

**ARTICULATING BOOM TRUCK
OPERATOR SAFETY TRAINING
WRITTEN EXAMINATION**

NAME: _____

DATE: _____

1. The size of the pad supporting the outrigger is primarily dependent upon:
 - a. Whatever material is available at the job site to use as a pad.
 - b. The type of soil.
 - c. The space available for the outrigger.
 - d. The opinion of the job site supervisor.

2. In setting up the crane at the job site, the operator needs to consider:
 - a. What pipes, voids and tanks are buried in the setup location.
 - b. Where the quickest place for set up is.
 - c. Where the boom truck can be operated without outriggers extended.
 - d. All the above are correct.

3. The soil around the foundation of a building can always be considered stable enough to set up the crane.
 - a. True
 - b. False

4. The minimum distance between the crane boom and a 50,000 volt power line is:
 - a. 5 feet
 - b. 10 feet
 - c. 15 feet
 - d. 20 feet

5. The crane operator is responsible for knowing the weight of the load before making a lift.
 - a. True
 - b. False

6. Hook safety latches are not required on the load hook.
 - a. True
 - b. False

7. When setting up the boom truck, how many outriggers need to be extended?
 - a. Only those on the side of the boom truck where the lift is being made.
 - b. If lifting a light load, none are required.
 - c. All outriggers must be extended before making any lift.
 - d. The rear outriggers are not required for most lifts.

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8. Who is authorized to be under a load at any given time?
- No one is allowed under the load.
 - Only the riggers handling the load.
 - Only job site personnel.
 - Only those with hard hats.
9. Who can give the crane operator an emergency stop signal?
- The designated signal person.
 - The site supervisor.
 - The site safety manager.
 - Anyone on site.
10. Stopping the load suddenly can:
- Cause structural damage to the crane.
 - Tip the crane over.
 - Help keep the wire rope spooled on the drum properly.
 - Answers a. and b. are correct.
11. How many signal persons should be designated to give hand signals to the operator:
- One primary and one backup
 - Only one
 - All those who are handling the load can give hand signals.
 - Doesn't matter.
12. If the boom of the crane comes into contact with a live power line, what should those on the ground do:
- Carefully walk up to the crane and help the operator off of the truck.
 - Hook onto the crane and pull it out from the power lines.
 - Keep all people away from the area surrounding the boom truck.
 - Throw a rope to the operator so he can be drug away from the truck.
13. The operator may leave the crane with a load suspended in the air.
- True
 - False
14. When can the boom truck be used to pick and carry a load:
- Only when the ground is level and firm.
 - Only when the crane is driven at 1 mph.
 - Only when the load is secured with a tag line.
 - The crane is not rated for pick and carry operations.
15. When moving the truck around the job site it is not necessary to lower the boom.
- True
 - False

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16. What is the number one cause of deaths involving cranes?
- Boom failure due to overloading.
 - Tipping the crane over
 - Electrocution
 - Being hit by a moving load.
17. The crane will always begin to tip before any structural damage can occur due to an overload.
- True
 - False
18. The appropriate load rating chart for the crane shall be:
- attached to the boom
 - in the office
 - in the vicinity of the crane
 - visible to the operator
19. The weight of the hook, hook block, and slings
- is included in the load chart ratings
 - has no effect on the crane's capacity
 - is impossible to determine
 - shall be considered part of the load
20. The load chart and handling instructions need not be posted on the job site if they are on file in the field office.
- True
 - False
21. Each day, before a crane is operated, the _____ shall inspect the crane.
- crane operator
 - rigger
 - roustabout
 - designated person in charge
22. The _____ is responsible for the safe operation of the crane.
- safety engineer
 - designated person in charge
 - crane operator
 - production foreman

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23. The crane can be shock loaded by _____.
- a. sudden starts and stops
 - b. setting a load down hard
 - c. abrupt changes in hook speed
 - d. all of the above
24. Before engaging the power take-off on the boom truck, the operator should verify that all controls are in the "off" or "neutral" position.
- a. True
 - b. False
25. As the angle of the boom from horizontal increases, the structural capacity of the crane _____.
- a. increases
 - b. remains the same
 - c. decreases
26. As the load radius increases, the structural capacity of the crane _____.
- a. remains the same
 - b. increases
 - c. decreases
27. When the angle of the boom from horizontal is decreasing, the load radius is _____.
- a. remaining constant
 - b. increasing
 - c. decreasing
28. The operator must test the hydraulics before handling a near capacity load.
- a. True
 - b. False
29. Pendulum action of the load (swing-out) due to excessive swing speeds has no negative effect on a properly setup crane.
- a. True
 - b. False
30. Operating the crane in high winds _____.
- a. reduces the strength of the boom
 - b. cushions the effects of shock loading
 - c. is allowed for lattice booms only
 - d. is allowed for box booms only.

ARTICULATING BOOM TRUCK OPERATOR SAFETY TRAINING WRITTEN EXAMINATION

31. Match up the hand signal description with the proper diagram.

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|---------------------|--------------------|
| a. Raise the load | b. Lower the load |
| c. Raise the boom | d. Lower the boom |
| e. Swing the boom | f. Extend the boom |
| g. Retract the boom | h. Stop |
| i. Emergency Stop | |

