

Technical Test Theory

Piling Rig - Driven below 20 tonnes A45



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 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.
3	What THREE main duties of The Health and Safety at Work Act must employees follow?
4	What is a 'driven cast in-situ' pile?
5	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.
6	During the piling operation, part of the task cannot be carried out as detailed in the method statement: a) What initially must happen to the piling operation and b) who authorises any changes?
7	When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
8	If setting up to pile near a pedestrian footpath, state THREE precautions that could be adopted.
9	List SIX typical subject areas that should be covered in a site induction.
10	Using the Operator's Manual, state the figure for setting the track tension. Note: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
11	Give TWO examples of where The Work at Height Regulations may apply to piling rig operations.
12	Give THREE reasons that may cause the rig to overturn.

Technical Test Theory

Piling Rig - Driven below 20 tonnes A45



No.	Question
13	Name THREE different types of driven hammers.
14	Why are rig operators generally regarded as 'safety-critical' workers?
15	A piling rig has been delivered to site, assembled and configured for work. What must be carried out before piling starts and by whom?
16	If checking the oil level using a dipstick, why must gloves be worn?
17	What is meant by the term 'raking angle'?
18	How can a qualification or card benefit a rig operator?
19	What is meant by 'toeing in' when referring to the piling activity?
20	Why should a rig be re-fuelled at the end of the day?
21	a) What is the purpose of a Method Statement and b) what is required of the operator?
22	What is meant by 'splicing'?
23	Where would you find the dolly on a percussive driven hammer?
24	a) What is the minimum distance allowed near an open excavation when travelling the rig and b) explain why?

Technical Test Theory

Piling Rig - Driven below 20 tonnes A45



No.	Question
25	In what situation does a hard hat NOT need to be worn when operating a piling rig?
26	In driven piling, what is meant by the 'drop height'?
27	What does 'backdriving' mean?
28	What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
29	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.
30	When towing a power pack why should you never position yourself between the rig and the power pack?
31	What is the purpose of a roll or ROPS frame?
32	During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
33	Apart from the operator, who else may need to use the machine's Operator's Manual?
34	Name THREE different types of driven pile.
35	List FIVE checks that should be made to the tracks and running gear.
36	a) What is meant by the lifting capacity of the rig and b) who determines it?

Technical Test Theory

Piling Rig - Driven below 20 tonnes A45



AN NOCN JOB CARD

No.	Question
37	When working in cellars or confined spaces: a) explain THREE precautions you must take to avoid a build up of fumes and b) why this is important?
38	The operator has to use a new model of rig that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
39	If both travel levers are pushed forwards when the track motors are in front of the cab, in which direction would the machine move?
40	When MUST a banksman or signaller be used before moving a rig?
41	What are the THREE actions or stages that a rig operator undertakes during pre-use inspections?
42	What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
43	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?
44	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?
45	What is meant by the term 'refusal'?
46	Where should the Operator's Manual be kept and why?
47	Wind speeds can be variable throughout the working day. What action must be taken to ensure safe working conditions are maintained?
48	How can the noise level of the hammering operation be reduced on: a) pre-cast types and b) cast in-situ types?

Technical Test Theory

Piling Rig - Driven below 20 tonnes A45



No.	Question
49	Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
50	Why are driven piles generally used on contaminated sites?
51	What is the purpose of a risk assessment?
52	a) Which part of the rig applies loading or pressure to the ground and b) what needs to be in place to cope with the pressure.
53	What checks and procedures need to be made before a 'permit to dig' can be issued?
54	If the rig has to cross the public highway between two parts of a site, the Road Traffic Act applies. a) What type of licence and which class should the operator hold and b) what is the minimum age allowed?
55	What is the purpose of a cofferdam?
56	What are pre-cast piles most suitable for?
57	What is the function of the shoe (end-cap) as used in cast in-situ piling?
58	If the words STOP NOW are given to the rig operator by radio during the lift, what action must the operator take?
59	Name THREE ways that a rig operator can contribute in ensuring repeat business with the client or principal contractor.
60	What is the purpose of counterweight(s) on the rig?

Technical Test Theory

Piling Rig - Driven below 20 tonnes A45



No.	Question
61	What is the definition of, or how can a hazard be described?
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?