

1. State the reason for undertaking a continuity test on the phase and c.p.c conductors of a ring final circuit.
2. State TWO other tests automatically carried out when undertaking the above.
3. State four prerequisite checks that need to be applied prior to undertaking an insulation resistance test.
4. State the danger that may arise if earth fault loop impedance tests are undertaken prior to verifying the continuity of the c.p.c.
5. State SEVEN methods of protection against direct contact.
6. State SIX methods of protection against indirect shock protection.
7. Name the THREE electrodes used when employing a proprietary tester to measure the resistance of a rod – type electrode.
8. State FIVE items of technical information that are required to be completed on an installation or periodic inspection and test report.
9. List THREE items of information relating to the incoming supply that should be listed on the schedule of test results.
10. State the effect on insulation resistance of an installation if
 - a. additional circuits are added
 - b. circuits were disconnected/removed
 - c. the length of a 6A lighting circuit was extended
11. In the formula $Z_s = U_o/I_a$ what is represented by:
 - a. U_o
 - b. I_a
 - c. Z_s
12. State:
 - a. why it is necessary to remove one end of a bonding conductor connection when verifying its continuity
 - b. the instrument used to verify continuity
 - c. a typical value of resistance when verifying the continuity of bonding conductors
13. State why a factor 1.2 is applied to (R_1+R_2) when determining the total value of phase and c.p.c conductor resistance of a final circuit.
14. State the possible outcomes if the factor of 1.2 was not applied to (R_1+R_2) .