

Name..

Company...

Please circle / tick the most correct answer or print your answer clearly.

Date..

Question 1.

Possible consequences of working on water supply systems, including metal pipes, water meters, valves etc. if you fail to carry out electrical tests before starting work include:

- a. Metal pipes, valves and water meters may be alive at a dangerous voltage. An electric shock or fatality may occur.
- b. You are failing to comply with your Company safety rules and procedures. You may be subject to disciplinary action.
- c. There may be electric current flowing through metal water pipes. When the pipes are cut or disconnected, an electric shock situation could occur.
- d. Any or all of the above (a, b, or c).

Question 2.

How is it possible for metal water pipes which are buried in the ground to become live? (i.e. a voltage appears between the pipe and the surrounding earth).

- a. Water flowing through the metal pipes might create a static charge.
- b. Faults in the local electrical supply system may cause a dangerous voltage to appear, where metal water pipes are often bonded to the customers MEN (multiple earthed neutral) supply or connected to a supply transformer earthing system.
- c. The earth's magnetic field can create electrical disturbances.
- d. Water supply pipes might pick up signals from other services (telephone, fibre-optic etc.).

Question 3.

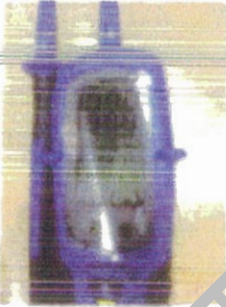
From the following list, identify the minimum PPE (personal protective equipment) required, when working on water supplies and carrying out electrical safety checks.

- Hard hat Safety glasses
- Safety footwear High visibility approved overalls
- Ear protection (earmuffs) Class 0 Insulated mat
- Class 0 Insulating gloves and over-gloves

Question 4.

RED LIGHT + THE NUMBER 1

While carrying out electrical tests, the voltage tester shows a ~~green~~/yellow LED which indicates:



- a. Dangerous voltage, stop work.
- b. This indication means a value of less than 5 Volt – it is OK to proceed.
- c. A flat battery
- d. The indicator is not working. Check the independent earth electrode is connected and positioned correctly.

Question 5.

What device must be connected across the water meter or valve, before disconnecting either of these items?

- a. Nothing is required to be connected.
- b. Volt meter.
- c. Bridging cable.
- d. By-pass valve.

Question 6.

The correct distance that the independent earth electrode (^{STAKE}~~plate~~) should be placed away from the water pipe or water meter is:

- a. Approximately 1.0 metre.
- b. Approximately 0.5 metre.
- c. Approximately 2.0 metres.
- d. Approximately 0.1 metre.

Practical assessment Check Sheet

Name: _____ Date: _____

| Item: | Description: | Achieved: | Not Achieved: |
|-------|---|-----------|---------------|
| 1. | Equipment set up, ready for use | ✓ | |
| 2. | Personal protective equipment used and worn appropriately | ✓ | |
| | Insulating gloves – test date check, roll up (air) check and used with overgloves | ✓ | |
| | Insulating mat – test date check, visual check that the mat is not damaged, positioned appropriately | ✓ | |
| 3. | Voltage indicator connected and independent earth placed appropriately | ✓ | |
| 4. | Voltage indicator checked – working properly | ✓ | |
| 5. | Voltage measured on water pipes and meter – correct action taken | ✓ | |
| 6. | Voltage indications to be advised, i.e. Safe or Not Safe | ✓ | |
| 7. | If safe, bridging cable connected correctly | ✓ | |
| | Clip connections rotated slightly to ensure clean connection | ✓ | |
| 8. | Re-use voltage indicator – to ensure voltage has not changed | ✓ | |
| 9. | On completing task, bridging cable to be removed | ✓ | |
| 10. | All equipment cleaned and packed away correctly | ✓ | |
| 11. | All Personal Protective Equipment removed and stored correctly | ✓ | |
| 12. | Final check – work area clear and reinstated | ✓ | |

Notes:

Employee (Trainee):

I, _____ (name) confirm that I have received training in electrical safety in the water industry and that I am competent to implement electrical safety measures when completing works.

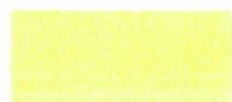
Signature: _____

Assessor

I, _____ (name) confirm that I have assessed the employee (trainee) in the procedure for electrical safety and testing, relating to work on water services and deem them to be competent.

Signature: _____

Result Competent (tick) Not Yet Competent (tick)



Example Document only