

CUSP Base Exams and T&D Endorsement Exam Sample Questions and Format

STANDARDS or OPERATIONS

1. A PIT (forklift) is considered unattended when the operator is how far away from a running machine?

- A. 10 feet
- B. 25 feet**
- C. 50 feet
- D. 75 feet

PITs are used at every utility workplace. Every safety person should be familiar with the basic PIT operation rules. Every operator is required to be licensed by the employer, ensuring that the operator meets the criteria of the OSHA 29 CFR 1910.178 standard for operators of PITs before they operate a PIT. Rule 1910.178(m)(5)(ii) defines “unattended” as 25 feet away when in view of the operator or anytime the PIT is out of view of the operator.

OPERATIONS

2. Physical and health hazards, HazCom program criteria, protection methods and a list of hazardous chemicals are found in what document?

- A. The federal MUTCD
- B. OSHA’s 1926 Construction Industry Standard
- C. OSHA’s 1910 General Industry Standard**
- D. OSHA’s 1904 Recordkeeping Standard

The qualifying element of the question is “program criteria.” The OSHA 29 CFR 1926 construction standard has a HazCom rule in 1926.59, but it refers the reader to OSHA 29 CFR 1910.1200 where the HazCom program criteria and list of hazardous chemicals are found. Answer A, the Manual on Uniform Traffic Control Devices, has no regulations for hazardous materials.

STANDARDS

3. Under the current OSHA and 1997 Z89.1 ANSI standards, which of the following best describes head protection that protects against impact and 20,000 volts?

- A. Type A
- B. Type B
- C. Type C
- D. Type E**

Consensus standards are cited by OSHA as useful to the employer as a means to comply with the requirements of the federal rules. ANSI Z89 was revised in 1997 and is adopted by OSHA. The classification for insulated hard hats was changed in the 1997 standard from Type B to Type E.

CUSP Base Exams and T&D Endorsement Exam Sample Questions and Format

OPERATIONS or HAZARD ID

4. Which of the following best describes where statistics regarding face, hand, foot or head injuries would most likely be found?

- A. Bureau of Labor Statistics (BLS)
- B. Bureau of Labor Management (BLM)
- C. The Employers Incident Emergency and Industrial Organization
- D. Occupational Safety and Health Administration

OSHA does not compile statistics in the standard, but does report statistics to the Bureau of Labor Statistics (BLS). The BLS compiles tables of statistics for use in the workplace, research, planning and many other important reasons. The Bureau of Labor Management and Employers Incident Emergency and Industrial Organization are fictitious organizations.

STANDARDS

5. Where are the OSHA standards for construction and operation of electric utility systems found?

- A. OSHA's General Industry Standard 1910 Subpart R
- B. OSHA's Construction Industry Standard 1926 Subpart V
- C. OSHA's Standard 1904 Subpart ZZ
- D. Answers A and B are correct

Answers A and B are correct. The 1904 standard is the recordkeeping standard and has no part ZZ.

OPERATIONS or STANDARDS

6. In the OSHA 29 CFR 1910.269 standard, the language "nominal voltages, maximum switching-transient voltages, presence of induction, locations of circuits and equipment, and condition of protective grounds" are terms associated with the rule that requires determination of:

- A. Recordkeeping
- B. Craft training
- C. Line clearance
- D. System characteristics

Several of the questions on the CUSP exam have verbatim language from the OSHA standard. These verbatim quotes are only drawn from the most frequently used standards and should be familiar to any safety professional. OSHA 29 CFR 1910.269(a)(4), immediately following the training section, requires that the existing conditions relative to safety be determined before starting work.

CUSP Base Exams and T&D Endorsement Exam Sample Questions and Format

STANDARDS

7. The following OSHA definition is criteria for what? “A person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, successfully demonstrated the ability to solve/resolve problems relating to the subject matter, the work, or the project.”

- A. A qualified person
- B. A controlling supervisor
- C. A competent person
- D. A capable person

This is the direct wording of OSHA’s definition of a qualified person. OSHA requires the employer to have either qualified persons or competent persons under several standards. OSHA defines the differences. The key difference is that a qualified person is a worker with training or experience-developed skills that enable them to resolve problems associated with their tasks. The competent person is a person in authority who can take corrective actions where hazards are discovered. The term “qualified person” is associated with an individual’s ability to safely perform a task, while the competent person is associated with safety conditions, remediation and accountability. The controlling supervisor title is not used by OSHA or any consensus standard.

INCIDENT PREVENTION or HAZARD ID or OPERATIONS

8. Which statement below best describes non-mandatory “Advisory Guidelines for Employer Compliance” published by OSHA?

- A. Consensus standards
- B. Federal register appendices
- C. OSHA interpretations
- D. ANSI standards

Consensus standards are published by industry groups or associations. Interpretations by OSHA have the force of regulatory text. The appendices to the rules published by OSHA are the non-mandatory guidelines and are listed as such in the introduction to each appendix in the standards.

HAZARD ID or STANDARDS or INCIDENT PREVENTION

9. Which of the following best describes National Electrical Safety Code (NESC) accepted requirements for determining energized or unknown conditions?

- A. Use of warning labels
- B. Inspection and testing of lines and equipment
- C. Fuzzing of energized lines
- D. Determination based on knowledge and experience

Answer B is the requirement for determining energized or unknown conditions in NESC 2012-Sec.42 (420.D). Fuzzing is not mentioned in the NESC; however, IEEE standards do allow fuzzing over 46 kV.

CUSP Base Exams and T&D Endorsement Exam Sample Questions and Format

STANDARDS or INCIDENT PREVENTION or OPERATIONS

10. Which of the following best describes when foot protection is NEEDED for employees?

- A. Foot protection is OSHA-mandatory PPE
- B. The employer's determination of conditions based on hazard assessment and previous experience**
- C. Compliance Safety & Health Officer (CSHO) inspection and requirements
- D. Company policy

OSHA does not mandate certain protective footwear criteria; neither do CSHOs. However, if an employee is injured and protective footwear would have prevented the injury, OSHA can cite an employer for failing to prescribe the proper footwear.

STANDARDS or OPERATIONS

11. In 2014, OSHA postponed the crane and derrick requirement for third-party certification to 2017 of which individuals?

- A. Equipment riggers
- B. Safety observers and signal persons
- C. Equipment operators**
- D. Equipment maintenance personnel

STANDARDS or OPERATIONS

12. What is the most important consideration for an employer when selecting what PPE to use and when to use it?

- A. OSHA compliant manufacturer recommendations
- B. Workplace hazards and injury statistics**
- C. How use affects productivity and cost versus the benefits
- D. Employee preferences

The employer is expected to know what hazards exist and also is expected to keep a first aid log and use injury statistics in the workplace both to decide what PPE should be used and to perform periodic audits of the effectiveness of the PPE program. Productivity and costs should not be part of the calculus for employee protection, and manufacturers' recommendations, though valuable in selection, do not relieve the employer of the responsibility.

CUSP Base Exams and T&D Endorsement Exam Sample Questions and Format

INCIDENT PREVENTION or HUMAN PERFORMANCE or OPERATIONS

13. A detailed study to identify the cause of the incident is best described by which of the following?

- A. Job hazard analysis
- B. Specific plural analysis
- C. Root cause analysis**
- D. Post incident analysis

OPERATIONS or HAZARD ID

14. Of the numbers below, which oxygen concentration best describes that suitable for life support?

- A. 17%
- B. 21%**
- C. 24%
- D. 29%

HAZARD ID or STANDARDS or INCIDENT PREVENTION

15. Which of the following best describes the sound level requirements for backup alarms on construction site vehicles?

- A. A minimum of 60 dB at 50 feet
- B. A minimum of 77 dB at 55 feet
- C. A minimum of 90 dB at 20 feet
- D. Above ambient sound level in the area of exposure**

HUMAN PERFORMANCE or INCIDENT PREVENTION

16. Which one of the following activities would be considered a leading indicator of a zero-incident culture?

- A. Routine and effective use of task hazard analysis**
- B. An annual published incident rate of 2.8
- C. A published insurance experience modifier of .88
- D. Review of recent incidents

CUSP Base Exams and T&D Endorsement Exam Sample Questions and Format

OPERATIONS

17. Where will specific safety procedures for completion of a task most likely be found?

- A. OSHA standards
- B. MSHA standards
- C. Consensus standards**
- D. ANSI standards

OSHA and MSHA are performance standards, meaning what must be accomplished. Procedural standards, meaning how to accomplish a task, are found in consensus standards.

HUMAN PERFORMANCE

18. In a determination of why people do what they do, which of the following best describes an antecedent?

- A. Response after an unwanted event
- B. Encouragement by co-workers
- C. Something that occurs before an unwanted event**
- D. Employee coaching or mentoring

STANDARDS

19. The following OSHA definition is criteria for what? "One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them."

- A. A qualified person
- B. A controlling supervisor
- C. A competent person**
- D. An authorized person

The criteria for competent and qualified are both based on a measure of experience and training. The key difference between a qualified person and a competent person is "authorization to take prompt corrective measures." A person can be both competent and qualified, but a qualified person usually performs a task; a competent person usually oversees a task.

INCIDENT PREVENTION or OPERATIONS or HUMAN PERFORMANCE

20. Which statement below best describes management leadership in developing and supporting a workplace safety culture?

- A. The manager facilitates down and accepts communication/feedback up**
- B. The manager gives clear, affirmative verbal support for safety ideas
- C. The manager supports safety awards with funding
- D. The manager provides appropriate incentives for safe behavior

CUSP Base Exams and T&D Endorsement Exam Sample Questions and Format

OPERATIONS or INCIDENT PREVENTION

21. According to the standards, task safety training is needed when a new employee reports to work or when an employee has been reassigned. Under federal rules, what other condition requires additional task safety training?

- A. After accidents happen, leveraging lessons learned
- B. Increased incident rates and high modifiers indicate safety issues
- C. When new equipment and new procedures are employed**
- D. Both B and C

Answer C is language from the standard.

LEADERSHIP or STANDARDS

22. Who is held accountable by OSHA's General Duty Clause, Section (5)(a)(1) of the Occupational Health and Safety Act of 1970, when hazards are involved?

- A. The employer of the employees at risk**
- B. Controlling employers on a multiemployer work site
- C. Utility owners and managers of subcontractors
- D. The supervisors at the job site

According to OSHA's Field Operations Manual for compliance, to cite an employer under the General Duty Clause, the employer's employees must be directly at risk from a hazard under the control of the employer. The other groups in answers B, C and D might have some control over safety, but the workers are not their employees so they could not be cited under the General Duty Clause.

STANDARDS

23. Under federal crane rules found in OSHA 29 CFR 1926.1400, the crane and derrick standard, assembly of a crane boom jib extension requires which competent person?

- A. An assembly/disassembly (AD) director**
- B. A qualified rigger
- C. A signal person
- D. All of the above

The only competent person required is an assembly/disassembly (AD) director. The others might be required, but they are classified as qualified persons.

HAZARD ID or INCIDENT PREVENTION or OPERATIONS

24. Which of the following conditions has the greatest effect on induced voltage?

- A. Air, wind and moisture saturation
- B. Type of structure support
- C. Voltage from nearby systems**
- D. Conductor diameter/type

CUSP Base Exams and T&D Endorsement Exam Sample Questions and Format

HAZARD ID or INCIDENT PREVENTION or OPERATIONS

25. The following language from the federal standard is criteria for what hazardous workplace? "... may contain hazardous atmosphere under abnormal conditions ..."

- A. Workers around operating cranes
- B. An enclosed space**
- C. Workers at elevated work surfaces
- D. A trench

HAZARD ID or INCIDENT PREVENTION or OPERATIONS

26. When not concerned with the total impedance of a ground connection, which method of grounding a truck is least likely to expose workers to the effects of a system fault?

- A. Independent ground rod**
- B. Connection to a pole bond
- C. Connection to a system neutral
- D. Connection transmission system static

There are many ways to accomplish grounding, but only an independent ground rod would not be subject to the possibility of introducing current onto the protected equipment by back-feeding fault from another location or from circulating induced currents.

INCIDENT PREVENTION or OPERATIONS or HAZARD ID

27. What is the purpose of bonding a metal aerial basket to grounded phase conductors?

- A. To maximize current flow in the ground system
- B. To improve protective device operation
- C. To equalize voltages protecting workers between conductive surfaces**
- D. To reduce static

HAZARD ID or INCIDENT PREVENTION

28. In standard excavation safety rules, which measure below is a trigger associated with ground control?

- A. 4 feet
- B. 5 feet**
- C. 6 feet
- D. 7 feet

Four-five-six is a good mnemonic device for rule memory; four is for ladder access, five is for shoring and six is for fall protection.

CUSP Base Exams and T&D Endorsement Exam Sample Questions and Format

OPERATIONS

29. A straight ladder resting against a wall 12 feet high should have its base how far from the wall?

- A. 3 feet
- B. 4 feet
- C. 5 feet
- D. 6 feet

OPERATIONS

30. Fall protection is not required in which of the following conditions?

- A. In excavations under 6 feet
- B. On ladders that are not secured
- C. On top of storage containers when rigging is being conducted
- D. On power transformers during routine insulator testing

31. A PIT (forklift) is considered altered under what circumstances?

- A. Fork extensions
- B. Fork attachments
- C. Added counterweights
- D. All of the above

Any modification that affects capacity is considered an alteration.

32. Which answer below best describes publications that are not new standards or regulations and do not create any new OSHA duties for employers?

- A. Consensus standards
- B. Advisory guidelines
- C. OSHA interpretations
- D. Industry best practices

33. Control of hazardous energy to protect individuals in the service and maintenance of machines and equipment is found in what program?

- A. HazCom
- B. Material Safety Data Sheets (MSDS)
- C. Lockout/Tagout (LOTO)
- D. Grounding

CUSP Base Exams and T&D Endorsement Exam Sample Questions and Format

34. Of the potential hazards below, which is the defining factor for determining whether a working space that has a limited means of egress or entry is considered an enclosed space versus a confined space?

- A. Engulfment
- B. Water
- C. Atmosphere**
- D. Energized electrical

35. Of the standards below, which provides criteria for use of arc flash protective clothing for commercial line workers?

- A. OSHA
- B. NFPA 70E
- C. IEEE
- D. Both A & C**

IEEE has specific criteria for arc flash protection for utility workers. The OSHA standards use the IEEE calculations for determining incident energy/arc-flash level. NFPA 70E is often cited as a rule for utilities, but the very first paragraph of NFPA 70E specifically exempts utilities from the 70E standard.

36. Each qualified employee climbing or changing location on poles, towers, or similar structures must use fall protection equipment. Where is this OSHA regulation located?

- A. OSHA 29 CFR 1910.269**
- B. OSHA 29 CFR 1926 Subpart M
- C. OSHA 29 CFR 1926 Subpart R
- D. OSHA 29 CFR 1926 Subpart P

37. In 2010, the crane and derrick final rule required certifications for which personnel?

- A. Signal persons
- B. Riggers
- C. Signal persons and riggers**
- D. None of the above