

# CRANE ELITE

## GROVE TELESCOPIC

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## CORE REVIEW

## QUESTIONS

CRANE ELITE PREP SCHOOL  
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# Telescopic Core Review Questions

- 1) When lifting off the main boom, how is the effective weight of the fly/jib different in the erected position from that of the stowed position?
  - a) Effective weight increases.
  - b) Effective weight decreases.
  - c) Effective weight is reduced 85%.
  - d) Effective weight is reduced 75%.
- 2) Who must determine maximum speed for a mobile crane to travel with a suspended load?
  - a) The competent person.
  - b) The job site.
  - c) The superintendent.
  - d) The craft foreman.
- 3) How does the effective weight of a stowed extension relate to the actual weight of the extension?
  - a) Lower than the actual weight.
  - b) Depends on the boom angle.
  - c) Higher than the actual weight.
  - d) Same as the actual weight.
- 4) Using a telescopic mobile crane and lifting off of the jib with the main boom partially extended, you should use \_\_\_\_\_ to determine gross capacity.
  - a) Jib Length.
  - b) Boom Angle.
  - c) Radius.
  - d) Boom Length.
- 5) If not listed in the load\capacity chart or notes for a telescopic boom crane and you are in between boom lengths, you should:
  - a) Use the next longer length.
  - b) Use the next shorter length.
  - c) Use closest to the actual length.
  - d) Use the lowest shorter or longer.

- 6) Which of the following is required to be on a mobile telescopic boom crane in order to lift a personnel platform?
- a) Boom length indicator.
  - b) Radio communication.
  - c) Free fall capability.
  - d) Two operators.
- 7) When operating a rough terrain crane and extending the outrigger beams from the upper cab, you should?
- a) Boom up to 50 degrees.
  - b) Boom up to 65 degrees.
  - c) Swing over the side with a low boom.
  - d) Make visual contact with beam and jack.
- 8) When a mobile cranes telescopic boom sections are required to be extended equally and they are not, the effect could be which of the following?
- a) Damage to the longest extended section.
  - b) LMI can give false extension readings.
  - c) Damage to the shortest extended section.
  - d) Hydraulic system can be damaged.
- 9) What item listed below can be removed from a carry deck mobile crane, and continue to be operational?
- a) Fire extinguisher.
  - b) Load chart.
  - c) Jib/fly/extension.
  - d) Anti two-block device.
- 10) What is the primary reason for lifting off a boom extension mounted on a mobile telescopic boom crane?
- a) Increase load radius.
  - b) Decrease load radius.
  - c) Increase height.
  - d) Increase reach.

- 11) Traveling a rear engine mounted rough terrain mobile crane, with a suspended load you should position the load:
- a) over the rear quadrant.
  - b) over the front quadrant.
  - c) secured to the carrier.
  - d) 18 inches off ground.
- 12) A telescopic mobile crane is equipped with an anti two-block lock-out device. When the device is activated which functions will be disabled?
- a) Hoist, and raise the boom.
  - b) Lower, boom up.
  - c) Hoist, retract the boom.
  - d) Hoist, extend, and lower the boom.
- 13) What device listed below is **NOT** required on telescopic boom mobile cranes manufactured today?
- a) An outrigger position monitor.
  - b) A drum rotation device.
  - c) Swing path monitor.
  - d) An anti two-block device.
- 14) Backward stability on a rough terrain mobile crane could be a problem when configured in which situation listed below?
- a) Over the rear at a minimum radius.
  - b) Over the side at a maximum radius.
  - c) Over the rear at a maximum radius.
  - d) Over the side at a minimum radius.
- 15) A telescopic boom mobile crane is going to lift a personnel platform, what is required from the list below to be operational on the crane?
- a) Rotation resistant wire rope.
  - b) Controlled load lowering.
  - c) Wireless two way radio.
  - d) Anti two-block warning device.

- 16) Which boom configuration can cause the most hazardous boom side-loading condition?
- a) Short boom with minimum radius.
  - b) Long boom with minimum radius.
  - c) Short boom at 45° angle.
  - d) Long boom at 45° angle.
- 17) According to OSHA when is it safe to hoist loads with a mobile crane below energized power lines?
- a) If a crane is equipped with an insulating link or proximity alarm.
  - b) If the crane only raises the boom to a maximum angle of 60 degrees.
  - c) If fully extended boom can't reach the prohibited zone.
  - d) The boom is kept 10 feet away from the power line for 360 degrees.
- 18) A crane loses stability when its leverage on the load is:
- a) Less than the load's leverage on the crane.
  - b) 70% of the load's leverage on the crane.
  - c) 80% of the load's leverage on the crane.
  - d) More than the load's leverage on the crane.
- 19) What is the design factor required when using non-rotating wire rope slings and lifting personnel in a platform suspended from a mobile crane?
- a) 3.5.
  - b) 5.
  - c) 7.
  - d) 10.
- 20) When should a tag line be used, during the hoisting of material?
- a) When the rotation of the load would be dangerous.
  - b) When the rigger is not certain of the loads stability.
  - c) When only one signal person is required to signal lift.
  - d) When the lift director leaves the lifting area of the crane.
- 21) When making a lift on outriggers, the maximum ground-bearing pressure occurs in which boom position?
- a) Over the rear.
  - b) Over the corner.
  - c) Over the front.
  - d) Over the side.



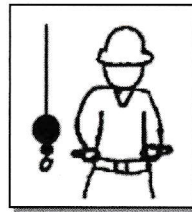
- 22) A mobile crane's jib is offset at  $15^{\circ}$  versus its original  $30^{\circ}$  offset, but the boom angle remains unchanged. In this situation, the load radius would:
- a) increase.
  - b) remains the same.
  - c) decrease.
  - d) cannot be determined.
- 23) Blocking or mats under the outrigger pads/float shall be:
- a) parallel to the outriggers.
  - b) able to sustain the load and maintain stability.
  - c) perpendicular to the outriggers.
  - d) at least three times the pad/float area.
- 24) When a telescopic boom extension is offset from the main boom, the crane's capacity normally will be:
- a) increased.
  - b) reduced.
  - c) not effected.
  - d) normal.
- 25) On mobile cranes the boom angle indicator indicates what to the operator?
- a) Radius of the boom to ground.
  - b) Angle of boom to horizontal.
  - c) Angle of boom to vertical.
  - d) Axis of tipping from centerline.
- 26) If working near power lines and using a tag line, which type of rope is least conductive to electricity?
- a) Cotton.
  - b) Nylon.
  - c) Hemp.
  - d) Polypropylene.
- 27) Which of the following regulations listed below governs the lifting of personnel with a mobile crane in construction?
- a) ASME B30.5
  - b) OSHA 1926.1431
  - c) OSHA 1910.1155
  - d) ASME B30.3

- 28) Backward stability of a mobile crane is tested in which configuration listed below?
- a) Basic boom at maximum angle with maximum load.
  - b) Maximum boom at maximum angle with maximum load.
  - c) Basic boom at minimum angle with no load.
  - d) Basic boom at maximum angle with no load.
- 29) On mobile truck cranes operating with outriggers retracted, the least stable position is when the boom is directly over the:
- a) front.
  - b) rear.
  - c) side.
  - d) corner.
- 30) When a rough-terrain crane is working on tires, backward tipping is most likely to occur when lifting which configuration?
- a) Side quadrant at a short radius.
  - b) Side quadrant at a long radius.
  - c) Rear quadrant at a long radius.
  - d) Rear quadrant at a short radius.
- 31) When traveling a rough terrain mobile crane with a suspended load, which of the following is the most important consideration?
- a) Ensuring that at least two hand-held tag lines are used.
  - b) Raising the load to avoid load contact with the crane.
  - c) Boom low as possible with the load close to the surface.
  - d) Keeping the load above the eye level for visibility.
- 32) When retracting the boom on a telescopic mobile crane, the hook block and load will move in what direction?
- a) Side.
  - b) Up.
  - c) Down.
  - d) Out.



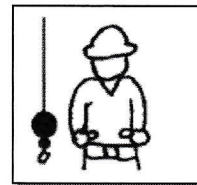
- 33) Rough terrain mobile crane capacities are generally greater over the:
- a) front.
  - b) rear.
  - c) right.
  - d) left.
- 34) Mobile truck crane capacities are generally greater over the:
- a) front.
  - b) rear.
  - c) right.
  - d) side.
- 35) Select the correct OSHA Standard Method Hand Signal that matches the illustration.

- a) Lower boom.
- b) Extend boom.
- c) Retract boom.
- d) Raise boom.



- 36) Select the correct OSHA Standard Method Hand Signal that matches the illustration.

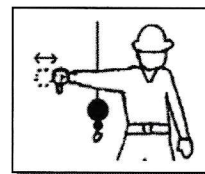
- a) Raise boom, lower load.
- b) Retract boom.
- c) Lower boom and raise load.
- d) Hoist.



- 37) Select the correct OSHA Standard Method Hand Signal that matches the illustration.

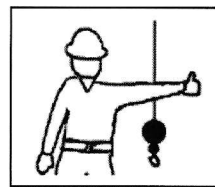
Hand

- a) Lower boom.
- b) Lower boom and raise load.
- c) Raise boom and lower load.
- d) Lower.



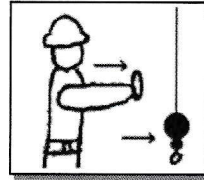
- 38) Select the correct OSHA Standard Method Hand Signal that matches the illustration.

- a) Hoist.
- b) Lower boom.
- c) Raise boom.
- d) Swing.



- 39) Select the correct OSHA Standard Method Hand Signal that matches the illustration.

- a) Trolley travel.
- b) Wheel travel.
- c) Swing.
- d) Stop.



- 40) Select the correct OSHA Standard Method Hand Signal that matches the illustration.

- a) Swing.
- b) Hoist.
- c) Move slowly.
- d) Lower.

