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| **No.** | **Question** |
| 1 | Which parts of the crane is the radius (for lifting) measured from? |
| 2 | a) What is the purpose of a Method Statement and b) what is required of the operator? |
| 3 | What is the difference between a contract lift and a ‘standard’ crane hire? |
| 4 | What is jib deflection and when does it occur? |
| 5 | a) What is meant by the lifting capacity of the crane and b) who determines it? |
| 6 | What is the purpose of counterweight(s) on the crane? |
| 7 | A tower crane has been delivered to site, assembled and configured for lifting. What must be carried out before lifting starts and by whom?  |
| 8 | If a load of 20 tonnes is lifted on four falls or lines of rope, what is the tension in each fall or line? |
| 9 | The safe working load or working load limit (SWL/WLL) of a multi-leg chain sling only applies in what TWO conditions or configuration? |
| 10 | If fitted, what is the purpose of the flags situated on the jib? |
| 11 | Only two legs of an 8 tonne four-legged chain sling are being used. What is the maximum load that can be lifted? |
| 12 | Why should luffing jibs be placed in the correct out-of-service position at the end of the working day? |
| 13 | If setting up to lift loads near a pedestrianised area, what main factor needs to be taken into account? |
| 14 | a) At the end of the shift what FOUR security measures should be applied and b) why? |
| 15 | What does The Health and Safety at Work Act require employers to do with regards specifically to plant? |
| 16 | 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. |
| 17 | Using the Operator’s Manual or other, state the procedure for changing the number of falls on the hook block. Note: The Operator’s Manual for the machine being used for the test MUST be available for reference by the candidate. |
| 18 | If the words STOP NOW are given to the crane operator by radio during the lift, what action must the operator take? |
| 19 | Wind speeds can be variable throughout the working day. What action must be taken to ensure safe working conditions are maintained? |
| 20 | Apart from lifting using the hook, what other type of work can tower cranes undertake? |
| 21 | If radios are to be used during the lifting operations, what FIVE actions and checks must be made by the crane operator before use? |
| 22 | 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? |
| 23 | List SIX typical subject areas that should be covered in a site induction. |
| 24 | What is the main purpose of the Rated Capacity Indicator (RCI)? |
| 25 | Using the lifting capacity diagrams (Annex A and B): Annex A – using a 55-metre jib set-up:a) what is the lifting capacity in tonnes at 34 metres radius and b) what radius can a load weighing 5.80 tonnes be placed at?Annex B – using a 45-metre jib set-up:c) what is the lifting capacity in tonnes at 27 metres radius using double falls andd) using a single fall, how far can a load weighing 9.6 tonnes be placed? |
| 26 | What is meant by a floor-climbing tower crane? |
| 27 | What are the possible outcomes of facing prosecution for not complying with legislation and regulations? |
| 28 | Name THREE ways that a hired-in crane operator can contribute in ensuring repeat business with the client or principal contractor. |
| 29 | Name THREE ways in which an operator can minimise their impact upon the environment whilst using the crane. |
| 30 | If a load is slewed rather quickly, what TWO initial effects does it have on the load whilst slewing? |
| 31 | What is the definition of, or how can a hazard be described? |
| 32 | What is the meaning of this hand signal (being demonstrated by the Tester)? |
| 33 | Name THREE ways in which wind speed can affect the lifting operation. |
| 34 | State the functions or job role of the following personnel: a) Appointed Person, b) Crane Supervisor, c) Slinger, d) Signaller. |
| 35 | a) In what environments are luffing units commonly used and b) why? |
| 36 | Where should the Operator’s Manual be kept and why? |
| 37 | If assisting in erecting a tower crane, why is it important that the manufacturer’s procedures are followed precisely? |
| 38 | At the end of the shift: a) how should cab cleanliness be maintained and b) explain why? |
| 39 | If a load is being slewed at a speed too high for its size, what TWO factors must the operator and signaller take into account? |
| 40 | When slewing with a load, where should the operator be looking? |
| 41 | What prevents the hook block from contacting the jib pulley? |
| 42 | What THREE main duties of The Health and Safety at Work Act must employees follow? |
| 43 | Name TWO ways that wet weather can affect lifting operations. |
| 44 | What is meant by a ‘cast’ in base? |
| 45 | The operator has to use a new model of tower crane that they are unfamiliar with. What do Regulations (i.e. LOLER 98) and other guidance require the operator to have? |
| 46 | On a busy construction site, how would the slinger/signaller be identified to the crane operator? |
| 47 | What do The Work at Height Regulations require of tower crane operations? |
| 48 | Why would hard hats (head protection) be needed when climbing a tower crane? |
| 49 | a) Where must the load radius diagram be located and b) what information must it contain? |
| 50 | What problems can be created when operating the crane in high-speed drive? |
| 51 | The number of falls has been changed on the hook block. How has this action affected the RCI? |
| 52 | Apart from the operator, who else may need to use the machine’s Operator’s Manual? |
| 53 | What effect can a swinging load have on a crane? |
| 54 | What are the THREE actions or stages that a crane operator should undertake during pre-use inspections? |
| 55 | Why are crane operators generally regarded as ‘safety-critical’ workers? |
| 56 | Name FIVE requirements that must be followed if accessing the end of the jib for maintenance purposes. |
| 57 | 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? |
| 58 | If the hook block inadvertently (accidentally) lands, what course of action should be taken? |
| 59 | Why are some tower cranes rail mounted? |
| 60 | What is the purpose of a risk assessment? |
| 61 | What makes up the total (or gross) weight of a load that is to be lifted? |
| 62 | Using the Operator’s Manual or other, state the maximum wind speed the crane may be operated in. Note: The Operator’s Manual for the machine being used for the test MUST be available for reference by the candidate. |
| 63 | Why should tools and spare components not be left lying on the decks or landings? |
| 64 | 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? |
| 65 | 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. |
| 66 | How can a qualification or card benefit a crane operator? |
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