

# Technical Test Theory

## Trencher A37



No.	Question
1	Before manually changing the chain: a) where or how should the frame be positioned (in relation to the ground) and b) explain why?
2	How can a qualification or card benefit a plant operator?
3	If the operator has to top-up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.
4	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?
5	a) What is the purpose of a Method Statement and b) what is required of the operator?
6	If an object becomes jammed in the chain, what procedures would be used?
7	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 machine?
8	Why must the seat belt be worn, even though a ROPS frame or cab is fitted?
9	In what situation does a hard hat NOT need to be worn when operating a trencher?
10	What THREE main duties of the Health and Safety at Work Act must employees follow?
11	What would be the procedure to start the cut on a tarmac surface road?
12	What TWO ways are there of keeping the cut vertical on uneven ground on a tracked trencher?

No.	Question
13	If a yellow-coloured marker tape is unearthed during excavating, which TWO types of services could this indicate?
14	Where should the trencher's Operator's Manual be kept and why?
15	Describe TWO actions to be taken for an open trench at the end of a working day.
16	Why are plant operators generally regarded as 'safety-critical' workers?
17	What may happen if the digging chain tension is too tight?
18	What sort of spoil can be extracted if there is one tooth for every second chain segment on the digging chain?
19	What is the purpose of a roll or ROPS frame?
20	What is the nearest distance allowed to gas pipes when excavating with the machine?
21	Name: a) TWO advantages of using a wheeled-chassis trencher and b) TWO advantages of using a tracked-chassis trencher.
22	What is the meaning of this hand signal (being demonstrated by the Tester)?
23	What problems and hazards can soft ground cause to a trencher?
24	Apart from the operator, who else may need to use the machine's Operator's Manual?

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25	Why do most trenchers use hydrostatic transmission drive?
26	How is the spoil prevented from falling back into the trench?
27	Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
28	List SIX typical subject areas that should be covered in a site induction.
29	If setting up to work near a pedestrianised area, state THREE factors that need to be taken into account.
30	What is the purpose of the 'creep speed' transmission?
31	What does the Health and Safety at Work Act require employers to do with regards specifically to plant?
32	Give TWO instances of using the off-set position of the trenching unit.
33	Name FIVE possible underground services that may be encountered prior to excavating.

No.	Question
34	Give TWO reasons why the operator should have an understanding of the type of spoil being excavated.
35	What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
36	Using the Operator's Manual, state the figure for setting the digging chain tension. Note: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
37	If checking the oil level using a dipstick, why must gloves be worn?
38	When cutting concrete, name ONE danger to the operator and others in the working area.
39	What particular and specific hazards can affect the stability of the machine when working on old industrial (brownfield) sites?
40	Name TWO types of equipment used to ensure that excavation levels, measurements and positions are to the required specification.
41	Cable avoidance tools (CATs) can detect a variety of buried services. What type of material do they have limitations in locating?
42	Name the main parts of the trenching unit.
43	If the teeth become blunt, what effect does it have on trenching operations?
44	If setting up to excavate in a confined area, name TWO things that should be taken into account before starting.
45	What is the purpose of the crumber?

No.	Question
46	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.
47	If fitted, what is the purpose of the flywheel on the digging chain?
48	Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
49	During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
50	The operator has to use a new type trencher that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
51	What is the definition of, or how can a hazard be described?
52	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.
53	When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
54	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.
55	If allowed, what is the effective way to create a cut during a turn?
56	Why should a trencher be re-fuelled at the end of the day?
57	What is the purpose of a risk assessment?

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58	Why do sticky or wet materials normally require a higher chain-wheel speed?
59	The operator is asked to excavate a new trench. State FIVE different requirements that must be considered or implemented before work commences.
60	If a trencher is being travelled or working on 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?
61	Name THREE ways that a plant operator can contribute in ensuring repeat business with the client or principal contractor.