1. Lock-out/tag-out procedures are in place to:
   a. Prevent the accidental start-up of equipment
   b. Prevent short-cuts from being taken to service equipment
   c. Train workers in their role in the lock-out/tag-out program
   d. All of the above

2. Lock-out/tag-out procedures are found only in this standard
   True False

There are many other OSHA standards that have specific lock-out/tag-out provisions including woodworking machines (1910.213); mechanical power presses (1910.217); forging machines (1910.218); welding, cutting and brazing (1910.252); and electrical (1910.305)

3. A Lock-out procedure is used whenever: [1910.147(a)]
   a. The servicing or repair work to be done places a worker in danger
   b. An equipment guard must be removed for servicing
   c. There is the possibility of an unexpected energization or start up of machines which could hurt workers
   d. All of the above
4. Which of the following would be covered by this standard? [1910.147(a)]
   
a. Electrical work on an oil rig
   
b. Electrical work where a worker has to part of their body into an area of the machine where work is actually performed
   
c. Work on a cord and plug piece of equipment which is unplugged
   
d. All of the above

5. Minor service activities during normal production operations do not need to be locked-out/tagged-out as long as the activities are routine, repetitive, and integral to use of the equipment and there are alternative measures that give effective protection. [1910.147(a)(2)(ii)]
   
   True   False

   Normal production operations fall under Subpart O. Normally workers are covered if they have to remove or bypass a guard or other safety device [1910.147(a)(2)(ii)(A)] or if they have "to place any part of his or her body into an area on a machine or piece of equipment where work is actually performed or where an associated danger exists during the machine operating cycle". [1910.147(a)(2)(ii)(B)] However, the above is the exception to this.

6. An affected employee is one who: (circle all that apply) [1910.147(b)]
   
a. Operates machinery that is subject to lockout
   
b. Works in an area where lockouts are used to service machines
   
c. Services machinery that is subject to lockout
   
d. Has worked in a hazardous area too long
7. An authorized employee is one who: (circle all that apply) [1910.147(b)]
   a. Has an identification badge
   b. Operates machinery that is subject to lockout - sometimes if they are properly trained
   c. Services machinery that is subject to lockout
   d. Actually locks out equipment for servicing.

8. The term "Lock-out" means: [1910.147(b)]
   a. Shutting down a piece of equipment for service or maintenance work
   b. Applying a lock somewhere on a piece of equipment to show that it should not be used
   c. Applying a device that utilizes a lock and key to hold an energy isolating device in a safe position and prevent the energizing of a machine or equipment.
   d. Applying a tag to a piece of equipment to show that it should not be used
9. "Tag-out" refers to: [1910.147(b)]

a. The placement of a device on an energy isolating device to tell others that an energy isolating device has been applied and to not operate until the tag-out device is removed

b. The process of blocking energy from reaching a piece of equipment

c. Signing off that a certain piece of machinery has been serviced

d. A device that physically prevents others from restarting equipment

10. Indicate which of the following items must be part of a written lock-out/tag-out program: [1910.147(c)]

a. Yes ☐ No ☐ The names of all affected employees

b. Yes ☐ No ☐ The steps for shutting down and securing all machines and equipment

c. Yes ☐ No ☐ Steps to verify, by testing machines, that all energy is safely isolated or turned off

d. Yes ☐ No ☐ The names of those who are authorized to lock out machinery

This is not required, but it is recommended

e. Yes ☐ No ☐ The steps to be taken in restarting the equipment after the maintenance has been completed.

f. Yes ☐ No ☐ Training of authorized employees, affected employees, and all other employees who may be in the area where energy control procedures may be used.

In fiscal year 1996, OSHA issued 714 citations to companies for inadequate lock-out/tag-out programs.

11. If you come across a piece of equipment that is turned off, tagged out but not
locked out, you should: (circle all that apply) [1910.147(c)(7)(ii)]

a. Ask someone working in the area if the machine could be turned on

b. **Notify someone who is authorized to perform a lock-out/tag-out**

c. **Never restart the equipment**

d. Assume the tag was accidentally left on and turn the machine back on.

12. Indicate which of the following items must exist before an employer does **not** need to document the required procedure for locking and tagging out a particular machine? [1910.147(c)(4)(i)]

<p>| | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>a. Yes</td>
<td>No</td>
<td>The machine has no potential for storing energy after shut down which could injure a worker</td>
</tr>
<tr>
<td>b. Yes</td>
<td>No</td>
<td>The machine has a single energy source which is easily identified and isolated</td>
</tr>
<tr>
<td>c. Yes</td>
<td>No</td>
<td>Isolating and locking out a single energy source will completely deactivate the machine</td>
</tr>
<tr>
<td>d. Yes</td>
<td>No</td>
<td>The machine is isolated from the only energy source and locked out during servicing</td>
</tr>
<tr>
<td>e. Yes</td>
<td>No</td>
<td>A single lockout device will lock out the machine</td>
</tr>
<tr>
<td>f. Yes</td>
<td>No</td>
<td>The lockout device is under sole control of the workers performing the servicing</td>
</tr>
<tr>
<td>g. Yes</td>
<td>No</td>
<td>The servicing of a machine provides no hazards to other workers</td>
</tr>
<tr>
<td>h. Yes</td>
<td>No</td>
<td>The employer hasn't had any accidents on that machine due to the accidental energization of it</td>
</tr>
</tbody>
</table>

**All of the above have to be in place before an employer doesn't have to document required lock-out/tag-out procedures**

13. Which of the following would **NOT** be appropriate wording for a tag-out device?
The tag-out device must warn against the hazardous condition if the machine or equipment is turned on and must include wording such as that found in A, B, or C. Tag D does not give a warning.

14. Inspections of the procedures must be performed at least annually to ensure that the procedures and that the requirements of the standard are being followed.  
[1910.147(c)(6)]

True    False
15. Which of the following is TRUE regarding tags? [1910.147(c)(7)(ii)]

a. Tags are a good example of an energy isolating device

b. **Tags are just warning devices** - Tags can give a false sense of security unless one understands their role as just part of an overall energy control program.

c. An affected person has the authority to remove a tag on their machine

d. Tags must always be in English

According to 1910.147(c)(7)(ii)(C), "Tags must be legible and understandable by all authorized employees, affected employees, and all other employees whose work operations are or may be in the area, in order to be effective." So if there are workers who primarily communicate in a language other than English, the tag would need to include warning words in their language so they can be effective.

16. Employee retraining is required when? (circle all that apply) [1910.147(7)(iii)]

a. It is required every 12 months

b. **It is required whenever there is a change such as in job assignments, machines, new hazard, or new control devices**

c. It is required if the periodic inspection shows workers don't remember the information

d. All of the above
17. The periodic inspection must be performed by: [1910.147(c)(6)(i)(A)]
   a. An affected person who uses the lock-out/tag-out procedure other than that which is to be inspected
   b. **An authorized person other than the one(s) using the energy control procedure being inspected**
   c. A person from the Health and Safety department
   d. None of the above

18. Who should carry the key in a locked-out/tagged-out environment?
   a. Supervisor
   b. **Worker doing the work in the lock-out/tagged-out area**
   c. Health & safety representative
   d. Shop steward
   e. A co-worker that is owed money by the worker in the locked-out/tagged-out area

19. It is all right to lend your lock to a co-worker if: (circle all that apply)
   a. The co-worker's lock is in another part of the building
   b. That co-worker works several miles away
   c. You know you won't be using your lock
   d. **None of the above - you should never lend your lock to anyone else**
20. Put the following statements in the proper sequence. For example #1 should be what is done first, #2 is done second, etc. [1910.147(d-e)]

4. Lock-out/Tag-out devices are applied
8. Employees are checked to ensure they are safely positioned or removed
3. The energy is isolated from the machine
1. The authorized employee makes sure they have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the method to control the energy.
7. The machine is inspected to ensure that nonessential items have been removed and that the machine components are operationally intact
9. Lock-out/Tag-out devices are removed
2. The machine is turned off or shut down according to procedure
6. An authorized employee verifies that the machine is isolated and deenergized
5. All stored energy is relieved

21. A contractor is coming on site to do some work that involves them using their own lock-out/tag-out procedures. Who is responsible in the standard for making sure the on-site employees understand and comply with the restrictions and prohibitions of the contractor's energy control program? [1910.147(f)(2)(ii)]

a. The on-site employer
b. The contractor
c. The on-site employees
d. Nobody
22. What is this device used for?

It is a group lock-out device. Each authorized worker puts their own lock on the group lock-out device when they begin work and remove it when they end work.

23. When there are personnel changes or at the end of a shift, there must be procedures in place to ensure the continuity of lock-out/tag-out protection between off going and oncoming workers. [1910.147(f)(4)]

True False