. is over 50 years of age
- B. has facial hair crossing the sealing surface
- C. wears prescription glasses
- D. has an in-date cartridge

56. Before respirator fit testing, a worker must first receive:

- A. cartridge color selection
- B. the annual refresher course
- C. a respirator storage case
- D. a medical evaluation

57. The key to preventing heat illness in new workers during a heat wave is:

- A. acclimatization with water, rest, and shade
- B. mandatory salt tablets
- C. eliminating breaks to finish faster
- D. issuing sunscreen as the control

58. The most effective control for repetitive manual lifting of heavy bags is:

- A. retraining workers in lifting form
- B. issuing back belts to all workers
- C. providing mechanical lifting aids
- D. rotating workers more frequently

59. Soil with water freely seeping from the trench face must be classified as:

- A. Type A
- B. Type B
- C. stable rock
- D. Type C

60. A trench shield (box) is designed to:

- A. prevent the surrounding soil from moving
- B. protect occupants if the soil moves
- C. eliminate the need for a competent person
- D. permit 25-foot vertical walls

61. A worker crushed between a backing vehicle and a fixed wall is a hazard of which category?

- A. struck-by
- B. fall
- C. electrocution
- D. caught-in/between

62. The first step in a job hazard analysis is to:

- A. list all required controls
- B. select the job to be analyzed
- C. assign accountability for prior incidents
- D. write the procedure summary

63. Risk is best expressed as a function of:

- A. severity and probability together
- B. severity alone
- C. probability alone
- D. cost and schedule

64. Benching as a protective system is permitted only in:

- A. Type C soil
- B. all soil types equally
- C. Type A and Type B soil
- D. stable rock only

65. A guardrail system is classified as which form of fall protection?

- A. active
- B. passive
- C. positioning
- D. restraint

66. A standard toeboard must be at least how tall vertically?

- A. 3.5 inches
- B. 6 inches
- C. 2 inches
- D. 1 inch

67. Before selecting personal protective equipment, the employer must first conduct:

- A. a respirator fit test
- B. a medical examination
- C. air monitoring
- D. a hazard assessment

68. Excavations must be inspected by a competent person:

- A. once per week
- B. only after rainfall
- C. daily and as conditions change
- D. once per month

69. Replacing a toxic solvent with a less hazardous one is an example of:

- A. substitution
- B. an engineering control
- C. personal protective equipment
- D. an administrative control

70. The OSHA action level for lead in construction is:

- A. $50 \mu\text{g}/\text{m}^3$
- B. $30 \mu\text{g}/\text{m}^3$
- C. $100 \mu\text{g}/\text{m}^3$
- D. $10 \mu\text{g}/\text{m}^3$

71. The OSHA permissible exposure limit for lead in construction is:

- A. $30 \mu\text{g}/\text{m}^3$
- B. $100 \mu\text{g}/\text{m}^3$
- C. $25 \mu\text{g}/\text{m}^3$
- D. $50 \mu\text{g}/\text{m}^3$

72. Under the scaffold standard, the minimum clearance from an uninsulated line up to 50 kV is:

- A. 3 feet
- B. 20 feet
- C. 10 feet
- D. 35 feet

73. The primary purpose of a guard on a table saw blade is to control:

- A. noise exposure over time
- B. contact with the moving blade
- C. dust inhalation
- D. same-level slip hazards

DOMAIN 2 — Safety Program Development, Implementation, and Sustainment (Q74–118)

74. The foundation of an effective safety and health program is:

- A. management leadership and worker participation
- B. a longer written hazard inventory
- C. more frequent third-party audits
- D. a stricter disciplinary policy

75. The continuous-improvement cycle of plan, do, check, and act is known as:

- A. the hazard-control sequence
- B. the risk-reduction ladder
- C. Plan-Do-Check-Act

D. the Deming triangle

76. The certifiable international standard for occupational health and safety management systems is:

- A. ISO 14001
- B. NFPA 70E
- C. ANSI/ASSP Z359
- D. ISO 45001

77. The U.S. national consensus standard for occupational health and safety management systems is:

- A. ISO 14001
- B. ANSI/ASSP Z10
- C. OSHA 29 CFR 1926
- D. NFPA 51B

78. An inspection differs from an audit in that an inspection:

- A. checks physical conditions at a point in time
- B. evaluates the management system itself
- C. is performed only once a year
- D. requires an outside party

79. A corrective action is not complete until it is:

- A. logged a single time
- B. signed by a supervisor
- C. discussed in a meeting

D. verified effective and tracked to closure

80. A polished written program that no one uses in daily work is best described as:

- A. fully effective if kept current
- B. sufficient proof of a safety system
- C. documentation, not an effective program
- D. a substitute for daily activity

81. Training peer observers to record behaviors and give immediate feedback describes:

- A. behavior-based safety
- B. a lagging-indicator audit
- C. permit-required entry
- D. a programmed inspection

82. Investigating the system after honest error while still holding reckless conduct accountable is:

- A. a just culture
- B. zero-tolerance discipline
- C. eliminating accountability
- D. reliance on automated monitoring

83. Which of the following is a leading indicator?

- A. total recordable incident rate
- B. days away from work last quarter
- C. percentage of inspections completed on time

D. annual injury severity rate

84. OSHA incidence rates are calculated using a standardized hours base of:

- A. 100,000 hours
- B. 1,000,000 hours
- C. 2,000 hours
- D. 200,000 hours

85. A site with 4 recordable cases over 200,000 hours worked has a TRIR of:

- A. 2.0
- B. 4.0
- C. 8.0
- D. 1.0

86. The OSHA 300A summary must be posted during the period:

- A. January 1 to March 1
- B. March 1 to May 31
- C. February 1 to April 30
- D. January 1 to December 31

87. The OSHA 300A summary must be certified by:

- A. the site safety coordinator
- B. a company executive
- C. the first-aid provider on duty

D. an outside compliance auditor

88. A work-related fatality must be reported to OSHA within:

A. 24 hours

B. 48 hours

C. 72 hours

D. 8 hours

89. An in-patient hospitalization from a work injury must be reported to OSHA within:

A. 24 hours

B. 8 hours

C. 4 hours

D. 72 hours

90. The detailed individual incident report form is the:

A. OSHA 300 log

B. OSHA 300A summary

C. OSHA 301

D. OSHA 174

91. Each recordable case is recorded as it occurs throughout the year on the:

A. OSHA 301

B. OSHA 300A

C. OSHA 174

D. OSHA 300 log

92. A laceration closed with sutures is recordable because it constitutes:

- A. any cut to the skin
- B. medical treatment beyond first aid
- C. a lost-time case
- D. a restricted-work case

93. Removing a splinter with tweezers and returning to work is treated as:

- A. first aid, which is not recordable alone
- B. medical treatment, which is recordable
- C. a restricted-work case
- D. a reportable event

94. A case is recordable when it is work-related, a new case, and:

- A. witnessed by a supervisor
- B. costly to the employer
- C. subject to litigation
- D. meets a recording criterion

95. OSHA injury and illness records must be retained for:

- A. 1 year from the end of the year
- B. 3 years from the date logged
- C. 5 years following the covered year

D. 10 years for all records

96. OSHA's highest inspection priority is:

A. a programmed high-hazard inspection

B. an imminent-danger situation

C. a worker complaint

D. a routine follow-up

97. A violation with substantial probability of death or serious harm that the employer should have known about is:

A. a serious violation

B. an other-than-serious violation

C. a de minimis notice

D. a failure-to-post violation

98. A knowing, intentional disregard of a requirement is which violation type?

A. serious

B. other-than-serious

C. willful

D. de minimis

99. An employer intending to contest a citation must file a Notice of Contest within:

A. 30 working days

B. 15 working days

C. 10 working days

D. 5 working days

100. A contested OSHA citation is adjudicated by the:

- A. National Labor Relations Board
- B. local federal district court
- C. Department of Labor Wage Board
- D. Occupational Safety and Health Review Commission

101. OSHA's multi-employer citation policy uses the roles of creating, exposing, correcting, and:

- A. owning
- B. controlling
- C. designing
- D. inspecting

102. A controlling employer's duty on a multi-employer site is to:

- A. create all site hazards deliberately
- B. expose only its own employees
- C. avoid any supervisory authority
- D. exercise reasonable care to detect and correct hazards

103. A safety management system is best described as:

- A. a purely reactive response to incidents
- B. a set of isolated activities
- C. an integrated, systematic business function

D. the sole duty of frontline workers

104. Auditing and measuring performance against objectives is which PDCA phase?

A. Check

B. Plan

C. Do

D. Act

105. When the same guard is repeatedly removed, effective corrective action requires:

A. reinstalling it each time

B. disciplining the last person to remove it

C. documenting the reinstallation cost

D. addressing the root cause of removal

106. A safety committee becomes effective when it has:

A. only senior managers as members

B. a purely advisory role

C. real authority and management representation

D. annual meetings with no worker input

107. A survey of workers' current safety perceptions at one point in time measures:

A. safety climate

B. enduring deep safety culture

C. the number of citations issued

D. the written safety policy

108. The rate that isolates cases involving days away, restriction, or transfer is the:

A. total recordable incident rate

B. DART rate

C. first-aid case count

D. training-hours total

109. Reviewing results and revising the system to improve it is which PDCA phase?

A. Plan

B. Do

C. Act

D. Check

110. The document describing how a site implements labels, SDS access, and chemical training is the:

A. emergency action plan

B. OSHA 300A summary

C. critical lift plan

D. written hazard communication program

111. A near-miss reporting system most depends on:

A. a culture free of unfair blame

B. financial penalties for each report

C. reporting limited to supervisors

D. an annual anonymous review

112. A small residential framing contractor's OSHA recordkeeping status is:

- A. exempt with fewer than 25 workers
- B. covered and non-exempt
- C. limited to recording fatalities
- D. fully exempt as low-hazard

113. An evaluation of whether programs exist, are implemented, and are effective across a site is a:

- A. single-ladder condition inspection
- B. weather-condition assessment
- C. lifting-technique observation
- D. safety management system audit

114. ISO 45001 and ANSI/ASSP Z10 are best described as:

- A. enforceable OSHA regulations
- B. mandatory standards with penalties
- C. voluntary continuous-improvement frameworks
- D. recordkeeping requirements

115. Which of the following is a lagging indicator?

- A. total recordable incident rate
- B. percentage of inspections completed
- C. on-time training completion

D. hazards corrected proactively

116. A before-shift check of a scaffold for new hazards by a competent person is a:

- A. annual comprehensive crane inspection
- B. pre-shift competent-person inspection
- C. five-year recertification review
- D. third-party management audit

117. Tracking only injury rates with no proactive measures is best described as:

- A. the recommended best practice
- B. proactive and predictive
- C. fully compliant with all standards
- D. steering by the rearview mirror

118. Compared with lagging indicators, leading indicators:

- A. measure proactive activity before incidents
- B. count injuries after they occur
- C. report lost workdays per quarter
- D. record the annual severity rate

DOMAIN 3 — Leadership, Communication, and Training (Q119–160)

119. The instruction a crew needs before a course is designed is determined by:

- A. posting the attendance roster

- B. selecting the classroom venue
- C. a training needs assessment
- D. scheduling the refresher in advance

120. Watching a slideshow on harness use is insufficient because donning a harness must be:

- A. issued only at hire
- B. trained and verified hands-on
- C. tested by written quiz
- D. demonstrated by the trainer alone

121. OSHA-required training must be delivered:

- A. only as written English handouts
- B. exclusively through online modules
- C. in a language and at a level workers comprehend
- D. once at hire with no comprehension check

122. The theory describing how adults learn is called:

- A. pedagogy of children
- B. ergonomics
- C. andragogy
- D. behaviorism

123. The most effective adult-learning adjustment for veteran workers is to:

- A. draw on and respect their experience

- B. remove all discussion
- C. focus on regulation citation numbers
- D. avoid links to their actual tasks

124. A brief jobsite talk on the day's specific hazard before work begins is a:

- A. formal certification course
- B. toolbox talk
- C. written examination
- D. disciplinary meeting

125. The most effective toolbox talks are:

- A. long and lecture-only
- B. generic and identical across sites
- C. delivered solely by consultants
- D. short, specific, and two-way

126. For an unsafe act with no immediate danger present, the best response is to:

- A. address the behavior respectfully and explain the consequence
- B. publicly reprimand the worker
- C. wait for the next scheduled audit
- D. issue written discipline without discussion

127. A worker observed entering an unshored 7-foot trench right now requires:

- A. coaching during the next shift

- B. a note in the weekly report
- C. discussion after the task ends
- D. immediate stop-work and removal

128. Coaching that durably changes behavior should focus on:

- A. the worth and character of the worker
- B. the behavior and the system reasons behind it
- C. blame for the prior incident
- D. comparison with top performers

129. Safety culture is best defined as:

- A. the number of safety posters displayed
- B. the written disciplinary policy
- C. the shared values and behaviors regarding safety
- D. the annual inspection total

130. Safety culture is most strongly shaped by:

- A. leaders' choices when safety conflicts with schedule
- B. the use of slogans
- C. the length of the safety manual
- D. the frequency of overtime

131. Training documentation should capture who was trained, on what topic, when, and:

- A. the trainer's title only

- B. confirmation of comprehension
- C. the total session cost
- D. the weather that day

132. Competence to operate a powered platform is appropriately verified by:

- A. a signed attendance sheet alone
- B. a verbal acknowledgment
- C. a passing written quiz alone
- D. demonstrated hands-on performance

133. The primary purpose of periodic refresher training is to:

- A. maintain and update worker competency
- B. replace initial training entirely
- C. satisfy a disciplinary requirement
- D. reduce the number of toolbox talks

134. Analyzing a non-routine lift's hazards and controls before the work is:

- A. signing the daily log
- B. reviewing company finances
- C. pre-task planning
- D. completing the recordkeeping summary

135. Adult-learner retention is highest when the material is:

- A. abstract and disconnected from tasks

- B. relevant, problem-centered, and immediately applicable
- C. delivered only once at hire
- D. focused on citation numbers

136. Effective safety communication is:

- A. one-directional from management down
- B. limited strictly to written memos
- C. delivered only during annual reviews
- D. clear, specific, two-way, and audience-adapted

137. Presenting a ventilation budget justification to executives is communicating:

- A. upward to management
- B. downward to the workforce
- C. laterally to peers
- D. outward to the public

138. More effective than discipline alone for changing unsafe behavior is:

- A. explaining the hazard once and stopping
- B. asking only why the choice was made
- C. pairing positive reinforcement with correction
- D. modeling shortcuts to fit in

139. Provable operator training typically requires:

- A. an annual verbal reminder only

- B. no documentation for experienced workers
- C. a one-time certification never renewed
- D. certification or documentation of the training

140. Despite many posters, safety culture is actually built by:

- A. adding more documents to the program
- B. consistent leadership decisions and behavior
- C. enlarging the safety department budget
- D. increasing the inspection rate

141. Supervised practice on the actual equipment in the real work setting is:

- A. a classroom lecture
- B. a self-paced online module
- C. an end-of-course written exam
- D. on-the-job training

142. Logging attendance without checking understanding is a problem because:

- A. it raises the session cost
- B. attendance alone does not confirm understanding
- C. it lengthens the required time
- D. it satisfies only the insurance broker

143. The legally required training for a site's tasks is most reliably found in:

- A. the applicable standards for the operations

- B. the company's marketing materials
- C. last year's profit statements
- D. the crew's personal preferences

144. An imminent-danger situation is chiefly distinguished by:

- A. whether the worker is a recent new hire
- B. whether a supervisor is present
- C. whether death or serious harm could occur immediately
- D. whether the task is on the schedule

145. To make a toolbox talk participatory, the foreman should:

- A. read a long generic script
- B. include only management
- C. end without any discussion
- D. ask workers what hazards they foresee

146. Genuine stop-work authority strengthens culture by:

- A. increasing the number of citations
- B. empowering workers to halt unsafe tasks without reprisal
- C. centralizing all decisions with management
- D. removing the need for training

147. When leaders repeatedly choose production over safety, the workforce learns that:

- A. safety is negotiable in practice

- B. the written program is trusted
- C. leadership values consistency
- D. stop-work authority is respected

148. Building a course around workers' existing knowledge and real tasks reflects:

- A. behavior-based discipline
- B. lagging-indicator analysis
- C. adult learning
- D. permit-required entry control

149. The main purpose of documenting training is to:

- A. lengthen the safety manual
- B. replace refresher training
- C. support the marketing department
- D. prove compliance and track who is qualified

150. A worker who reasonably believes a task is unsafe should be able to:

- A. file a grievance only after the shift
- B. stop the work until the concern is addressed
- C. request a transfer to another crew
- D. continue the task and report it later

151. A training-related leading indicator is:

- A. counting recordable injuries after they occur

- B. measuring lost workdays per quarter
- C. tracking on-time completion of required training
- D. reporting the annual severity rate

152. Training effectiveness is best verified by:

- A. confirming the worker can demonstrate the competency
- B. counting the slides presented
- C. recording only the session date
- D. assuming experienced workers need no check

153. A pre-task meeting differs from formal training in that it is:

- A. a multi-day certification course
- B. a written exam of all workers
- C. required only after a recordable injury
- D. brief, task-specific, and conducted on site

154. Coordinating hazard information among several subcontractors is communication that is:

- A. downward to the direct workforce only
- B. across to peers and other employers
- C. upward to corporate only
- D. outward to the public only

155. The most credible proof of management commitment is:

- A. allocating resources and choosing safety under pressure

- B. a signed policy posted at the entrance
- C. an annual safety awards luncheon
- D. a detailed written procedures manual

156. Effective correction of an unsafe act is:

- A. focused on embarrassing the worker publicly
- B. delayed until the annual review
- C. specific to the behavior and its consequence
- D. identical regardless of the situation

157. Measuring safety climate is useful because it:

- A. replaces incident investigation
- B. eliminates the need for training records
- C. guarantees a zero-injury year
- D. gives a measurable read on current perceptions

158. A course built on workers' real tasks reflects the principle of:

- A. adult-learning relevance
- B. lagging-indicator analysis
- C. permit-required entry
- D. behavior-based discipline

159. Periodic refresher training primarily serves to:

- A. replace initial training

- B. satisfy a disciplinary need
- C. maintain current competency
- D. reduce the number of talks

160. A practitioner most powerfully shapes safety culture by:

- A. increasing the number of posted signs
- B. modeling safe behavior and helping leaders choose it
- C. lengthening the written program
- D. expanding the disciplinary policy

DOMAIN 4 — Emergency Preparedness, Incident Investigation, and Response (Q161–200)

161. An Emergency Action Plan must include evacuation procedures, routes, and:

- A. employee accountability
- B. quarterly financial projections
- C. subcontractor bid amounts
- D. site manager resumes

162. A generic EAP reused at every project is inadequate because the plan must be:

- A. stored only at corporate
- B. reviewed only after an emergency
- C. site-specific to the actual hazards
- D. kept consistent across all sites

163. Before confined-space entry, the employer must:

- A. rely exclusively on a 911 call
- B. evaluate and arrange adequate rescue in advance
- C. assume the nearest fire department is equipped
- D. wait until an emergency to find resources

164. The purpose of an incident investigation is to:

- A. satisfy the insurer only
- B. find causes and prevent recurrence
- C. document rule violations only
- D. assign blame efficiently

165. An event that nearly caused injury but did not is called a:

- A. recordable case for the 300 log
- B. first-aid case requiring treatment
- C. citation issued by an inspector
- D. near-miss

166. Near-misses are worth investigating because they:

- A. share root causes with injuries but occur more often
- B. always become recordable injuries later
- C. require mandatory OSHA reporting
- D. remove the need for any investigation

167. The "four P's" of incident evidence are People, Parts, Position, and:

- A. Plans
- B. Procedures
- C. Paper
- D. Photos

168. Witnesses to an incident should be interviewed:

- A. together to form one account
- B. after several days have passed
- C. with pointed, accusatory questions
- D. promptly, separately, with open-ended questions

169. The statement "the worker was not tied off" is best classified as:

- A. an immediate cause
- B. the systemic root cause
- C. a corrective action
- D. a disciplinary outcome

170. Concluding an investigation with "worker error" is flawed because it is:

- A. the true and complete root cause
- B. sufficient for effective correction
- C. a symptom, not a root cause
- D. a fully thorough analysis

171. Repeatedly asking "why?" to move from a symptom toward the systemic cause is the:

- A. witness-counting method
- B. cost-ranking method
- C. citation-category selection
- D. 5 Whys technique

172. Organizing possible causes into categories branching off a central spine is a:

- A. chronological event timeline
- B. fishbone (Ishikawa) diagram
- C. ranked repair-cost list
- D. single linear cause chain

173. Immediately after a serious injury, priority over preserving the scene goes to:

- A. medical care and controlling ongoing hazards
- B. photographing the undisturbed scene
- C. collecting written witness statements
- D. notifying the legal department

174. At a remote site far from medical facilities, the medical-services standard requires:

- A. a full-time physician on site
- B. a hospital built within one mile
- C. an onsite trained first-aid provider
- D. an ambulance parked at the project

175. Where corrosives can splash the eyes or skin, the employer must provide:

- A. additional paid break time
- B. quick-drenching and eye-flushing facilities
- C. a written chemical inventory
- D. long-sleeved cotton clothing

176. A post-incident review should evaluate:

- A. only the injured worker's record
- B. only the dollar cost of the claim
- C. only whether discipline was applied
- D. both the causes and the emergency response

177. After reaching the assembly point following evacuation, the next step is to:

- A. account for every person
- B. return immediately to inspect the scene
- C. wait for OSHA inspectors
- D. collect a signed statement from each evacuee

178. An EAP must be practiced beforehand so that:

- A. it can replace the written safety program
- B. it satisfies the insurer
- C. workers know it before, not during, an emergency
- D. fewer toolbox talks are needed

179. Corrective action from an investigation should target:

- A. the reputation of the injured worker
- B. the cost of the investigation report
- C. the immediate unsafe act only
- D. the systemic root cause

180. Severe weather most directly affects which operations?

- A. payroll processing and billing
- B. crane, scaffold, and fall-protection work
- C. document retention practices
- D. marketing and client outreach

181. A traumatic finger amputation on a saw must be reported to OSHA within:

- A. 8 hours
- B. 4 hours
- C. 24 hours
- D. 72 hours

182. Documenting the locations of equipment and the victim at the scene captures which element of the four P's?

- A. Position
- B. Paper
- C. People
- D. Parts

183. Lessons learned from an investigation should be fed into:

- A. the company's marketing strategy
- B. the payroll processing system
- C. the client billing records
- D. the broader safety program and procedures

184. When a co-worker is buried in a trench collapse, a nearby worker should:

- A. immediately jump in to dig the victim out
- B. stay out, call trained rescue, and secure the scene
- C. climb down a ladder to assist directly
- D. wait inside the trench for instructions

185. The most reliable rescue for a collapsed permit-space entrant is:

- A. non-entry retrieval using a harness and retrieval line
- B. immediate entry by the standby attendant
- C. a 911 call with no other preparation
- D. waiting for the entry supervisor to enter

186. Loss of an eye in a struck-by event must be reported to OSHA within:

- A. 8 hours
- B. 4 hours
- C. 48 hours
- D. 24 hours

187. Applying PDCA's "Act" step to an incident means:

- A. logging the case on the OSHA 300 form
- B. re-interviewing the witnesses
- C. turning the event into systemic improvement
- D. re-photographing the scene

188. A first-aid responder who may contact a co-worker's blood must follow:

- A. crane operator certification rules
- B. bloodborne pathogen precautions and PPE
- C. confined-space attendant duties
- D. powder-actuated tool certification

189. Which question best reflects root-cause thinking after a fall?

- A. Which crew member should be disciplined?
- B. How much will the claim cost?
- C. When can the worker return to duty?
- D. Why was no anchorage available for tie-off?

190. A head count taken against a roster after evacuation supports which EAP function?

- A. employee accountability
- B. atmospheric testing of a space
- C. certification of the 300A summary
- D. scheduling refresher training

191. Evacuation assembly points should be located:

- A. as close to the building entrance as possible
- B. inside the nearest enclosed structure
- C. at safe distances clear of operations
- D. wherever workers first happen to gather

192. Beyond first-aid supplies, the medical-services standard requires that:

- A. a full-time physician be onsite at all times
- B. medical personnel be available for advice and prompt attention
- C. an ambulance be stationed at every project
- D. a hospital be located within one mile

193. Concluding a report with "failure to follow procedure" is problematic because it:

- A. always identifies the correct systemic root
- B. guarantees the incident will not recur
- C. satisfies all corrective-action needs
- D. stops the analysis before the real cause

194. The leading cause of multiple fatalities in confined-space incidents is:

- A. untrained would-be rescuers entering the space
- B. failure of monitoring equipment
- C. excessive atmospheric monitoring
- D. issuing too many entry permits

195. Useful lessons learned from an investigation should be:

- A. kept confidential to one supervisor
- B. discarded once the case file closes
- C. communicated across the organization as appropriate
- D. reported only to the marketing team

196. The strongest reason to investigate near-misses is that they:

- A. are always more severe than injuries
- B. provide early warning before an injury occurs
- C. require an OSHA citation by law
- D. remove the need for corrective action

197. A work-related fatality has an OSHA reporting deadline of:

- A. 8 hours
- B. 24 hours
- C. 48 hours
- D. 72 hours

198. Gathering JHAs, training records, and procedures represents which element of the four P's?

- A. People
- B. Position
- C. Parts
- D. Paper

199. Emergency eyewash for corrosive work must be located:

- A. at the main site office
- B. at the nearest public facility
- C. within the immediate work area
- D. anywhere within the property line

200. Recurrence of an incident is truly prevented when:

- A. the report is closed with no system change
- B. root causes are controlled and lessons fed back into the system
- C. discipline is applied to the involved worker
- D. a photo archive of the scene is kept

PRACTICE EXAM 4 : ANSWERS AND EXPLANATION

1. D — Subpart M sets the general construction fall protection trigger at 6 feet to a lower level. Above this height, guardrails, personal fall arrest, or safety nets are required. The 10-foot figure belongs to scaffolds, not general walking/working surfaces.
2. D — A competent person is defined by two capabilities: identifying existing and predictable hazards, and having the authority to take prompt corrective action. Neither a PE license, seniority, nor a 10-hour course alone satisfies the definition. The authority element is what distinguishes a competent person from a merely knowledgeable one.
3. B — A hazard is a source or condition with the potential to cause harm. Probability and severity describe risk, not the hazard itself, and residual exposure is a post-control concept. Correctly separating hazard from risk keeps analysis precise.
4. A — Elimination removes the hazard entirely and sits at the top of the hierarchy of controls. Because no exposure can remain once the hazard is gone, it is the most effective level. Engineering, administrative, and PPE controls all rank below it.
5. C — PPE is the least effective control because it does not remove the hazard and depends entirely on correct selection, fit, and use. It protects only the individual wearer and fails silently if misused. This is why it sits at the bottom of the hierarchy.
6. A — A protective system (sloping, shoring, or shielding) is required at 5 feet or greater unless the excavation is entirely in stable rock. The depth trigger is independent of the fall-protection trigger. Below 5 feet, a competent person may still require protection based on conditions.
7. B — B (1.5:1) states the correct slope; option
8. C — In a trench 4 feet or deeper, a stairway, ladder, or ramp must be within 25 feet of lateral travel for any worker. This ensures rapid egress during a cave-in or other emergency. Placing egress only at distant points violates the rule.

9. D — Excavated spoil and equipment must be kept at least 2 feet back from the trench edge. This prevents added surcharge load on the wall and material rolling back into the trench. The setback is a basic cave-in prevention measure.
10. A — A confined space meets three criteria: large enough to enter and perform work, limited means of entry or egress, and not designed for continuous occupancy. A hazardous atmosphere or a permit are not part of the base definition. Adding a serious hazard makes it permit-required.
11. C — The correct testing order is oxygen, then flammability, then toxicity. Oxygen must be confirmed first because combustible-gas sensors rely on adequate O₂ to read accurately, and flammability is cleared before toxicity. Reversing the sequence can produce false readings.
12. B — The minimum acceptable oxygen concentration for entry is 19.5%. Below this, the atmosphere is oxygen-deficient and dangerous. The 23.5% figure marks the upper boundary for oxygen-enriched conditions.
13. D — Atmospheres above 23.5% oxygen are classified as oxygen-enriched. Enrichment dramatically increases combustion intensity and ignition risk. Both deficiency and enrichment are hazardous deviations from the 20.9% normal level.
14. A — Confined-space entry generally requires the flammable atmosphere to be below 10% of the LEL. This conservative margin keeps the atmosphere well clear of the ignitable range. The 25% figure applies to other hot-work contexts, not entry.
15. C — A personnel-protection GFCI trips at a ground-fault current of roughly 5 milliamperes, fast enough to prevent a dangerous shock. Breakers and fuses respond to overcurrent (amps), not the small leakage that injures people. The device is matched to the personnel hazard.
16. B — When GFCIs are not used, the Assured Equipment Grounding Conductor Program is the accepted alternative on construction sites. It requires scheduled continuity and terminal testing of cord sets and equipment. Double insulation or electrician inspection alone does not satisfy the requirement.
17. A — After lockout, the required next step is verifying zero energy and releasing or restraining stored energy before work begins. Locking the device does not address residual hydraulic, mechanical, electrical, or gravitational energy. Verification confirms the isolation actually worked.
18. D — A lock physically prevents operation of the isolating device, while a tag is only a warning that can be ignored or bypassed. This physical restraint removes the human-error pathway. That is why lockout is preferred over tagout alone.
19. C — The arc flash boundary is the distance at which incident energy reaches 1.2 cal/cm², the threshold for a second-degree skin burn. It is energy-based, not a fixed radius. PPE requirements flow from this boundary.
20. B — A standard guardrail top rail is set at a nominal 42 inches (within a 39–45 inch range). This height stops a worker from going over while remaining workable. Heights outside the range are non-compliant.
21. A — The top rail of a guardrail must withstand at least 200 pounds applied outward or downward. This ensures the rail holds a worker who falls against it. The midrail requirement is lower.
22. C — Intermediate members such as midrails must withstand at least 150 pounds applied in any downward or outward direction. This is distinct from the 200-pound top-rail requirement. Confusing the two values is a common error.
23. B — Scaffold fall protection is required at a platform height of 10 feet above a lower level. The general 6-foot trigger does not govern scaffolds. Below 10 feet, guardrails or harnesses are not required on the scaffold itself.

24. D — A scaffold and its components must support their own weight plus at least four times the maximum intended load. This safety factor accounts for dynamic loading and material variability. It applies to supported scaffolds generally.
25. C — Suspension ropes on a suspended scaffold require a safety factor of six times the maximum intended load. The higher factor reflects the catastrophic consequence of a rope failure. Supported scaffold components use a factor of four.
26. A — The 4:1 rule sets the ladder base out from the wall by one-quarter of the working length. For a 20-foot working length, the base sits about 5 feet out. This angle balances stability against tip-back risk.
27. D — A non-engineered fall-arrest anchorage must support at least 5,000 pounds per attached worker. This conservative value accounts for arrest forces without a qualified-person design. The 1,800-pound figure is the maximum arresting force on the worker, not the anchor.
28. B — A full-body harness system limits the maximum arresting force on the worker to 1,800 pounds. This protects the body from internal injury during arrest. The 5,000-pound value applies to the anchorage, not the person.
29. A — Body belts are prohibited for fall arrest because they concentrate arrest forces on the abdomen, risking severe internal injury. A full-body harness distributes forces across the thighs, pelvis, chest, and shoulders. Cost and movement are not the basis for the prohibition.
30. C — A worker hanging motionless in a harness develops suspension trauma (orthostatic intolerance) as blood pools in the legs and venous return drops. It can become life-threatening within minutes. This is why prompt rescue is mandatory.
31. B — The maximum free fall distance in a personal fall arrest system is 6 feet. Limiting free fall keeps arrest forces within tolerable limits. Exceeding it risks both excessive force and a longer fall clearance than available.
32. D — As the sling-to-horizontal angle decreases, the tension in each leg increases sharply. A flatter angle places more load along the line of the sling rather than vertically. This is why low sling angles are dangerous and steeper angles are preferred.
33. A — A synthetic sling without a legible capacity tag has unverifiable rated capacity and must be removed from service. Guessing or derating an unknown sling is not acceptable. Capacity must be traceable to use the sling safely.
34. C — Under Subpart CC, the minimum clearance from an energized line up to 50 kV is 10 feet. A 13 kV line falls within this range. The 20-foot value applies only when line voltage cannot be determined.
35. D — When the load or its path leaves the operator's view, a qualified signal person must direct the lift. The blind condition triggers the requirement regardless of load weight. Relying on memory of the path is unacceptable.
36. B — Anyone who observes a hazard may give the STOP signal, and the operator must obey it. This universal authority is a safety backstop independent of signaling roles. The operator does not judge the validity first.
37. A — Rated lifting capacity decreases as operating radius increases because the load moment grows. Moving the load farther out without rechecking the chart can cause an overload. Radius is a primary determinant of capacity.
38. C — A bench grinder work rest must be adjusted to within 1/8 inch of the wheel. A wider gap allows the workpiece to be drawn in and jam, fracturing the wheel. The small gap prevents this catch hazard.

39. B — The tongue (spark) guard on a bench grinder must be kept within 1/4 inch of the wheel. This limits exposure if the wheel disintegrates. It is distinct from the 1/8-inch work-rest requirement.
40. D — A powder-actuated tool may be operated only by a trained, certified operator. Age, foreman status, or having an electrician nearby does not satisfy the requirement. The tool's hazard demands documented operator qualification.
41. C — A fire watch must be maintained for at least 30 minutes after hot work ends to detect smoldering ignition. Stopping when the torch shuts off defeats the purpose. The duration is non-negotiable.
42. A — Under NFPA 51B, combustibles within 35 feet of hot work should be relocated or protected with shields or covers. When they cannot be moved, guarding within that radius is required. The 35-foot zone is the standard.
43. D — The fire triangle consists of fuel, heat, and oxygen. Removing any one element extinguishes the fire. It is the foundational model for prevention and suppression.
44. B — A fire in energized electrical equipment is Class C and requires a non-conductive agent. Water or foam would create a shock hazard on energized equipment. De-energizing changes the classification to Class A.
45. A — Oxygen and acetylene cylinders must be separated by at least 20 feet or by a noncombustible barrier of adequate height and fire rating. This prevents a fuel-oxygen fire escalation. Lesser separation without a barrier is non-compliant.
46. C — Bonding and grounding the containers equalizes electrical potential and dissipates static charge built up by the flowing liquid, preventing an ignition spark. Gloves, plastic funnels, and fast pouring do not address the static hazard. This is the controlling measure.
47. B — The OSHA permissible exposure limit for respirable crystalline silica is 50 $\mu\text{g}/\text{m}^3$ as an 8-hour TWA. Exposures above it require controls. The 100 and 250 figures are not the applicable limit.
48. D — The action level for respirable crystalline silica is 25 $\mu\text{g}/\text{m}^3$ as an 8-hour TWA. Reaching it triggers monitoring and medical surveillance obligations. The PEL of 50 $\mu\text{g}/\text{m}^3$ is twice the action level.
49. C — Water delivery to suppress dust is an engineering control because it reduces the hazard at the source. Table 1 prioritizes such controls over respirators and administrative measures. Source control protects everyone in the area.
50. A — Welding stainless steel generates hexavalent chromium fume, a respiratory irritant and known carcinogen. The base metal's chromium content is the source. Lead, asbestos, and silica are not characteristic of stainless welding.
51. D — OSHA's permissible noise exposure baseline is 90 dBA for 8 hours using a 5-dB exchange rate. Each 5-dB increase halves the permitted time. This is the reference point for the action level and PEL.
52. B — Using the 5-dB exchange rate from the 90-dBA, 8-hour baseline, a 5-dB increase to 95 dBA halves the permitted time to 4 hours. The 3-dB rate belongs to other standards, not OSHA's PEL. The halving rule is the key.
53. C — A Safety Data Sheet uses a standardized 16-section format under the GHS-aligned HazCom standard. The consistent order lets users find information quickly across manufacturers. Sections 1–11 are mandatory for OSHA enforcement.
54. A — Under the current Hazard Communication Standard, the document is the Safety Data Sheet, which replaced the older Material Safety Data Sheet. The change aligned U.S. requirements with the GHS. The SDS uses the 16-section format.

55. B — Facial hair crossing the sealing surface prevents a proper face-to-facepiece seal, so a tight-fitting respirator cannot protect the wearer. Age, glasses, or cartridge currency do not overcome a broken seal. The worker is effectively unprotected.
56. D — A medical evaluation clearing the worker must occur before fit testing and respirator use. Respirator use imposes physiological burden, so clearance is the prerequisite. Cartridge selection and refreshers do not precede it.
57. A — Acclimatization—gradually building heat exposure over days—paired with water, rest, and shade is the key to preventing heat illness in new workers. New workers are at highest risk without it. Salt tablets and skipping breaks are not the preventive principle.
58. C — Providing mechanical lifting aids removes the manual-handling hazard, an engineering control, and is the most effective fix. Training, back belts, and rotation rely on behavior and do not eliminate the load. Removing the lift addresses the root exposure.
59. D — Freely seeping water from the trench face mandates a Type C classification, the least stable category. Seepage overrides any appearance of cohesion. Type C requires the most protective system.
60. B — A trench shield (box) is designed to protect occupants from a cave-in even if the surrounding soil moves; it does not prevent soil movement. It does not remove the need for a competent person or permit unlimited vertical walls. Its function is occupant protection.
61. D — Being crushed between a moving object and a fixed object is the caught-in/between hazard category. Although the vehicle was moving, the defining feature is compression between two objects. Correct categorization drives the right control.
62. B — The first step of a job hazard analysis is selecting and defining the specific job to analyze. Hazards and controls cannot be identified until the task is scoped. Listing controls first reverses the logical sequence.
63. A — Risk is a function of both severity and probability considered together. Neither dimension alone defines risk. This is why a rare-but-fatal event and a frequent-but-minor event can share a rating.
64. C — Benching is permitted only in cohesive soils, namely Type A and Type B, never in Type C. Type C lacks the cohesion to hold a benched face. A sloped or shielded system is required for Type C.
65. B — A guardrail is a passive fall-protection system because it works without any action by the worker once installed. Active systems like personal fall arrest require the worker to don and connect equipment. Passive protection does not depend on user behavior.
66. A — A standard toeboard must be at least 3.5 inches tall vertically. It prevents tools and materials from falling to workers below. This is the minimum dimension under the guardrail provisions.
67. D — Before selecting PPE, the employer must conduct a hazard assessment to identify what hazards are present and what protection is needed. Fit tests, exams, and monitoring follow from the assessment. Selecting PPE without it risks the wrong protection.
68. C — Excavations must be inspected by a competent person daily and as conditions change, such as after rainfall. A weekly or monthly schedule is insufficient given how quickly trench conditions deteriorate. The inspection must precede worker entry each shift.
69. A — Replacing a toxic solvent with a less hazardous one is substitution, the second tier of the hierarchy of controls. It reduces the hazard without relying on the worker. It ranks below elimination but above engineering controls.
70. B — The OSHA action level for lead in construction is $30 \mu\text{g}/\text{m}^3$ as an 8-hour TWA. Reaching it triggers monitoring and other obligations. The PEL is higher than the action level.

71. D — The OSHA permissible exposure limit for lead in construction is $50 \mu\text{g}/\text{m}^3$ as an 8-hour TWA. Exposures above it require controls and protections. The action level of $30 \mu\text{g}/\text{m}^3$ is the lower trigger.
72. C — Under the scaffold standard, the minimum clearance from an uninsulated line up to 50 kV is 10 feet. The 20-foot value is the crane-specific clearance and does not apply to scaffolds. The 10-foot rule matches the line voltage range.
73. B — A blade guard controls contact with the moving blade, the caught-in/contact-with hazard. Removing it exposes the operator directly to the cutting element. Dust, noise, and slips are unrelated to the guard's function.
74. A — Management leadership and worker participation are the foundation of an effective safety program. Without funded, visible leadership and engaged workers, procedures fail in practice. This core element most determines program success.
75. C — The cycle of plan, do, check, and act is Plan-Do-Check-Act, the continuous-improvement engine of modern safety management systems. The loop iterates rather than terminating. It underlies ISO 45001 and ANSI Z10.
76. D — ISO 45001 is the certifiable international standard for occupational health and safety management systems. ISO 14001 covers environmental management, and NFPA/ANSI references are not international OHS certifications. ISO 45001 fits the description.
77. B — ANSI/ASSP Z10 is the U.S. national consensus standard for occupational health and safety management systems. It provides a voluntary continuous-improvement framework. The OSHA regulation and NFPA 51B do not fit.
78. A — An inspection checks physical conditions and behaviors at a point in time, while an audit evaluates whether the management system is designed, implemented, and effective. The two differ in scope, not just frequency. They are not interchangeable.
79. D — A corrective action is incomplete until its effectiveness is verified and the item is tracked to documented closure. A "fixed" finding with no verification can recur unnoticed. Verification and tracking close the loop.
80. C — A polished but unused written program is documentation, not an effective safety program. Effectiveness is shown by implementation in daily work, not by the binder's existence. Paper alone does not protect workers.
81. A — Training peer observers to record safe and at-risk behaviors and give immediate feedback is Behavior-Based Safety. BBS targets the behavioral component of incident causation. It is proactive, not a lagging audit.
82. A — Investigating the system after honest error while still holding reckless conduct accountable describes a just culture. It balances learning from error against accountability for willful risk. This sustains trust and reporting.
83. C — The percentage of inspections completed on time is a leading indicator because it measures proactive activity before incidents. TRIR, days away, and severity rate are lagging outcomes. Leading metrics forecast; lagging metrics report.
84. D — OSHA incidence rates use a 200,000-hour base, representing 100 full-time workers over a year. This standardizes rates for comparison across employers. The figure is fixed by the recordkeeping methodology.
85. B — $\text{TRIR} = (\text{recordable cases} \times 200,000) \div \text{hours worked} = (4 \times 200,000) \div 200,000 = 4.0$. The 200,000-hour base normalizes the rate. The result is 4.0 recordable cases per 100 full-time-equivalent workers.

86. C — The OSHA 300A summary must be posted from February 1 through April 30 of the following year. This window lets workers review the prior year's data. Posting outside it is non-compliant.
87. B — A company executive must certify the 300A summary, attesting to its accuracy. This places accountability at a responsible management level. A coordinator or first-aid provider cannot substitute.
88. D — A work-related fatality must be reported to OSHA within 8 hours of the employer learning of it. This is the shortest reporting deadline given the event's severity. Hospitalizations and amputations have longer windows.
89. A — In-patient hospitalization must be reported to OSHA within 24 hours. This is distinct from the 8-hour fatality deadline. The 24-hour window also covers amputations and loss of an eye.
90. C — The OSHA 301 is the detailed individual incident report form. The 300 is the running log and the 300A is the year-end summary. Each serves a distinct recordkeeping function.
91. D — Each recordable case is entered on the OSHA 300 log as it occurs through the year. The 301 captures incident detail and the 300A summarizes at year-end. The running log is the 300.
92. B — Closing a wound with sutures is medical treatment beyond first aid, which makes the case recordable. First aid would be limited to cleaning and bandaging. The treatment level, not the mere presence of a cut, determines recordability.
93. A — Removing a splinter with tweezers is on the first-aid list and is not, by itself, recordable. First-aid treatment does not trigger recordability absent another criterion. No medical-treatment threshold was crossed.
94. D — A case is recordable when it is work-related, a new case, and meets at least one recording criterion (death, days away, restricted work or transfer, medical treatment beyond first aid, loss of consciousness, or a significant diagnosis). All three conditions must align. This is the core recordability test.
95. C — OSHA injury and illness records must be retained for 5 years following the year they cover. This supports trend analysis and inspection review. Shorter or longer periods are incorrect.
96. B — An imminent-danger situation receives the highest inspection priority because of the immediate threat to life. It outranks worker complaints and programmed inspections. Priority follows severity and immediacy.
97. A — A serious violation exists when there is a substantial probability of death or serious harm and the employer knew or should have known of the condition. This matches the described scenario. It is more severe than other-than-serious or de minimis.
98. C — A knowing, intentional disregard of a requirement is a willful violation, carrying the highest civil penalties and potential criminal liability. It reflects deliberate indifference to worker safety. This is the most serious classification.
99. B — A Notice of Contest must be filed within 15 working days of receiving a citation. Missing the deadline makes the citation final. The window is counted in working days.
100. D — Contested citations are adjudicated by the Occupational Safety and Health Review Commission, an independent body separate from OSHA. It is not the NLRB or a federal district court in the first instance. The OSHRC hears the formal contest.
101. B — OSHA's multi-employer policy uses the creating, exposing, correcting, and controlling employer roles. Each role carries distinct duties on a shared site. This framework determines citation exposure.
102. D — The controlling employer must exercise reasonable care to detect and correct hazards it has authority over, even those created by others. It cannot disclaim responsibility because a subcontractor created the hazard. Reasonable care is the standard.

103. C — A safety management system is an integrated, systematic function embedded in how the business operates. It is neither a set of isolated activities nor purely reactive. Integration is its defining feature.
104. A — Auditing and measuring performance against objectives is the "Check" phase of PDCA. Plan sets objectives, Do implements, and Act improves. Checking compares results to targets.
105. D — Recurring removal of a guard signals an unaddressed root cause, such as the guard impeding the work. Effective corrective action addresses why it keeps being removed, not just reinstalling or disciplining. Root-cause correction stops the recurrence.
106. C — A safety committee becomes effective when it has real authority and includes management representation. Without these, it cannot drive change. Advisory-only or manager-only membership undermines its purpose.
107. A — A snapshot of workers' current perceptions measures the safety climate, the time-bound surface read of culture. Deep culture is the enduring set of shared values. Climate is the measurable instant; culture is the substrate.
108. B — The DART rate isolates cases involving days away, restricted work, or job transfer—the more serious outcomes. TRIR counts all recordables. DART focuses on severity-weighted cases.
109. C — Reviewing results and revising the system to improve it is the "Act" phase of PDCA. Plan sets objectives, Do executes, Check measures. Act converts findings into system change.
110. D — The written hazard communication program documents how a site implements labels, SDS access, and chemical training. It is distinct from the emergency action plan or lift plan. HazCom requires this written program.
111. A — Near-miss reporting depends on a culture free of unfair blame. Punishing reporters suppresses the data the system needs. Trust is the load-bearing condition.
112. B — Residential construction framing is a covered, non-exempt industry that must keep OSHA injury and illness records. Small headcount and "low-hazard" assumptions do not exempt construction. Recordkeeping obligations apply.
113. D — Examining whether programs exist, are implemented, and are effective across a site is a safety management system audit. It evaluates the system, not a single condition. This is the audit's defining scope.
114. C — ISO 45001 and ANSI/ASSP Z10 are voluntary, continuous-improvement frameworks, not enforceable OSHA regulations. They guide management-system design. Neither carries OSHA penalties.
115. A — The total recordable incident rate is a lagging indicator because it counts injuries after they occur. Inspections completed, on-time training, and proactive corrections are leading indicators. TRIR reports outcomes, not prevention activity.
116. B — A before-shift check of a scaffold for new hazards by a competent person is the pre-shift competent-person inspection. It is task- and condition-focused, not a management-system audit. Scope and frequency distinguish it.
117. D — Tracking only injury rates with no proactive measures is "steering by the rearview mirror," reacting to past harm rather than preventing it. It is not a best practice or predictive. Leading indicators are absent.
118. A — Leading indicators measure proactive activity before incidents occur, such as inspections and training completed. Lagging indicators count injuries and lost days after the fact. Leading metrics forecast performance.

119. C — A training needs assessment identifies the skill gaps that determine what instruction is required before a course is designed. Rosters, venues, and schedules come afterward. The assessment drives content.
120. B — Donning and using a harness is a psychomotor skill that must be trained and verified hands-on, not merely viewed in a slideshow. Passive viewing does not confirm competence. Performance verification is required.
121. C — OSHA requires training delivered in a language and at a literacy level the workers comprehend. English-only handouts or unverified online modules fail comprehension. Understanding, not mere delivery, is the standard.
122. C — Andragogy is the theory of how adults learn, emphasizing relevance, experience, and self-direction. Pedagogy concerns children's learning. Designing adult training around andragogy improves retention.
123. A — Adults learn best when their existing experience is respected and drawn upon. Ignoring veterans' experience disengages them. Connecting content to their knowledge is the key adjustment.
124. B — A brief, task-specific jobsite talk on the day's hazard before work is a toolbox talk. It is informal and frequent, unlike formal courses or exams. Its purpose is timely, focused awareness.
125. D — The best toolbox talks are short, specific to the day's work, and two-way (interactive). Long, generic, lecture-only sessions lose attention and relevance. Engagement and specificity define effectiveness.
126. A — For an unsafe act without immediate danger, the best response is to address the behavior respectfully and explain the consequence. Public reprimand or silent waiting is counterproductive. Respectful, prompt correction supports learning.
127. D — A worker entering an unshored 7-foot trench is in immediate danger, so the correct response is immediate stop-work and removal. Coaching or logging it for later ignores the imminent risk. Stop-work takes precedence over scheduling.
128. B — Behavior-changing coaching focuses on the behavior and the system reasons behind it, not on character or blame. Understanding why the choice was made enables durable change. Coaching is forward-looking and constructive.
129. C — Safety culture is the shared values, beliefs, and behaviors regarding safety within an organization. It is not a poster count or a written policy alone. Culture lives in what people actually value and do.
130. A — Workers learn most from how leaders choose when safety conflicts with schedule, because those decisions reveal real priorities. Slogans and manual length do not shape behavior the way pressured choices do. Leadership under pressure defines the culture.
131. B — Training documentation should capture who was trained, on what topic, when, and confirmation of comprehension. Trainer title or cost alone is insufficient. Comprehension is the element that proves the training worked.
132. D — Operating a powered platform competently is verified by demonstrated hands-on performance. A signed sheet, verbal acknowledgment, or written quiz alone does not confirm skill. Performance verification is required for equipment operation.
133. A — Refresher training maintains and updates worker competency over time as skills fade or conditions change. It does not replace initial training or serve as discipline. Its primary purpose is currency.

134. C — Analyzing a non-routine lift's hazards and controls before the task is pre-task planning. It is a focused, just-in-time hazard analysis. This is distinct from recordkeeping or attendance logging.
135. B — Adult retention is highest with relevant, problem-centered material that is immediately applicable. Abstract, disconnected content or one-time delivery weakens retention. Practical relevance is the design principle.
136. D — Effective safety communication is clear, specific, two-way, and adapted to the audience. One-directional, memo-only, or annual-only communication is far weaker. Adaptation and dialogue make it effective.
137. A — Presenting a budget justification to executives is communicating upward to management. It differs from coaching workers or leading a toolbox talk. The direction of the message defines the category.
138. C — Pairing positive reinforcement with correction changes behavior more effectively than discipline alone. Reinforcing safe behavior builds durable habits. Discipline-only approaches yield limited, short-lived results.
139. D — Provable operator training typically requires certification or documentation of the training. A verbal reminder or undocumented experience does not satisfy the requirement. Documentation enables later proof of qualification.
140. B — Culture is built by consistent leadership decisions and behavior, not by more posters, bigger budgets, or more documents. Leaders' actions set the real norms. Consistency over time shapes culture.
141. D — Supervised practice on the actual equipment in the real setting is on-the-job training. It differs from lectures, online modules, or written exams. OJT builds skill in context.
142. B — Logging attendance does not confirm understanding, so training that omits comprehension checks cannot demonstrate effectiveness. Presence is not learning. Verification of understanding is the missing element.
143. A — Legally required training for site tasks is found in the applicable OSHA standards for those operations. Marketing materials, financials, or preferences are not authoritative. The regulations define the mandate.
144. C — An imminent-danger situation is distinguished by the potential for death or serious harm to occur immediately. New-hire status, supervisor presence, or scheduling do not define it. Immediacy of serious harm is the criterion.
145. D — Making a toolbox talk participatory means asking workers what hazards they foresee. Reading a script or excluding workers defeats interactivity. Eliciting input drives engagement.
146. B — Genuine stop-work authority empowers workers to halt unsafe tasks without reprisal, strengthening culture by signaling that safety outranks production. It does not centralize decisions or remove training needs. Empowerment builds trust.
147. A — When leaders repeatedly choose production over safety, the workforce learns that safety is negotiable in practice regardless of written policy. Actions override slogans. The lesson is that stated values are not real.
148. C — Building a course around workers' existing knowledge and real tasks reflects adult learning (andragogy). It leverages experience and relevance. This principle improves engagement and retention.
149. D — The main purpose of documenting training is to prove compliance and track who is qualified for which tasks. It is not to lengthen the manual or replace refreshers. Documentation supports accountability and verification.

150. B — A worker who reasonably believes a task is unsafe should be able to stop the work until the concern is addressed, without reprisal. Continuing or merely filing later does not protect them in the moment. Stop-work is the appropriate right.
151. C — Tracking on-time completion of required training is a leading indicator because it measures proactive activity. Recordable injuries, lost workdays, and severity are lagging. The metric forecasts rather than reports harm.
152. A — Training effectiveness is verified by confirming the worker can demonstrate the competency. Counting slides or recording the date does not prove learning. Demonstration is the test of effectiveness.
153. D — A pre-task meeting is brief, task-specific, and conducted on site, unlike multi-day formal training or written exams. It addresses the immediate job's hazards. Scope and setting distinguish it.
154. B — Coordinating hazard information among peer subcontractors is lateral (across) communication to other employers. It is neither downward to one's own crew nor upward to corporate. The peer direction defines it.
155. A — The most credible proof of management commitment is allocating resources and choosing safety when under pressure. Signed policies, luncheons, and manuals are weaker signals. Demonstrated priority outweighs symbolic gestures.
156. C — Effective correction is specific to the behavior and its consequence. Public embarrassment, delay, or one-size-fits-all responses are ineffective. Behavior-specific feedback drives change.
157. D — Measuring safety climate provides a measurable read on workers' current perceptions, useful for targeting improvement. It does not replace investigations or training records, nor guarantee outcomes. Its value is diagnostic.
158. A — Building a course on workers' real tasks reflects adult-learning relevance, which leverages experience and immediate applicability. It is not a lagging-indicator or entry-control concept. Relevance is the operative principle.
159. C — Periodic refresher training primarily serves to maintain current competency as skills fade and conditions change. It does not replace initial training or serve as discipline. Currency is its purpose.
160. B — The practitioner most powerfully shapes culture by modeling safe behavior and helping leaders choose it. More signs, longer programs, or expanded discipline do not build culture. Influence flows through demonstrated behavior and leadership coaching.
161. A — An Emergency Action Plan must include evacuation procedures, routes, and a means to account for employees. Financials, bid amounts, and resumes are irrelevant to emergency response. These core elements are mandatory content.
162. C — An EAP must be site-specific to the actual hazards and layout of each project. A generic plan reused everywhere fails to address real conditions. Specificity makes the plan usable in an emergency.
163. B — Before confined-space entry, the employer must evaluate prospective rescue services and arrange adequate rescue capability in advance. Assuming 911 or the local fire department is equipped is insufficient. Pre-arranged, verified rescue is required.
164. B — The purpose of an incident investigation is to identify causes and prevent recurrence, not to assign blame. A blame focus suppresses information and misses systemic factors. Prevention, not punishment, is the goal.

165. D — An event that nearly caused injury but did not is a near-miss, carrying the same potential for harm. It is not a recordable case, first-aid case, or citation. Near-misses are warning signals.
166. A — Near-misses share root causes with actual injuries but occur far more frequently, giving abundant prevention opportunities. They are not always destined to become injuries, nor mandatorily reportable. Investigating them prevents future harm.
167. C — The four P's of incident evidence are People, Parts, Position, and Paper. These categories organize the collection of perishable evidence. Each captures a distinct evidence type.
168. D — Witnesses should be interviewed promptly, separately, and with open-ended questions to preserve accurate, uncontaminated accounts. Group interviews and leading or delayed questioning distort recollection. Separate, timely, open questioning yields the best information.
169. A — "The worker was not tied off" is an immediate cause, the surface condition, not the root cause. The root cause asks why tie-off was unavailable or not used. Stopping at the immediate cause prevents real correction.
170. C — "Worker error" is a symptom, not a root cause; it stops short of why the error was possible. Effective analysis probes the systemic factors enabling the error. Treating it as the root cause yields ineffective fixes.
171. D — Repeatedly asking "why?" to move from symptom to systemic cause is the 5 Whys technique. It drills past surface conditions to underlying factors. The method is iterative questioning.
172. B — Organizing possible causes into categories branching off a central spine is a fishbone (Ishikawa) diagram. It visually groups potential contributing factors. This differs from a linear timeline or cost ranking.
173. A — Immediately after a serious injury, medical care for the injured and control of ongoing hazards take priority over preserving the scene. Life safety and stopping further harm come first. Evidence preservation follows once people are safe.
174. C — At a remote site far from medical facilities, the standard requires an onsite trained first-aid provider when timely outside help is unavailable. A full-time physician, nearby hospital, or parked ambulance is not required. Adequate first-aid capacity must be assured.
175. B — Where corrosives can splash eyes or skin, the employer must provide quick-drenching and eye-flushing facilities in the immediate work area. A written inventory or clothing alone does not meet the requirement. Emergency flushing must be readily accessible.
176. D — A post-incident review should evaluate both the incident's causes and the adequacy of the emergency response. Limiting it to the worker's record, claim cost, or discipline misses learning. Reviewing both dimensions improves the system.
177. A — After evacuating to the assembly point, a reliable method must account for every person. This confirms no one remains in danger. Accountability, not immediate re-entry, is the next step.
178. C — The EAP must be practiced beforehand so workers know it before, not during, an emergency. Drills build the familiarity needed under stress. Practice does not replace the safety program or reduce toolbox talks.
179. D — Corrective action should target the systemic root cause, not merely the immediate unsafe act. Fixing only the surface act leaves the underlying condition intact. Root-cause correction prevents recurrence.

180. B — Severe weather most directly affects crane, scaffold, and fall-protection work, where wind and conditions create acute hazards. Payroll, document retention, and marketing are not weather-sensitive operations. Weather response protects these high-exposure activities.
181. C — A traumatic amputation must be reported to OSHA within 24 hours. This shares the window with in-patient hospitalization and loss of an eye. It is longer than the 8-hour fatality deadline.
182. A — Documenting the locations of equipment and the victim captures the "Position" element of the four P's. People, Parts, and Paper are the other categories. Spatial documentation defines Position.
183. D — Lessons learned should feed back into the broader safety program and procedures. Routing them to marketing, payroll, or billing wastes the knowledge. Integration into the program closes the improvement loop.
184. B — In a trench collapse, a nearby worker must stay out, call trained rescue, and secure the scene, because entering risks a second burial. Jumping in or climbing down endangers the rescuer. Untrained entry compounds the emergency.
185. A — The most reliable rescue for a collapsed permit-space entrant is non-entry retrieval using a harness and retrieval line. This avoids exposing rescuers to the same hazard, the leading cause of multiple-fatality confined-space events. Non-entry retrieval is preferred whenever feasible.
186. D — Loss of an eye must be reported to OSHA within 24 hours. It shares this window with amputation and in-patient hospitalization. The 8-hour deadline applies only to fatalities.
187. C — Applying PDCA's "Act" step to an incident means turning the event into systemic improvement. Logging or re-interviewing are not the Act phase. Act converts findings into lasting change.
188. B — A first-aid responder who may contact blood must follow bloodborne pathogen precautions and use appropriate PPE. Crane, confined-space, or powder-actuated requirements are unrelated. BBP precautions protect the responder.
189. D — "Why was no anchorage available for tie-off?" reflects root-cause thinking by probing the system condition. Questions about discipline, cost, or return date do not address causation. Root-cause questions ask why the hazard existed.
190. A — A head count against a roster supports the employee accountability function of the EAP after evacuation. It is not atmospheric testing, 300A certification, or training scheduling. Accountability confirms all personnel are safe.
191. C — Assembly points should be at safe distances clear of operations and hazards. Locating them at the entrance, inside a structure, or wherever workers happen to gather can place evacuees in danger. Safe, deliberate siting is required.
192. B — Beyond first-aid supplies, the medical-services standard requires that medical personnel be available for advice and prompt attention. It does not mandate a full-time physician, onsite ambulance, or a hospital within a mile. Access to professional guidance must be assured.
193. D — "Failure to follow procedure" stops the analysis before the real cause—why the procedure was not followed or was unworkable. It does not identify the systemic root or guarantee prevention. Premature stopping yields weak corrective actions.
194. A — The leading cause of multiple fatalities in confined-space incidents is untrained would-be rescuers entering the space and succumbing to the same hazard. This is why non-entry retrieval and trained, equipped rescue are emphasized. Impulsive rescue compounds the toll.

195. C — Useful lessons learned should be communicated across the organization as appropriate. Confining them to one supervisor or discarding them wastes the insight. Broad sharing prevents recurrence elsewhere.
196. B — The strongest reason to investigate near-misses is that they provide early warning before an injury occurs. They are not always more severe, nor citation-required, and they do require corrective action. Early warning is their preventive value.
197. A — A work-related fatality must be reported to OSHA within 8 hours of the employer learning of it. This is the shortest deadline because of the event's severity. Hospitalizations, amputations, and eye loss have a 24-hour window.
198. D — Gathering JHAs, training records, and procedures represents the "Paper" element of the four P's—records and procedures. People, Position, and Parts are distinct categories. Documentary evidence is Paper.
199. C — Emergency eyewash for corrosive work must be located within the immediate work area, not at a distant office or public facility. Quick access within seconds is essential to limit injury. Proximity to the hazard is the requirement.
200. B — Recurrence is truly prevented only when root causes are controlled and lessons are fed back into the system. A closed report, discipline, or a photo archive without system change does not confirm prevention. Sustained control plus feedback is the ultimate measure.