

Chapter 1 - Shop and Personal Safety

MULTIPLE CHOICE

1. What agency is responsible for certifying safety boots and shoes?
 - a. U.S. Government.
 - b. Your employer.
 - c. EPA.
 - d. Underwriters Laboratories (UL).

ANS: D REF: 2-6

2. What type of equipment are safety glasses, splash goggles and face shields?
 - a. Eye protection.
 - b. Shop uniforms.
 - c. Eyewear.
 - d. Welding equipment.

ANS: A REF: 3-2

3. Which situation most often results in hearing loss in a shop environment?
 - a. An individual incident.
 - b. Improperly maintained air tools.
 - c. Years of exposure to repetitive and excessive noise levels.
 - d. Shop noise exceeding 160 decibels.

ANS: C REF: 4-2

4. What type of glove should be used to handle dangerous acids or alkalis?
 - a. Leather gloves.
 - b. Any glove that covers the entire hand.
 - c. Vinyl disposable gloves.
 - d. Hazardous materials gloves.

ANS: D REF: 4-5

5. How do you avoid injury when lifting heavy items?
 - a. Lift only with your arms.
 - b. Keep your back vertical while lifting.
 - c. Bend over the center of the object.
 - d. Keep your legs straight.

ANS: B REF: 4-6

6. Why is clothing made from artificial fibers dangerous in a shop environment?
 - a. It can melt onto skin when exposed to high temperatures.
 - b. They react with oils and brake down.
 - c. Artificial fibers ignite easily.
 - d. It will gas when in warm environments.

ANS: A REF: 5-3

7. Why are butane lighters dangerous in a shop environment?
 - a. Metal parts can cause electrical shorts.

- b. Butane reacts explosively with certain automotive fluids.
- c. Most butane lighters leak.
- d. They are an extreme explosive potential.

ANS: D REF: 5-4

8. What class of fire extinguisher should be used on a grease or fuel fire?
- a. Class A.
 - b. Any class available.
 - c. Class C or D.
 - d. Class B.

ANS: D REF: 6-3

9. What should you do before using unfamiliar shop equipment?
- a. Ask for help/training on the equipment.
 - b. Have the manual available and read it when you make an error.
 - c. Demand certification training from your employer.
 - d. Proceed slowly.

ANS: A REF: 6-5

10. What precautions should be taken before working under hydraulic hoists?
- a. Just make sure the hydraulic valves are in the proper positions.
 - b. Make sure all electrical controls are stopped.
 - c. Makes sure it is mechanically supported.
 - d. Make sure it clears your head while standing erect.

ANS: C REF: 7-1

11. Which of the following best describes a bottle jack?
- a. Hand actuated and rated to lift loads up to 10 tons.
 - b. Made for heavy lifting.
 - c. Hand actuated and made only for loads under 1 ton.
 - d. Air operated light duty jacks.

ANS: A REF: 8-1

12. In what situation can a cherry picker be used?
- a. Only for lifting transmissions and engines.
 - b. A replacement for a hydraulic lift.
 - c. Only light weight lifting under 100 lbs.
 - d. Both light and heavy duty lifting jobs.

ANS: D REF: 8-2

13. For what purpose are come-alongs most often used?
- a. Lifting engines.
 - b. To apply straight line force to an object.
 - c. Separating heads from blocks.
 - d. Dragging engine blocks.

ANS: B REF: 8-4

14. Why should technicians use caution when working on vehicles equipped with diesel particulate filters (DPFs)?

- a. They operate at high temperatures and retain heat after operation.
- b. There is an explosion danger because they burn fuel.
- c. They operate at extreme pressures.
- d. Ash residue is highly toxic.

ANS: A REF: 9-2

15. What should you always do when operating, connecting or disconnecting pneumatic tools?
- a. Wear a full face shield.
 - b. Stay away from hot engines or exhaust.
 - c. Wear safety glasses.
 - d. Wear the proper type glove.

ANS: C REF: 9-4

16. On a typical shop pneumatic system what two tasks should be performed daily?
- a. Check hoses for cracks or nicks.
 - b. Test the operating pressure.
 - c. Purge all hoses and tanks.
 - d. Air tool oiling and draining accumulated water.

ANS: D REF: 10-img

17. What should be used when working on chassis electronic circuits?
- a. Spark shielded gloves.
 - b. Ground strap.
 - c. Full anti-static coveralls.
 - d. Grounding jumpers to ground.

ANS: B REF: 11-1

18. What is the maximum pressure acetylene regulator gauges should be set at?
- a. 15psi (100kPa)
 - b. 30psi (200kPa)
 - c. 100psi (700kPa)
 - d. 10psi (70kPa)

ANS: A REF: 12-2

19. Why should oxygen tank valves be fully opened when in use?
- a. To provide sufficient oxygen pressure.
 - b. To prevent inadvertently increasing oxygen after a flame is set.
 - c. It will prolong the service life of the valves.
 - d. Oxygen will leak past valve threads on a partially opened valve.

ANS: D REF: 12-3

20. What two gauges are used on pressure regulator assemblies?
- a. The high and low pressure..
 - b. Oxygen and fuel.
 - c. Cylinder pressure and working pressure.
 - d. Cylinder pressure and ambient pressure.

ANS: C REF: 12-4

21. Technician A states static discharge is usually not an issue in a shop environment because of cement floors and rubber soled foot ware. Technician B states when working on vehicle electronic circuits you should always wear a grounding strap as a precaution. Which technician is correct?
- a. Technician A only.
 - b. Technician B only.
 - c. Both A and B.
 - d. Neither A nor B.

ANS: C

REF: 10-3

22. Technician A states oxygen is a non-flammable gas that can be safely used and stored in a shop environment. Technician B states oxygen can be used as an alternative to compressed air. Which technician is correct?
- a. Technician A only.
 - b. Technician B only.
 - c. Both A and B.
 - d. Neither A nor B.

ANS: A

REF: 12-3