

Concrete Pump

A44

Trailer Mounted

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. Concrete pump 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. If required, in what situation does a hard hat NOT need to be worn when operating a concrete pump?
	A
	11. The operator has to use a new type of pump 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 for not complying with legislation and regulations?
	A
Preparing for work	13. How can a qualification or card benefit a concrete pump operator?
	A
	14. Name THREE ways that a concrete pump operator can contribute in ensuring repeat business with the client or main contractor.
	A
	15. Where should the User's Manual be kept and why?
	A
	16. What are the THREE actions or stages that a concrete pump operator undertakes during pre-use inspections?
	A
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	
17. Using the Operator's Manual, state the tyres' operating pressure.	
A	
18. Using the Operator's Manual, state the cold starting procedure for the pump.	
A	
19. If checking the oil level using a dipstick, why must gloves be worn?	
A	

continued...

Preparing for work continued	20. Apart from the operator, who else may need to use the machine's User's Manual?
	A
	21. What is the purpose of stabilisers on the concrete pump?
	A
	22. What is the purpose of the blanking piece?
	A
	23. What are the main component parts of a concrete mix?
	A
	24. What is the difference between: a) a placement hose and b) a delivery hose?
	A
	25. What piece of information would a client need from pump hirer/owner before a hire?
	A
	26. What is the function, if fitted, of the mixer paddles?
	A
27. On a piston type pump, what is the purpose of the water bow?	
A	
28. Why must the thickness of steel pipelines be checked on a regular basis?	
A	
29. During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.	
A	
Setting up for work	30. a) Which part of the concrete pump applies loading or pressure to the ground and b) how can that pressure be reduced?
	A
	31. If setting up to pump concrete in a pedestrianised area, state THREE factors that need to be taken into account.
A	

continued...

Setting up for work continued	32. What is the purpose of pumping grout through the pipeline?
	A
	33. When setting up to work, what should be taken into account for the mixer vehicles?
	A
	34. If pipelines have to be connected to scaffolding, what TWO items must be ensured?
	A
	35. On what basis are pipelines and couplers selected?
	A.
	36. Name THREE possible underground hazards that may affect the stability of the trailer when in operation.
	A
	37. If the pump has to be lifted into the required position, name SIX factors to be taken into account prior to the lift taking place.
	A
	38. What checks should be made to the couplers?
	A
39. What checks should be made to the transmitter of a remote-controlled pump before work?	
A	
40. Before the start for work: a) how should signallers be identified and b) what should be agreed between the pump operator and a signaller?	
A	
41. Before towing a trailer mounted pump into position, name SIX factors to be taken into account.	
A	

continued...

Setting up for work continued	42. What can occur if the placement hose is longer than specified?
	A
Working tasks	43. a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden pylons when setting up the machine and b) explain why a distance should be kept.
	A
	44. If radios are to be used during the lifting operations, what FIVE actions and checks must be made by the concrete pump operator before use?
	A
	45. During the pumping operation, part of the task cannot be carried out as detailed in the method statement. a) What initially must happen to the operation and b) who authorises any changes?
	A
	46. Describe at least THREE causes of blockages that may occur within the pipeline.
	A
	47. During pumping, if the operator (using a remote control) needs to leave the pump, what TWO things need to be ensured?
	A
48. When working in a confined area or space, name THREE dangers that can be present.	
A	
49. a) What is considered as the danger zone around the placement hose and b) what is regarded as the safe minimum?	
A	
50. If the words STOP NOW are given to the concrete pump operator by radio during the lift, what action must the operator take?	
A	

continued...

Working tasks continued	51. If a blockage occurs, what actions must be taken by the operator?
	A
Working tasks continued	52. What is the meaning of this hand signal (being demonstrated by the Tester)?
	A
Completing work	53. a) What additional items (over and above standard site wear) of PPE are required when cleaning out concrete pumps and b) explain why?
	A
Completing work	54. Before leaving the pump for a rest break, after switching off the pump, what final action must be carried out?
	A
Shutdown	55. Name THREE places where the trailer should NOT be parked after completion of the pumping operation.
	A
	56. When is it acceptable to use compressed air to clean out pipelines?
	A
	57. Before cleaning a pipeline with compressed air, what must be removed from the line itself?
	A
	58. What is the maximum allowable air pressure to clean out the pipes?
A	
Shutdown	59. Where must waste from the cleaning process be deposited?
	A