

EXAMINATION FOR THE ISSUE OF AUTHORISATION 'A' - LICENCE 'A'

Practical Test

September 2015

Time Allowed: 1 Hr

NAME & SURNAME _____ (in Block letters)

INDEX NO. _____

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Figure 1 shows the line diagram of a typical domestic installation. The installation comprises the following:

- I. a Ring Circuit supplying 4 single 13Amp socket outlets.
- II. a 20A Power circuit supplying a water heater
- III. One lighting circuit consisting of a lighting point controlled from two separate positions.

A. For each circuit shown in Figure 1, draw separate wiring diagrams showing the connections, polarity, colour, size of cables and protective devices ratings required for the circuits.

(12 marks)

B. List the sequence of tests that need to be carried out before energising the installation shown in Figure 1.

(6 marks)

C. Write a short report explaining how a continuity and an insulation resistance test will be carried out on the Ring circuit shown in Figure 1. In the report include drawings showing how the instruments will be connected to perform each test.

(12 marks)

D. Draw a suitable Consumer Unit Layout for the above installation showing the MCB's, Main Switch, RCD and any other protection that may be required for the installation shown in Figure 1.

(5 marks)

E. State what is the maximum acceptable earth electrode resistance value for a domestic installation?

(5 marks)

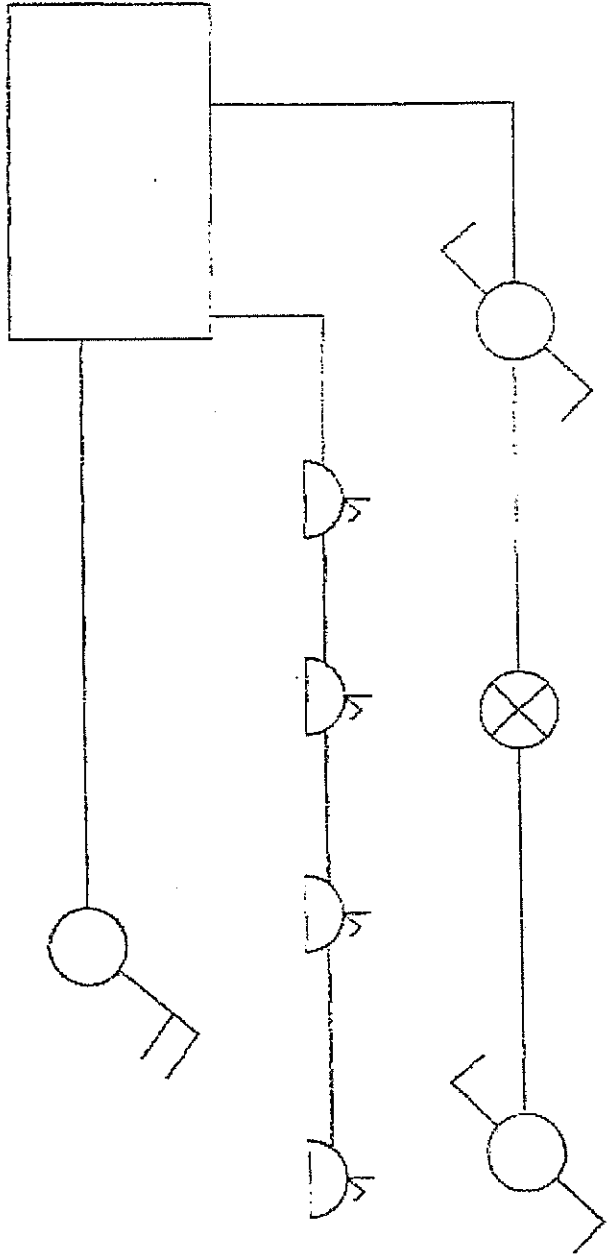


Figure 1

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