

# Crusher

**A42**

Technical Test – Theory

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| Roles and responsibilities | 1. What is the definition of, or how can a hazard be described?  |
|                            | <b>A</b>   |
|                            | 2. What is the purpose of a risk assessment?   |
|                            | <b>A</b>   |
|                            | 3. List SIX typical subject areas that should be covered in a site induction.  |
|                            | <b>A</b>   |
|                            | 4. What THREE main duties of the Health and Safety at Work Act must employees follow?  |
|                            | <b>A</b>   |
|                            | 5. What does the Health and Safety at Work Act require employers to do with regards specifically to plant?   |
|                            | <b>A</b>   |
|                            | 6. a) What is the purpose of a Method Statement and b) what is required of the operator?   |
|                            | <b>A</b>   |
|                            | 7. Name FOUR different types or levels of sanctions that can be applied (by employers and judicial bodies) to plant operators who do not comply with, or follow legislation and regulations. |
|                            | <b>A</b>   |
|                            | 8. Plant operators are generally regarded as 'safety-critical' workers. What does this mean?   |
|                            | <b>A</b>   |

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| Roles and responsibilities continued | 9. Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.  |
|                                      | <b>A</b>  |
|                                      | 10. In what situation does a hard hat NOT need to be worn when operating a crusher?   |
|                                      | <b>A</b>  |
|                                      | 11. The operator has to use a new type of crusher that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have? |
|                                      | <b>A</b>  |
|                                      | 12. What are the possible outcomes if being prosecuted (by judicial bodies) for not complying with legislation and regulations?                                       |
|                                      | <b>A</b>  |
|                                      | 13. Give TWO examples of where The Work at Height Regulations 1995 may apply to crusher operations.   |
|                                      | <b>A</b>  |
| Preparing for work                   | 14. How can a qualification or card benefit a plant operator?   |
|                                      | <b>A</b>  |
|                                      | 15. Name THREE ways that a plant operator can contribute in ensuring repeat business with the client or main contractor.  |
|                                      | <b>A</b>  |
|                                      | 16. Where should the crusher’s Operator’s Manual be kept and why?   |
|                                      | <b>A</b>  |
|                                      | 17. If the operator has to top-up the hydraulic oil, state TWO precautions to ensure cleanliness of the system.   |
| <b>A</b>                             |   |

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| Preparing for work continued  | <b>For questions 18 and 19 the Operator’s Manual for the machine being used for the test MUST be available for reference by the candidate</b> |
|   | 18. Using the Operator’s Manual, state the procedure for adjusting conveyor belt tension.   |
|   | <b>A</b>  |
|   | 19. Using the Operator’s Manual, state the cold-starting procedure for the machine.   |
|   | <b>A</b>  |
|   | 20. If checking the oil level using a dipstick, why must gloves be worn?  |
|   | <b>A</b>  |
|   | 21. Apart from the operator, who else may need to use the machine’s Operator’s Manual?  |
|   | <b>A</b>  |
|   | 22. What is the purpose of the sizing bars on the crusher feed?   |
|   | <b>A</b>  |
|   | 23. Name a) THREE differences between ‘cone’ and ‘jaw ‘type crushers and b) ONE suitable application for each.                                |
|   | <b>A</b>  |
|   | 24. Name THREE requirements of the Noise at Work Act 1994 that apply to crusher operations.   |
| <b>A</b>  |   |
| 25. Name FIVE items of specific PPE applicable to crusher operations.                                   |   |
| <b>A</b>  |   |
| 26. What are the THREE actions or stages that a crusher operator undertakes during pre-use inspections? |   |
| <b>A</b>  |   |

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| Preparing for work continued | 27. Name the FOUR key causes of accidents that occur during crushing operations.  |
|                              | <b>A</b>  |
|                              | 28. When would a harness be used?   |
|                              | <b>A</b>  |
|                              | 29. a) What is the purpose of a magnetic separator and b) where would it be located?  |
|                              | <b>A</b>  |
|                              | 30. During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap. |
|                              | <b>A</b>  |
|                              | 31. For mobile crushers, when MUST a banksman/signaller be used before moving a mobile crusher?                                   |
|                              | <b>A</b>  |
|                              | 32. What problems and hazards can soft ground cause when travelling a mobile unit across a site?                                  |
|                              | <b>A</b>  |
|                              | 33. a) What is the minimum distance allowed near open trenches when travelling with a mobile crusher and b) explain why.          |
| <b>A</b>                     |   |
| Setting up for work          | 34. Give THREE reasons that may cause a mobile crusher to tip over sideways during travel.  |
|                              | <b>A</b>  |
|                              | 35. Give TWO reasons why the operator should have an understanding of the type of material being loaded for crushing.             |
| <b>A</b>                     |   |
|                              | 36. Explain SIX requirements to be taken into account when positioning a crusher prior to work.                                   |
|                              | <b>A</b>  |

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| Setting up for work continued | 37. Describe ONE method of how to adjust a cone type crusher to produce the desired aggregate size.   |
|                               | <b>A</b>  |
|                               | 38. a) Which part of the crusher applies loading or pressure to the ground and b) name ONE way that pressure can be reduced.  |
|                               | <b>A</b>  |
|                               | 39. As far as is reasonably practical, where should crushing operations be kept clear of?   |
|                               | <b>A</b>  |
|                               | 40. What are the requirements for the ramps that are to be used by loading shovels loading the crusher?   |
|                               | <b>A</b>  |
|                               | 41. What are the requirements for the standing for loading excavators?  |
| <b>A</b>                      |   |
| Working tasks                 | 42. If setting up to work near a pedestrianised area, state THREE factors that need to be taken into account.   |
|                               | <b>A</b>  |
|                               | 43. a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles when setting up the machine and b) explain why a distance should be kept. |
|                               | <b>A</b>  |
|                               | 44. If a trench has a depth of 2.0 metres: a) what is the minimum distance to maintain from the edge of the trench when forming stockpiles and b) explain why.                              |
|                               | <b>A</b>  |
|                               | 45. What FOUR steps should initially be taken should a crusher be blocked before remedial work starts?  |
| <b>A</b>                      |   |
| Working tasks                 | 46. Why should the engine speed be set to the manufacturer’s recommendations on magnet equipped machines?   |
|                               | <b>A</b>  |

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| Working tasks continued   | 47. Name FOUR possible causes for blockages in crushers.  |
|   | <b>A</b>  |
|   | 48. Why is it recommended to leave a layer of material in the feed hopper during loading?   |
|   | <b>A</b>  |
|   | 49. A previous, traditional method of clearing blockages was the use of a wedge or mouse. Explain why this method must not be used.                     |
|   | <b>A</b>  |
|   | 50. If radios are to be used during the crushing operations, what FOUR actions and checks must be made by the loading and crusher operators before use? |
|   | <b>A</b>  |
|   | 51. When using water suppression, where should the water be applied?  |
|   | <b>A</b>  |
|   | 52. Apart from water, name THREE other methods that can be used to minimise dust.   |
|   | <b>A</b>  |
|   | 53. Name TWO things that can cause 'bridging'.  |
|   | <b>A</b>  |
|   | 54. Name FIVE possible dangers to health if operating the crusher from the platform.  |
|   | <b>A</b>  |
| 55. During an unblocking activity, even though the crusher may be switched off: a) what else must be done and b) why? |   |
| <b>A</b>  |   |
| 56. When is it permitted to enter the crushing chamber area?  |   |
| <b>A</b>  |   |

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| Working tasks continued | 57. What TWO problems can wet weather cause?   |
|                         | <b>A</b>   |
|                         | 58. If a crusher has appeared to stall, what are the THREE initial steps to take before remedial work starts?  |
| Working tasks continued | <b>A</b>   |
|                         | 59. What is the meaning of this hand signal (being demonstrated by the Tester)?  |
|                         | <b>A</b>   |
| Completing work         | 60. What checks should be made to stockpiled materials at the end of a working day?  |
|                         | <b>A</b>   |
|                         | 61. Before leaving the machine for a rest break, after switching off the machine, what final action must be carried out?   |
| Completing work         | <b>A</b>   |
|                         | 62. If parking a mobile unit away from the working area, name THREE places where the machine should NOT be parked.   |
|                         | <b>A</b>   |
| Shutdown                | 63. The crusher operator has been asked to drive a mobile crusher onto a transporter/trailer.<br>a) Who is responsible for the loading operations and b) state FOUR actions to be considered by the operator before loading commences. |
|                         | <b>A</b>   |
|                         | 64. Why should a crusher be re-fuelled at the end of the day?  |
| Shutdown                | <b>A</b>   |