

Tracked Loading Shovel

A22

Technical Test – Theory

Roles and responsibilities	1. What is the definition of, or how can a hazard be described?
	A
	2. What is the purpose of a risk assessment?
	A
	3. List SIX typical subject areas that should be covered in a site induction.
	A
	4. What THREE main duties of The Health and Safety at Work Act must employees follow?
	A
	5. What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
	A
	6. a) What is the purpose of a Method Statement and b) what is required of the operator?
	A
	7. Name FOUR different types or levels of sanctions that can be applied (by employers and judicial bodies) to plant operators who do not comply with, or follow legislation and regulations.
	A
	8. Plant operators are generally regarded as 'safety-critical' workers. What does this mean?
	A

continued...

Roles and responsibilities continued	9. Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
	A
	10. In what situation does a hard hat NOT need to be worn when operating a loading shovel?
	A
	11. The operator has to use a new type of tracked loader that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
	A
	12. What are the possible outcomes if being prosecuted (by judicial bodies) for not complying with legislation and regulations?
	A
	13. Give TWO examples of where The Work at Height Regulations 1995 may apply to loading shovel operations.
	A
Preparing for work	14. How can a qualification or card benefit a plant operator?
	A
	15. Name THREE ways that a plant operator can contribute in ensuring repeat business with the client or main contractor.
	A
	16. Where should the loading shovel's Operator's Manual be kept and why?
A	
Preparing for work	17. If the operator has to top-up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.
	A
Preparing for work	18. What is the purpose of a roll or ROPS frame?
	A

continued...

Preparing for work continued	For questions 19 and 20 the Operator's Manual for the machine being used for the test MUST be available for reference by the candidate
	19. Using the Operator's Manual, state the figure for setting track tension.
	A
	20. Using the Operator's Manual, state the cold-starting procedure for the machine.
	A
	21. a) What are the functions of 'grousers' or 'cleats' as found on track pads and b) what is the result if excessively worn?
	A
	22. If checking the oil level using a dipstick, why must gloves be worn?
	A
	23. How are loading shovel bucket sizes calculated?
	A
	24. Apart from the operator, who else may need to use the machine's Operator's Manual?
	A
	25. a) What are the purposes of the track guards and b) where would it/they be located?
A	
26. Why are most tracked loading shovels rear-engined?	
A	
27. During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.	
A	

continued...

Travelling and manoeuvring	28. a) Give ONE advantage and b) TWO disadvantages of rear mounted cameras.
	A
	29. Name THREE conditions that mirrors must be in, on the machine.
	A
	30. Why must the seat belt be worn, even with the cab door closed?
	A
	31. What problems and hazards can soft ground cause to a loaded tracked shovel?
	A
	32. a) What is the minimum distance allowed near open trenches when travelling with a loaded loading shovel and b) explain why.
A	
33. Give FOUR reasons that may cause the loading shovel to tip over sideways.	
A	
Setting up for work	34. Whenever possible, who should decide the positioning of the dump truck when being loaded?
	A
	35. Name TWO types of equipment that are used to ensure that excavation levels, measurements and positions are to the required specification.
	A
	36. Give THREE possible reasons why loading shovels should not stray off the designated travel routes.
A	
37. If setting up to work near a pedestrianised area, state THREE factors that need to be taken into account.	
A	

continued...

Setting up for work continued	38. What is regarded as the most productive position for the dump truck to be in when being loaded by a loading shovel working from a stockpile?
	A
	39. Before manually changing any bucket: a) where should the bucket be positioned (in relation to the ground) before removing the final pin and b) why?
Setting up for work continued	A
	40. Give TWO reasons why the loading shovel operator should have an understanding of the type of material being loaded.
	A
Working tasks	41. When working in a confined area or space: a) what danger can be present with regards to the counterweight of the machine, b) what is the recommended minimum distance and c) what measures must be implemented if the gap is less?
	A
	42. If fitted, describe ONE application when the hand throttle can safely be used.
	A
	43. The operator is asked to tip material into a trench. State FIVE different requirements that must be considered or implemented before tipping commences.
	A
	44. Why should different materials be segregated during excavating?
	A
	45. Who should determine the maximum load that should be placed into the body of the dump truck?
	A
46. What factors determine the shoring requirements of a trench?	
A	
47. If a load has to be tipped on a slope, what may happen if the load is tipped downhill and why?	
A	

continued...

Working tasks continued	48. When working in a confined area or space, name THREE hazards that can occur.
	A
	49. a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when tipping loads and b) explain why a distance should be kept.
	A
	50. State TWO requirements of using a stop block or earth bank (berm) at a trench discharging point.
	A
	51. When constructing a ramp to load a crusher, name THREE considerations to take into account.
	A
	52. Give TWO reasons why, wherever possible, operators should excavate ground in layers.
	A
	53. Why is it poor practice to reverse the loader at high speed?
	A
	54. a) What effect on loader operations does making too deep a cut have when filling the bucket and b) what <i>effect</i> does making too shallow a cut have?
	A
55. When backfilling trenches by pushing spoil toward the trench, why should the bucket start to be emptied / raised before reaching the trench?	
A	
56. Tracked loading shovels are normally equipped with a clamshell bucket. Name FOUR functions of this type of bucket.	
A	
Completing work	57. Describe TWO actions to be taken for an open trench at the end of a working day.
	A
	58. Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
A	

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Shutdown	59. How can tracks be prevented from becoming frozen to the ground during cold weather?
	A
	60. Many loading shovels have a turbo-charged engine. A) What is the normal procedure before switching off the engine after working and b) what happens if the procedure is not followed?
	A
	61. The operator has been asked to drive the machine onto a transporter/trailer. A) Who is responsible for the loading operations and b) state FOUR actions to be considered by the operator before loading commences.
	A
	62. If the operator has loaded the machine onto a transporter/trailer on behalf of a driver, what checks must be carried out before they leave the cab?
	A
63. Why should a loading shovel be re-fuelled at the end of the day?	
A	