

## **Signalling Revision Questions: Track circuits**

1. An aster track works by what method?
2. What is the main cause of aster track failures?
3. A serious condition can occur if you disconnect more than one aster track in series, what can happen & where would you find this info?
4. What prevents a TR from damage when shunted by a train?
5. What does a TPR follow & how does it work?
6. What is meant by a dead short & a partial short?
7. How would you find a partial short?
8. What is residual voltage?
9. What is the working voltage of a HVI TC?
10. What is a stagger & what is its purpose?
11. Why do we have transposition cables & what do they do?
12. Why are Nylons (commonly known as 'biscuits') put under pandrol clips?
13. Why do OHL areas have one rail only that has insulated block joints?
14. What is a jumper cable and where would you find them?
15. Why do some rails (in sidings & stations) have weld zig-zags on the rail top?
16. What must you never do if you find a TC which has wet ballast contamination and it is drop shunting too high?
17. If a TC is deemed to be SCWO what is this failure, and what documentation must be followed?
18. What is the main cause of an unwanted slow-to-pick TC?
19. What is a TC-AID and why is it used?
20. What is the purpose of a TFR relay?
21. At the end of a track circuit where the rails continue, the rails on the other side of the IBJ's are shorted out by permanent cables, why is this?
22. What special meter is used to detect faults on the frequency side of an aster TC?
23. What is a 'K-9' and what does it aid?
24. What is a 'Manchester tester'?

25. What device is added to a track circuit which is known to SCWO due to rusty/contaminated rails?

26. What is the preferred method of checking that a TR relay has dropped/picked during a TC test on maintenance?

27. What is meant by track locked?