

# Crawler-Tractor/Dozer

**A34**

Technical Test – Theory

Roles and responsibilities	1. What is the definition of, or how can a hazard be described?
	<b>A</b>
	2. What is the purpose of a risk assessment?
	<b>A</b>
	3. List SIX typical subject areas that should be covered in a site induction.
	<b>A</b>
	4. What THREE main duties of the Health and Safety at Work Act must employees follow?
	<b>A</b>
	5. What does the Health and Safety at Work Act require employers to do with regards specifically to plant?
	<b>A</b>
	6. a) What is the purpose of a Method Statement and b) what is required of the operator?
	<b>A</b>
	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.
	<b>A</b>
	8. Plant operators are generally regarded as 'safety-critical' workers. What does this mean?
	<b>A</b>

*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 crawler-tractor/dozer?
	A
	11. The operator has to use a new dozer 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. How can a qualification or card benefit a plant operator?
	A
Preparing for work	14. Name THREE ways that a plant operator can contribute in ensuring repeat business with the client or main contractor.
	A
	15. Where should the dozer's Operator's Manual be kept and why?
	A
	16. If the operator has to top-up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.
	A
	<b>For questions 17 and 18 the Operator's Manual for the machine being used for the test MUST be available for reference by the candidate</b>
17. Using the Operator's Manual, state the figure for setting track tension.	
A	
18. Using the Operator's Manual, state the cold-starting procedure for the machine.	
A	

*continued...*

Preparing for work continued	19. a) What is the purpose of the track guard or guards and b) where would it/they be located?
	<b>A</b>
	20. What is the purpose of a roll or ROPS frame?
	<b>A</b>
	21. If checking the oil level using a dipstick, why must gloves be worn?
	<b>A</b>
	22. List FIVE checks that should be made to the tracks and running gear.
	<b>A</b>
	23. a) How do low ground pressure units differ from standard type dozers and b) where would they be used?
	<b>A</b>
	24. Apart from the operator, who else may need to use the machine's Operator's Manual?
	<b>A</b>
	25. a) What is the function of 'Grousers' or 'Cleats' as found on track pads and b) what is the result if excessively worn?
	<b>A</b>
	26. During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
<b>A</b>	
27. How does a PAT blade work?	
<b>A</b>	
28. What is the difference between a tilting blade and an angle blade?	
<b>A</b>	
Travelling and manoeuvring	29. What action does 'counter-rotation' of the tracks produce?
	<b>A</b>
	30. Why do dozers have an undercarriage suspension system?
<b>A</b>	

*continued...*

Travelling and manoeuvring	31. Why must the seat belt be worn, even with the cab door closed?
	<b>A</b>
Setting up for work	32. Name TWO types of equipment used to ensure that excavation levels, measurements and positions are to the required specification.
	<b>A</b>
	33. Before removing a blade: a) how should the blade be positioned (in relation to the ground) before removing the final pin and b) why?
	<b>A</b>
	34. Cable avoidance tools (CATs) can detect a variety of buried services. What type of material do they have limitations in locating?
	<b>A</b>
	35. a) What is meant by blade capacity and b) how is it determined?
	<b>A</b>
	36. If setting up to excavate a slot in a confined area, name TWO things that should be taken into account before starting.
	<b>A</b>
	37. What particular and specific hazards can affect the stability of the machine when working on old industrial (Brownfield) sites?
<b>A</b>	
38. If setting up to work next to a pedestrianised area, state THREE factors that need to be taken into account.	
<b>A</b>	
39. The operator is asked to cut a new trench. State FIVE different requirements that must be considered or implemented before work commences.	
<b>A</b>	

*continued...*

Setting up for work continued	40. What THREE things should be checked out before carrying out embankment work?
	<b>A</b>
	41. What problem may occur if the wearing plates on the blade are at the maximum wear limit?
	<b>A</b>
	42. a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when setting up the machine and b) explain why a distance should be kept.
	<b>A</b>
Working tasks	43. If a trench has a depth of 2.0 metres: a) what is the minimum distance to maintain from the edge of the trench when travelling and b) explain why.
	<b>A</b>
	44. Why should different soils be segregated during excavating?
	<b>A</b>
	45. When working on a diagonal side hill cut, how should the blade be angled?
	<b>A</b>
	46. Why is it poor practice to reverse the dozer at high speed?
	<b>A</b>
	47. Why is 'back-blading' (using the back of the blade to drag material) not considered good practice?
	<b>A</b>
48. Give TWO reasons why the operator should have an understanding of the type of material being dozed.	
<b>A</b>	
49. What hazards might arise whilst filling in an excavation with soil?	
<b>A</b>	
50. If fitted, what function can the float on the blade allow?	
<b>A</b>	

*continued...*

Working tasks continued	51. Give TWO reasons why, wherever possible, operators should excavate ground in layers.
	<b>A</b>
	52. If a yellow coloured marker tape is unearthed during excavating, which two types of services could this indicate?
	<b>A</b>
	53. What is the nearest distance allowed to gas pipes when excavating with the machine?
	<b>A</b>
	54. a) What effect on dozer operations does making too deep a cut have and b) what effect does making too shallow a cut have?
	<b>A</b>
	55. Wherever possible, why should the dozer be aligned before making the next pass or cut?
	<b>A</b>
Shutdown	56. When backfilling trenches, why should the blade be feathered before reaching the trench?
	<b>A</b>
	57. Describe TWO actions to be taken for an open trench at the end of a working day.
	<b>A</b>
	58. Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
<b>A</b>	
Shutdown	59. When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
	<b>A</b>
Shutdown	60. How can tracks be prevented from becoming frozen to the ground during cold weather?
	<b>A</b>

Shutdown continued	61. Many dozers 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?
	<b>A</b>
	62. 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.
	<b>A</b>
	63. 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?
	<b>A</b>
64. Why should a dozer be re-fuelled at the end of the day?	
<b>A</b>	