

No.	Question	Answers	Max. Mark
1	a) When and b) why are axle or suspension locks fitted to most mobile cranes?		2
2	List SIX typical subject areas that should be covered in a site induction.		3
3	Why must a crane driver never try and 'drag' a load?		2
4	What are the THREE actions or stages that a crane operator undertakes during pre-use inspections?		2
5	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?		2
6	a) On a tower crane, where must the load radius diagram be located and b) what information must it contain?		2
7	Who is responsible for providing the contractor with written details of the work to be done?		1
8	Who has overall control of the lifting operation?		1
9	To whom should the appointed person give all details involving the lifting operation?		1
10	If setting up to lift loads near a pedestrianised area, what main factor needs to be taken into account?		2
11	State the safe procedure to be followed before lifting or lowering a load down a shaft or excavation.		2

12	Name TWO duties of the crane operator.		2
13	In which applications are single-leg slings rated with their SWL (WLL)?		1
14	State SIX environmental factors that can affect an external lifting operation.		6
15	Name FOUR items that must be recorded when a thorough examination on a lifting appliance has been carried out.		4
16	How can a qualification or card benefit a crane supervisor?		1
17	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?		3
18	A tower crane has been delivered to site, assembled and configured for lifting. What must be carried out before lifting starts and by whom?		2
19	Define the term 'radius'.		1
20	Name THREE ways that a crane supervisor can contribute in ensuring repeat business with the client or principal contractor.		3
21	If a crane is out of level, what effect will it have on the radius?		2
22	a) What determines the minimum distances that any part of plant and machinery has to be kept from overhead electricity lines and b) explain why a distance should be kept.		4
23	Give TWO methods of obtaining the centre of gravity on an unbalanced load.		2
24	To lift a load of 12 tonnes on a two-point lift using single-leg slings, what is the required SWL (WLL) for each sling with an included angle of 87 degrees? Please explain your calculation.		4
25	Name TWO possible penalties for not following legal requirements when using a crane.		4

26	What are the types of warning that an RCI will indicate?		2
27	If radios are to be used during the lifting operations, what FIVE actions and checks must be made before use?		5
28	The operator has to use a new model of crane that they are unfamiliar with. What do Regulations (i.e. LOLER 98) and other guidance require the operator to have?		3
29	How long is a thorough examination for a lifting accessory valid for?		1
30	Give THREE examples of how excessive rain can affect an external lifting operation when using a mobile crane.		3
31	What is the definition of, or how can a hazard be described?		3
32	What advantage is there in increasing the number of falls on a hook block?		1
33	State why there must be a safe system of work.		2
34	Describe how to calculate the area of support beneath a crane outrigger, which gives maximum possible safeguards against ground subsidence.		4
35	Name THREE ways in which an operator can minimise their impact upon the environment whilst using a crane.		3
36	Explain the difference between an employing and user organisation.		2
37	Identify FOUR requirements for ensuring the stability of mobile cranes on site.		4
38	If a heavy load is being slewed at too a high speed over at least 180 degrees, what TWO factors must the operator and signaller take into account?		4
39	Name FIVE requirements that must be followed if accessing the end of the jib for maintenance purposes.		5
40	Name THREE factors that determine the safe working load of the crane.		3

41	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.		4
42	What is the maximum angle that a bow shackle used as a pair on a crane hook can be used at?		1
43	What is the meaning of this hand signal (being demonstrated by the Tester)?		1
44	If a mobile crane on blocked duties is slewing through 180 degrees and is unladen, what can cause a change of ground loading in each stabiliser.		2
45	Where should the crane's Operator's Manual be kept and why?		2
46	Which part of BS 7121 is specific to mobile cranes?		1
47	a) What is meant by the lifting capacity of the crane and b) who determines it?		2
48	Name a design of accessory hook that is exempt from being fitted with a safety catch.		1
49	What do The Work at Height Regulations require of crane supervisors?		2
50	List TWO methods of obtaining the accurate weight of a load.		2
51	How does the deflection of the boom on a mobile crane or jib affect the lift?		2
52	Explain the purpose of the over-hoist limit switch.		1
53	Why is it important to ensure the wheels are clear of the ground when outriggers are employed?		1
54	What is the purpose of a risk assessment?		2

55	a) What is the purpose of a Method Statement and b) what is required of the operator?		4
56	According to BS 7121 Part 1: a) what is the minimum number of allowable turns on the hoist drum and b) who decides the actual minimum for a given model of crane?		3
57	What does The Health and Safety at Work Act require employers to do with regards specifically to plant?		3
58	What is the minimum recommended distance that is allowed between the counterweight(s) of the crane and another object/structure?		2
59	What THREE main duties of The Health and Safety at Work Act must employees follow?		6
60	A replacement crane driver has been supplied to continue the lift. What must they be made aware of before further lifting can take place?		2
61	How is the SWL/WLL/rated capacity for multi-leg slings determined?		1
62	If the operator has to leave the cab of a crane for a short period, state at least TWO actions that must be taken before they leave.		2
63	State the maximum recommended angle for single-leg slings when used as a pair.		1
64	What is the difference between a contract lift and a 'standard' crane hire?		4
65	What are the possible outcomes if facing prosecution for not complying with legislation and regulations?		3
66	List FOUR items to be found on a chain sling inspection certificate.		4

67	What is the 'Factor of Safety' when lifting personnel?		1
68	When a crane company hires out a crane, name TWO main legal requirements the hire company must meet regarding the crane and driver.		2