

No.	Question
1	If a load of 40 tonnes is lifted on four falls or lines of rope, what is the tension in each fall or line?
2	What makes up the total (or gross) weight of a load that is to be lifted?
3	When working in a confined area or space: a) what danger can be present with regards to the counterweight of the machine, b) when should measures be taken and c) what measures should be implemented?
4	If a load is being slewed too fast for its size, what TWO factors must the operator and signaller take into account?
5	Wind speeds can be variable throughout the working day. What action must be taken to ensure safe working conditions are maintained?
6	Apart from the operator, who else may need to use the machine's Operator's Manual?
7	When would a fly jib or lattice extension be fitted and used?
8	Why are crane operators generally regarded as 'safety-critical' workers?
9	Give FOUR reasons that may cause the crane to overturn.
10	Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
11	a) What is meant by the lifting capacity of the crane and b) who determines it?
12	Name TWO ways that wet weather can affect lifting operations.

No.	Question
13	Using the lifting capacity diagram for A60: a) what is the maximum lifting capacity, b) what boom extension is required for a load weighing 7.6 tonnes needed to be placed at 15 metres radius and c) what counterweight is required?
14	The number of falls has been changed on the hook block. How has this action affected the RCI?
15	What is the definition of, or how can a hazard be described?
16	During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
17	In what situation does a hard hat NOT need to be worn when operating a mobile crane?
18	Only two legs of an 8 tonne four-legged chain sling are being used. What is the maximum load that can be lifted?
19	What are the THREE actions or stages that a crane operator undertakes during pre-use inspections?
20	On a busy construction site, how would the slinger/signaller be identified to the crane operator?
21	Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
22	a) What is the minimum distance allowed near open trenches when travelling the crane and b) explain why?
23	If radios are to be used during the lifting operations, what FIVE actions and checks must be made by the crane operator before use?
24	If the words STOP NOW are given to the crane operator by radio during the lift, what action must the operator take?

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25	The safe working load or working load limit (SWL/WLL) of a multi-leg chain sling only applies in what TWO conditions or configuration?
26	If the hook block inadvertently (accidentally) lands, what course of action should be taken?
27	What effect can a swinging load have on a crane?
28	a) How does the number of lines or falls of rope affect the lifting capacity for the crane and b) how is hoist speed affected when the number of lines (or falls of rope) is reduced?
29	Why must the seat belt be worn, even with the cab door closed?
30	Why should a crane be re-fuelled at the end of the day?
31	List SIX typical subject areas that should be covered in a site induction.
32	What THREE main duties of The Health and Safety at Work Act must employees follow?
33	As a lifting machine, the crane must be thoroughly examined. a) What is the purpose of the examination and b) who would carry out the examination?
34	Give TWO examples of where The Work at Height Regulations may apply to mobile crane operations.
35	Name THREE ways in which wind speed can affect the lifting operation.
36	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.

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37	If a load is slewed rather quickly, what TWO initial effects does it have on the load whilst slewing?
38	What is meant by the footprint of the crane?
39	What is the main purpose of the Rated Capacity Indicator (RCI)?
40	When slewing with a load, where should the operator be looking?
41	State the functions or job role of the following personnel: a) appointed person, b) crane supervisor, c) slinger,
42	a) Which part of the crane applies loading or pressure to the ground and b) name TWO ways that pressure can be reduced.
43	If asked to travel with a suspended load, name FIVE factors that must be taken into account by the operator before moving.
44	How can a qualification or card benefit a crane operator?
45	As the crane rotates through 360 degrees with a load, what happens to the loading on each outrigger or wheel?
46	What is the purpose of counterweight(s) on the crane?
47	a) Who only can authorise partial outrigger extensions and b) what is the effect on lifting capacity by partially extending the outriggers?
48	What is the purpose of a roll or ROPS frame?

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49	How does the deflection of the boom or jib affect the lift?
50	Name TWO things that happen if the hoist rope is not vertical when lifting a load.
51	Two cranes are working in the same vicinity that encroach the operating radius of each. What actions would the lift plan or method statement normally specify?
52	What is the difference between a contract lift and a 'standard' crane hire?
53	When must a banksman or signaller be used before moving a crane?
54	Crane operations fall within the scope of the Lifting Operations and Lifting Equipment Regulations (LOLER) 1998. Name TWO requirements of the regulations with regards to lifting.
55	If setting up to lift loads in a pedestrianised area, state THREE factors that need to be taken into account.
56	Which parts of the crane is the radius (for lifting) measured from?
57	An operator has been asked to pick and carry a load down a small section of the public highway, for which The Road Traffic Act applies. What effect does this have on crane operations?
58	When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
59	Using the Operator's Manual, state the figure for the tyre pressures. Note: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
60	What is the meaning of this hand signal (being demonstrated by the Tester)?

No.	Question
61	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.
62	What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
63	If the crane has to travel on the public highway, 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?
64	What is the purpose of a risk assessment?
65	The operator has to use a new model of mobile crane that they are unfamiliar with. What do Regulations (i.e. LOLER 98) and other guidance require the operator to have?
66	Using the Operator's Manual, state the cold-starting procedure for the crane (can be the drive engine or auxiliary engine). Note: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
67	If checking the oil level using a dipstick, why must gloves be worn?
68	a) What is the purpose of a Method Statement and b) what is required of the operator?
69	What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
70	What is the purpose of the hoisting limit switch (also known as the 'chandelier')?
71	Where should the Operator's Manual be kept and why?

Technical Test Theory

Mobile Crane A60



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72	During the lifting operation, part of the task cannot be carried out as detailed in the lift plan. a) What initially must happen to the lifting operation and b) who authorises any changes?
73	Name THREE ways that a crane operator can contribute in ensuring repeat business with the client or principal contractor.