

PLEASE WRITE YOUR ANSWERS AND DRAWINGS HERE



DEPARTMENT OF EXAMINATIONS
THE MALL, SARRIA STREET, FLORIANA, MALTA

EXAMINATION: AUTHORISATION A

September 2020

Practical Test

Time Allowed – 1 Hour

Name & Surname _____
(In Block letters)

Index No. _____

1. (a) A domestic installation is to be developed for a house made up of a ground floor composed of a sitting room, bathroom, small bedroom, kitchen and a living room together with a small box room. Its first floor consists of a main bedroom with an *en suite*, a spare bedroom and a study room.

Draw the wiring diagrams showing the connections, polarity, colour, size of cables and protective device ratings required for the above domestic installation. The latter is made up of the following minimum circuits:

- i. two Lighting circuits. (4 Marks)
 - ii. five power circuits which include a hot water immersion heater and a cooker unit. (20 Marks)
 - iii. a circuit to control an air-conditioning unit rated at 3.5 kW. (5 Marks)
- (b) Draw a suitable Consumer Unit Layout for the above installation showing the MCB, Main Switch, RCD and other protection that may be required. (8 Marks)
- (c) Show how the installation will be connected to the earth electrode and state the size of cable used. (3 Marks)

NOTE:

ALL diagrams **must** be neat, clear and fully labelled.

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