AUTOMATIC NIGHT LAMP WITH MORNING ALARM

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APPROVAL SHEET

This project report attached here to, entitle *"AUTOMATIC NIGHT LAMP WITH MORNING ALARM"* by Muhammad Izzat Aswad bin Sadarudin (2013862762), Ahmad Syafiq bin Ahmad Zamzuri (2013209508) and Mohamad Aminuddin bin Muani (2013221718) in partial fulfillment of the Diploma of Electrical Engineering (Power).

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ABSTRACT

Automatic Night Lamp with Morning Alarm System is a simple yet powerful concept, which uses transistor as a switch. By using this system manual works are 100% removed. It automatically switches ON lights when the sunlight goes below the visible region of our eyes.

This is done by a sensor called Light Dependent Resistor (LDR) which senses the light actually like our eyes. It automatically switches OFF lights whenever the sunlight comes, visible to our eyes and activates the morning alarm. By using this system energy consumption is also reduced because nowadays the manually operated street lights are not switched off even the sunlight comes and also switched on earlier before sunset. In this project, no need of manual operation like ON time and OFF time setting. LDR and transistor are the main components of the project. The resistance of light dependent resistor (LDR) varies according to the light falling on it.

This LDR is connected as biasing resistor of the transistor. According to the light falls on the LDR, the transistor is operated in saturation and cut off region. This transistor switches the relay to switch on / off the light. This project uses regulated 12V, 750mA power supply. 7812 three terminal voltage regulator is used for voltage regulation. Bridge type full wave rectifier is used to rectify the ac output of secondary of 230/18V step down transformer.

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