



**General Mechanical Safety Training  
Quiz (M\_001)**



**Name (print):** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Score:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

Each question is worth 1 point unless otherwise noted. A passing score is 40 out of a possible 50.  
Return the completed quiz to **Karen Kiselycznyk** ([kkis@lle.rochester.edu](mailto:kkis@lle.rochester.edu), Rm. 2212).

- 1) What is the primary cause of accidents?
  - a) Failure to follow procedures
  - b) Equipment failure
  - c) People
  - d) Hurrying
- 2) If an activity seems unsafe
  - a) Address the concern after the job is done
  - b) The system must be safe since it is at LLE
  - c) I just haven't been trained yet
  - d) Stop work and address the concern
- 3) The best way to prevent an accident is to be aware of your surroundings.
  - a) True
  - b) False
- 4) Only perform activities for which you are qualified.
  - a) True
  - b) False
- 5) Only use items in the manner for which they were intended.
  - a) True
  - b) False
- 6) Additional training is required for
  - a) Cryogenic liquids
  - b) Gas systems in excess of 150 psig
  - c) Rigging loads in excess of 120 lbs.
  - d) Overhead crane operation
  - e) Overhead hoist operation
  - f) Aerial (Manlift) operation
  - g) Fall Protection PPE
  - h) All of the above
- 7) The first person you should ask about required PPE is
  - a) your supervisor
  - b) a work area supervisor
  - c) another trained operator
  - d) a safety officer
- 8) The cleaning and care of PPE is the responsibility of
  - a) your supervisor
  - b) a work area supervisor
  - c) the employee
  - d) safety officers

- 9) Broken or dysfunctional PPE that is provided in a work area must be returned to
- a) your supervisor
  - b) the work area supervisor
  - c) the employee
  - d) safety officers
- 10) PPE (safety glasses, laser glasses, hard hats, face shields, etc.) that is provided in a work area should remain in the work area.
- a) True
  - b) False
- 11) When are safety glasses required in a laboratory?
- a) always
  - b) sometimes
  - c) never
  - d) only when posted
- 12) When are hardhats required?
- a) always
  - b) sometimes
  - c) never
  - d) when someone is working overhead
- 13) All mechanical equipment modifications must be coordinated through which group?
- a) EE
  - b) ME
  - c) ASME
  - d) O&M
- 14) What is the common metric for evaluating the risk level associated with equipment and systems?
- a) Kinetic energy
  - b) Momentum
  - c) Entropy
  - d) Stored energy
- 15) Low pressure systems that use “house” air or nitrogen and commercial air compressors designed for <150 psi and when used in accordance with manufacturer’s recommendations require only ME Safety Training.
- a) True
  - b) False
- 16) Compressed air for general shop or laboratory use shall be limited to a maximum pressure of 30 psig using restricting nozzles.
- a) True
  - b) False
- 17) It is acceptable to use compressed air to clean clothing while it is being worn.
- a) True
  - b) False
- 18) Oxygen can be used as a substitute for compressed air.
- a) True
  - b) False
- 19) All gas systems must be inspected
- a) by EE
  - b) by ME prior to operation
  - c) by ME after initial pressure check
  - d) by ASME prior to operation
- 20) All gas system operators must
- a) have compressed gas system training
  - b) receive training for the equipment they will operate
  - c) use operating procedures for systems with gas sources over 3000 psi
  - d) receive extra training for flammable gas systems
  - e) All of the above

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- 33) Basic rigging training is required starting at a payload weight of
- a) 0 lbs
  - b) 120 lbs
  - c) 500 lbs
  - d) 20000 lbs
- 34) Advanced rigging training is required starting at a payload weight of
- a) 0 lbs
  - b) 120 lbs
  - c) 500 lbs
  - d) 20000 lbs
- 35) Rigging equipment does not need to be inspected prior to every use.
- a) True
  - b) False
- 36) When moving an object that feels heavy or unwieldy, stop and get help.
- a) True
  - b) False
- 37) When using a ladder which statement is false
- a) Inspect prior to use
  - b) Do not exceed the manufacturer's rated capacity
  - c) Do not allow personnel to work or pass under the ladder
  - d) Keep your weight centered over the ladder
  - e) Do not go above the highest labeled step and use only on a level non-skid surface
  - f) Secure ladder in designated locations when not in use
  - g) Face the ladder when moving up or down
  - h) Use at least two hands to grasp the ladder when climbing
  - i) Do not carry objects (loads) that could cause loss of balance and falling
  - j) Use ladders equipped with nonconductive side rails if the worker or the ladder could contact exposed energized electrical equipment
- 38) Ladders, rolling stairs, and manlifts must be used in accordance to manufacturers' recommendations.
- a) True
  - b) False
- 39) Use of manlifts is restricted to qualified operators.
- a) True
  - b) False
- 40) Housekeeping is only the responsibility of the janitorial staff.
- a) True
  - b) False
- 41) All items over 4' off of the ground must be properly stored or secured to prevent becoming a falling object.
- a) True
  - b) False
- 42) Cable management in the Omega and Omega EP facilities must be engineered and documented.
- a) True
  - b) False
- 43) Which group is responsible for the engineering and documentation of cable management?
- a) EE
  - b) ME
  - c) O&M
  - d) XOPS

- 44) Which group is responsible for cable engineering and documentation?
- a) EE
  - b) ME
  - c) O&M
  - d) XOPS
- 45) Modification of any equipment cannot be performed unless reviewed by
- a) EE
  - b) ME
  - c) O&M
  - d) All applicable engineering groups
- 46) Use of hand tools is permitted under which circumstances.
- a) used in accordance to manufacturers' recommendations
  - b) use is reviewed with a qualified user
  - c) shown how to use it by a machinist
  - d) any of the above
- 47) Training for the use of Student Machine Shop is required.
- a) True
  - b) False
- 48) Use of Student Machine Shop is a privilege and not a right.
- a) True
  - b) False
- 49) A qualified user of the Student Machine Shop is automatically qualified to use equipment in the LLE Machine Shop.
- a) True
  - b) False
- 50) Qualified users for the LLE Machine Shop must first check in with;
- a) only the shop supervisor
  - b) the shop supervisor or his designee
  - c) the shop supervisor after setting up your work
  - d) another qualified user