

# Technical Test Theory

## Tracked Loading Shovel A22



No.	Question
1	Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
2	a) What are the functions of 'grousers' or 'cleats' as found on track pads and b) what is the result if they are excessively worn?
3	a) What are the purposes of the track guards and b) where would it/they be located?
4	a) What determines the minimum distances that any part of plant and machinery has to be kept from over head electricity lines and b) explain why a distance should be kept.
5	If setting up to work near a pedestrianised area, state THREE factors that need to be taken into account.
6	a) What is the purpose of a Method Statement and b) what is required of the operator?
7	Name THREE conditions that mirrors on the machine must be in.
8	Tracked loading shovels are normally equipped with a clamshell bucket. Name FOUR functions of this type of bucket.
9	If fitted, describe ONE application when the hand throttle can safely be used.
10	In what situation does a hard hat NOT need to be worn when operating a loading shovel?
11	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?
12	Why are plant operators generally regarded as 'safety-critical' workers?

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13	When working in a confined area or space, name THREE hazards that can occur.
14	If the operator has to top-up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.
15	If a load has to be tipped on a slope, what may happen if the load is tipped downhill and why?
16	What is the purpose of a risk assessment?
17	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?
18	How are loading shovel bucket sizes calculated?
19	If checking the oil level using a dipstick, why must gloves be worn?
20	Using the Operator's Manual, state the figure for setting track tension. Note: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
21	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?
22	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?
23	Name THREE ways that a plant operator can contribute in ensuring repeat business with the client or principal contractor.
24	Before manually changing any bucket: a) Where should the bucket be positioned (in relation to the ground) before removing the final pin and b) explain why?

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25	Give TWO reasons why the loading shovel operator should have an understanding of the type of material being loaded.
26	Apart from the operator, who else may need to use the machine's Operator's Manual?
27	During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
28	Using the Operator's Manual, state the cold-starting procedure for the machine. Note: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
29	State TWO requirements of using a stop block or earth bank (berm) at a trench discharging point.
30	What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
31	Why should a loading shovel be re-fuelled at the end of the day?
32	a) Give ONE advantage and b) TWO disadvantages of rear-mounted cameras.
33	Where should the loading shovel's Operator's Manual be kept and why?

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34	Give TWO examples of where The Work at Height Regulations 1995 may apply to loading shovel operations.
35	Describe TWO actions to be taken for an open trench at the end of a working day.
36	When backfilling trenches by pushing spoil toward the trench, why should the bucket start to be emptied/raised before reaching the trench?
37	List SIX typical subject areas that should be covered in a site induction.
38	What is the purpose of a roll over ROPS frame?
39	What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
40	Whenever possible, who should decide the positioning of the dump truck when being loaded?
41	What is the definition of, or how can a hazard be described?
42	Why is it poor practice to reverse the loader at high speed?
43	Who should determine the maximum load that should be placed into the body of the dump truck?
44	Why are most tracked loading shovels rear-engined?
45	Why should different materials be segregated during excavating?

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46	How can tracks be prevented from becoming frozen to the ground during cold weather?
47	Give THREE possible reasons why loading shovels should not stray off the designated travel routes.
48	What factors determine the shoring requirements of a trench?
49	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?
50	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?
51	How can a qualification or card benefit a plant operator?
52	a) What is the minimum distance allowed near open trenches when travelling with a loaded loading shovel and b) explain why?
53	What THREE main duties of The Health and Safety at Work Act must employees follow?
54	Why must the seat belt be worn, even with the cab door closed?
55	Give TWO reasons why, wherever possible, operators should excavate the ground in layers.
56	Give FOUR reasons that may cause the loading shovel to tip over sideways.
57	What problems and hazards can soft ground cause to a loaded tracked shovel?

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58	Name TWO types of equipment used to ensure that excavation levels, measurements and positions are to the required specification.
59	Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
60	When constructing a ramp to load a crusher, name THREE considerations to take into account.
61	Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.
62	a) What effect on loader operations does making too deep a cut have when filling the bucket and b) what effect does making too shallow a cut have?
63	The operator is asked to tip material into a trench. State FOUR different requirements that must be considered or implemented before tipping commences.