

Ride-on Roller

A31

Technical Test – Theory

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

continued...

Roles and responsibilities continued	9. Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
	A
	10. In what situation does a hard hat NOT need to be worn when operating a ride-on roller?
	A
	11. The operator has to use a new type of ride-on roller that they are unfamiliar with. What do Regulations (i.e. PUWER 98) and other guidance require the operator to have?
	A
	12. What are the possible outcomes if being prosecuted for not complying with legislation and regulations?
	A
	13. How can a qualification or card benefit a plant operator?
A	
Preparing for work	14. Name THREE ways that a plant operator can contribute in ensuring repeat business with the client or main contractor.
	A
	15. Where should the ride-on roller's Operator's Manual be kept and why?
	A
	16. If the operator has to fill the fuel tank, state TWO precautions to ensure cleanliness of the system.
	A
	For questions 17 and 18 the Operator's Manual for the machine being used for the test MUST be available for reference by the candidate
17. Using the Operator's Manual, state the procedure for positioning and adjusting the scraper bars. For tyred machine, state the tyres' operating pressure.	
A	
18. Using the Operator's Manual, state the cold-starting procedure for the machine.	
A	

continued...

Preparing for work continued	19. On articulated ride-on rollers, steering is achieved by actuating a hydraulic ram (or rams) which is controlled by turning the steering wheel. a) How does the engine supply the oil flow and b) what happens to the steering when the engine stops?
	A
	20. If checking the oil level using a dipstick, why must gloves be worn?
	A
	21. Apart from the operator, who else may need to use the machine's Operator's Manual?
	A
	22. What is the purpose of a ROPS cab or frame?
	A
Travelling and manoeuvring	23. During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
	A
	24. On articulated ride-on rollers, the two halves of the chassis can oscillate (or twist). What is the purpose of this?
	A
	25. The roller has to be travelled up a slope. What should be checked before starting?
	A
	26. What problems and hazards can soft ground cause to a ride-on roller?
	A
Travelling and manoeuvring	27. a) What is the minimum distance allowed near open trenches when travelling with a ride-on roller and b) explain why.
	A
	28. If the machine 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 class should the operator hold and b) what is the minimum age allowed?
A	

continued...

Travelling and manoeuvring continued	29. If travelling on wet soils, what effect does this have on the ride-on roller?
	A
	30. Why must the seat belt be worn at all times, even though a ROPS frame is fitted?
Travelling and manoeuvring continued	A
	31. Give THREE possible reasons why ride-on rollers should not stray off the designated travel routes.
	A
Setting up for work	32. If setting up to work in a pedestrianised area, state THREE factors that need to be taken into account.
	A
	33. a) What is the recommended minimum distance to be kept away from overhead power lines mounted on wooden poles and b) explain why a distance should be kept.
Setting up for work	A
	34. Before starting work, name SIX checks that should be made to the compacting area.
	A
Working tasks	35. When working in a confined area or space, what danger can be present with an articulated ride-on roller with regards to steering?
	A
	36. When working in a confined area or space, name THREE hazards that can occur.
Working tasks	A
	37. What are the TWO aims of compaction?
	A

continued...

Working tasks continued	38. What is meant by deadweight rolling?
	A
	39. Why should the vibration system not be engaged whilst the roller is stationary on soft ground?
	A
	40. What is generally accepted as a rolling pass?
	A
	41. Where should the first pass be made if rolling a cross-fall or camber?
	A
	42. When would a low frequency amplitude (or vibration) generally be used?
	A
	43. By how many times is a vibratory pass more effective than a deadweight pass?
	A
	44. Name FOUR factors that determine the number of rolling passes.
	A
	45. In general, what types of material are usually used as a sub-base?
	A
	46. What is regarded as the commonest cause for poor compaction?
	A
	47. What is meant by consolidation?
	A
48. What thickness of soil should be compacted before another layer is laid?	
A	
49. If compacting on a gradient: a) what is the rolling procedure and b) explain why.	
A	
50. What is the meaning of this hand signal (being demonstrated by the Tester)?	
A	

Completing work	51. Before leaving the cab or seat for a rest break, after parking and switching off the machine, what final action must be carried out?
	A
Shutdown	52. When parking the machine at the end of the shift, name THREE places where the ride-on roller should NOT be parked.
	A
	53. Why should a ride-on roller be re-fuelled at the end of the day?
	A
Shutdown	54. 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.
	A