

19 HAULAGE AND OFF-ROAD EQUIPMENT

QUIZ 1 (20 POINTS TOTAL)

True/False (5 points)

1. When on the road, heavy-duty trucks are governed by the same driving rules and regulations that apply to other types of automotive equipment.
 - a. true
 - b. false
2. A dump truck operator is better off staying inside the cab of his or her truck than jumping clear of a vehicle that is beginning to roll or slide out of control.
 - a. true
 - b. false
3. A canopy and its support should be able to bear at least three times the weight of the machinery.
 - a. true
 - b. false
4. A good earth-ground system may be constructed by driving copper-clad steel rods at least 10 ft. into suitable soil.
 - a. true
 - b. false
5. Operators should always block up the scraper bowl before replacing the cutting edges.
 - a. true
 - b. false

Multiple Choice (6 points)

6. The design, color, and placement of signs warning about entrances for off-road vehicles should conform to standards set by _____.
 - a. the company itself
 - b. OSHA
 - c. the Federal Highway Administration
 - d. all of the above
7. Which of the following is the most dangerous movement?
 - a. turning
 - b. moving forward
 - c. backing up
 - d. lowering a bucket or blade
8. Which of the following is not acceptable practice when it comes to transporting workers?
 - a. offering handholds and footholds to workers as they get off
 - b. prohibiting horseplay in the vehicle
 - c. having workers sit on the truck bed
 - d. allowing the vehicle to move slowly while workers get on

9. Who is responsible for the safety of employees who must work near a power shovel?
 - a. the employees themselves
 - b. the on-site supervisor
 - c. the signal person
 - d. the shovel operator
10. According to OSHA regulations, crane operators must keep booms and wire ropes at least _____ away from power lines.
 - a. 8 ft
 - b. 10 ft
 - c. 14 ft
 - d. 16 ft
11. Heavy equipment maneuvering along the top of a hill needs to have a clear view of approaching traffic for a distance of about _____.
 - a. 500 ft
 - b. 750 ft
 - c. 1,000 ft
 - d. 1,500 ft

Short Answer (7 points)

12. Where is the best place to find instructions for safe and proper equipment operation?
13. How wide should curves along haul roads be to accommodate large trucks?
14. The Manual on Uniform Traffic Control Devices for Streets and Highways is also published under another name. What is it?

15. What should companies require from manufacturers as part of equipment specifications for power shovels?

16. When loading under a high rock face, how can a power shovel operator swing the shovel to have a better view and reduce the potential for injury?

17. An operator is working behind a scraper with the tailgate in the forward position. What precaution must he or she take in case someone should release the power control brake?

18. When traveling up a steep slope, how does a bulldozer operator need to position the blade of the machine?

Short Essay (2 points)

19. What are some safety procedures that dump truck operators and signalers should keep in mind when preparing to dump a load of material?

20. What safety precautions should be taken when doing clearing work with a bulldozer?

QUIZ 2 (20 POINTS TOTAL)

True/False (5 points)

1. All curves along haul roads should be banked toward the outer roadside.
 - a. true
 - b. false
2. Accidents involving heavy equipment are caused more often by unsafe practices than by the unsafe condition of equipment and roadways.
 - a. true
 - b. false
3. Drivers of heavy-duty vehicles do not need to signal before starting forward.
 - a. true
 - b. false
4. Before starting repairs on any vehicle, maintenance workers must notify the operator about the nature of the repairs.
 - a. true
 - b. false
5. Crane accidents occur frequently and are generally twice as serious as accidents involving other types of heavy equipment.
 - a. true
 - b. false

Multiple Choice (6 points)

6. If a heavy-duty vehicle is not equipped with an automatic warning device, how should drivers warn other workers that they are about to back up?
 - a. The driver should shout a warning.
 - b. The driver should signal with three horn blasts.
 - c. The driver should give the proper hand signal.
 - d. The driver should flash the truck's lights.
7. The vertical clearance between the deck and the canopy should be _____ where the operator enters or leaves the seat.
 - a. 36 in.
 - b. 45 in.
 - c. 52 in.
 - d. 65 in.
8. The wire ropes, hooks, clamps, and pulleys used on power shovels and cranes should be inspected _____.
 - a. every day
 - b. every other day
 - c. at the end of every workweek
 - d. every two weeks

9. Which of the following does not apply to boom stops?
- a. They are best suited to cranes in 5- to 60-ton range.
 - b. They cannot prevent the boom from being pulled backwards over the top of crane by the boom-hoisting mechanism.
 - c. They limit the boom from traveling beyond 80 degrees above the horizontal plane.
 - d. They should be able to disengage the master clutch.
10. When is it necessary to drive bulldozers at slow speeds?
- a. when driving in congested areas
 - b. when driving beyond the shoulder
 - c. when driving under icy conditions
 - d. all of the above
11. Which of the following has the right of way on haul roads?
- a. loaded equipment
 - b. unloaded equipment
 - c. bulldozers and cranes
 - d. the vehicle that is traveling faster

Short Answer (7 points)

12. In general, preventing accidents involving heavy equipment requires four factors. Name these factors.
13. How can companies protect their employees from dusty conditions created during dry and windy periods?
14. What is the best insurance against injury or damage when it comes to dumping procedures?

15. What determines the number of steel rods used to set up an earth-ground system and their spacing?

16. Why is it especially dangerous to undercut sand banks in the winter and spring?

17. Before coupling trailer equipment to a tractor, what does an operator need to do?

18. What factor determines how close a bulldozer can work to an excavation?

Short Essay (2 points)

19. What are five practices that are essential to preventing towing accidents?

20. When crane operators need help transporting a load, whom can they ask? Who is ultimately responsible for a lift?