

TECHNICAL TEST — THEORY

360 EXCAVATOR UP TO 12T

Answer all 40 questions in the spaces provided. Write clearly in ink.

Time guide: 45–75 minutes. Pass mark: 32 of 40 (80%). Questions marked [SC] are safety-critical and must be answered correctly.

1. What is the definition of a hazard, and what is the purpose of a risk assessment?
2. What THREE main duties does the Health and Safety at Work Act place on employees?
3. What does PUWER 98 require before an operator uses an excavator type they are unfamiliar with?
4. a) What is the purpose of a Method Statement and b) what is required of the operator?
- 5 [SC]. Before digging, what must be done about underground services (HSG47)?

6 [SC]. What are the minimum distances plant must keep from overhead electricity lines and why?

7 [SC]. If the machine or its bucket contacts a live overhead line, what does the operator do?

8. What are the three actions of the pre-use inspection routine?

9. State FOUR checks made to tracks/running gear during the pre-use inspection.

10. Why must the operator use three points of contact when mounting and dismounting?

11. Name the principal components of a 360 excavator.

12 [SC]. What is the danger area around a slewing excavator and how is it controlled?

13. Why is the machine's centre of gravity different when the house is slewed across the tracks?

14. When is an excavator subject to LOLER lifting-duties requirements?

15. What checks are made before lifting a load with the excavator?

16. What is the purpose of check (burst protection) valves on boom and dipper rams for lifting duties?

17. What is the correct travel configuration on site?

18. How should slopes be climbed and descended?

19 [SC]. What is the minimum distance to keep from an open trench or excavation when travelling or standing?

20. Where should spoil be placed relative to a trench edge?

21. Name THREE methods of protecting a trench from collapse.

22. When may a person enter the excavation area near the machine?

23. What checks are made to the bucket and teeth?

24 [SC]. Describe the safety checks for a quick hitch when changing buckets.

25. Why have quick hitches been involved in fatal accidents?

26. What factors decide the machine's digging and lifting capability at a given moment?

27. What is done before backfilling an excavation?

28 [SC]. What precautions apply when loading a road vehicle with the excavator?

29. How should the excavator approach working alongside traffic or pedestrians?

30. What is checked with regard to visibility before slewing or reversing?

31. What are the rules for carrying persons?

32. Why must the machine be levelled or correctly set before trenching to grade?

33 [SC]. During work the engine overheats. What is the danger of removing the radiator/ expansion cap?

34. Describe the correct shutdown and parking of the excavator.

35. Why should the machine be refuelled at the end of the shift and what precautions apply?

36. Who may carry out the thorough examination of the machine and how often?

37. Name FOUR ways wet weather affects excavator operations.

38 [SC]. What must be considered before travelling the excavator on the public highway (wheeled) or transporting it?

39. What is the operator's responsibility for the machine's documentation?

40. Name FOUR different disciplinary actions or sanctions that can be applied to operators who do not comply with legislation.

END OF TEST — hand this paper to the assessor.

Candidate name

Date

Machine make/model

