ABSTRACT

This developmental- experimental research primarily aimed to determine the acceptability and efficiency of Two- Way Rechargeable Lamp which was designed and developed for providing light and emergency power to load consuming devices and appliances. In this study, Two-Way Rechargeable Lamp is an electrical device that produces illumination that provides alternate source of light when the power interruption occurs. The Two-Way Rechargeable Lamp is typically used in remote areas where main electrical power supply is insufficient and can only be available in a limited time, it can also be used to lessen our reliant on electrical power plants that supplies daily utilization of electrical power. To gather the needed data, a set of questionnaires with two parts were used. The first part is the personal information of the evaluators. The second part of the evaluation sheet is for design, composition and operating performance of the Two-Way Rechargeable Lamp. The respondents were experts in technology, professors in electrical and electronics technology and homeowners. In scoring the variables, a 5- Point scale rating was used. The Two-Way Rechargeable Lamp operates in terms of no. of hours to sustain the temporary light after it has been fully charged. The researchers also developed an instrument to test the level of acceptability of the Two-Way Rechargeable Lamp. The statistical tools utilized in the analysis of data were the frequency count and mean. Findings of the study revealed that the Two-Way Rechargeable Lamp is "Very Acceptable". Also, it was found out that the Two- Way Rechargeable Lamp can supply other devices with an output of 5 volts.