

Dragline

A05

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, Safety and Welfare 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 dragline?
	A
	11. The operator has to use a new type of dragline 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 may apply to dragline 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 dragline's Operator's Manual be kept and why?
A	
	17. If the operator has to top-up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.
	A

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Preparing for work continued	For questions 18 and 19 the Operator's Manual for the machine being used for the test MUST be available for reference by the candidate
	18. Using the Operator's Manual, state the figure for setting track tension.
	A
	19. Using the Operator's Manual, state the cold-starting procedure for the machine.
	A
	20. A dragline has been delivered to site, assembled and configured for lifting. What must be carried out before lifting starts and by whom?
	A
	21. Which parts of the dragline is the radius measured from?
	A
	22. a) How does the number of lines or falls of rope affect the lifting capacity for the dragline and b) how is hoist speed affected when the number of lines (or falls of rope) is reduced?
	A
	23. What function does a fairlead carry out?
	A
	24. What is the purpose of a roll or ROPS frame?
	A
25. If checking the oil level using a dipstick, why must gloves be worn?	
A	
26. Apart from the operator, who else may need to use the machine's Operator's Manual?	
A	
27. What is the purpose of the counterweight of the machine?	
A	

continued...

Preparing for work continued	28. During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
	A
Travelling and manoeuvring	29. If both travel levers are pushed forwards when the track motors are in front of the cab, in which direction would the machine move?
	A
	30. If the machine has to cross the public highway, including adjacent pavements and verges, the Road Traffic Act applies. a) What type of licence and which classes should the operator hold and b) what is the minimum age allowed?
	A
	31. When MUST a banksman/signaller be used before moving a dragline?
	A
Setting up for work	32. Why must the seat belt be worn, even with the cab door closed?
	A
	33. What information does the ‘dig-envelope’ (also known as ‘working range’) chart give? (Candidates may be shown a copy of a chart)
	A
	34. If setting up to start new workings in a confined area, name TWO things that should be taken into account.
	A
	35. 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
	36. Give TWO reasons why the operator should have an understanding of the type of spoil being excavated.
	A

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Setting up for work continued	37. How is the bucket adjusted for hard or soft digging?
	A
	38. 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
	39. 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.
	A
Working tasks	40. Give FOUR reasons that may cause the machine to tip over – forwards and/or sideways.
	A
	41. Why should different soils be segregated during excavating?
	A
	42. Give THREE reasons why an oversize bucket should not be used when excavating.
	A
	43. a) Why should the slewing direction be to the left wherever possible and b) explain why.
	A
	44. Why must dragline operators not begin to load vehicles until the vehicle driver is in a safe place?
	A
45. Who should determine the maximum load that should be placed into the body of the dump truck?	
A	
46. When would the free fall function be used?	
A	

continued...

Working tasks continued	47. Give TWO reasons why, wherever possible, operators should excavate ground in layers.
	A
	48. What is the meaning of this hand signal (being demonstrated by the tester)?
	A
	49. Explain a possible danger if the dragline is lifting a load on sloping ground, even though the load chart indicates that the machine can lift that load?
	A
	50. If a load is slewed rather quickly, what TWO initial effects does it have on the load whilst slewing?
A	
Completing work	51. When slewing with a load, where should the operator be looking?
	A
	52. Describe TWO actions to be taken for an open excavation at the end of a working day.
A	
Completing work	53. Many draglines 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
	54. Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
A	
Shutdown	55. When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
	A
	56. 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	

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Shutdown continued	57. 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
	58. Why should a dragline be re-fuelled at the end of the day?
	A