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### An Experimental Study on Effect of Utilization of Industrial Waste By-Products in Preparation of Green Bricks

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**Abstract :** Now-a-days brick is one of the most common masonry units used as building material in the construction of industry. Hence the huge demand occurred in building material industry especially in the last decade owing to the increasing population. The traditional methods consume 350 million tons of fertile soil and 25 million tons of coal annually. Consequently, it becomes a big issue of environmental concern.

Recycling of waste materials such as fly ash, quarry dust, lime powder, eggshell powder, glass powder, ceramic waste etc.; are alternatives for the raw materials instead of clay and fly ash that may contribute to the preparation of green bricks, exhausting of natural resources, conservation of non- renewable resources, by using waste materials often cause cost reduction, energy-saving and few hazards in the environment. Optimum percentage of waste materials using various combinations of material in the brick like clay and fly ash are studied and their effect on different properties of bricks have been discussed. The parameter studied considered in this study is compressive strength, water absorption and durability of brick.

**Keywords :** Green Brick, Fly ash, Ceramic waste, Glass powder, Eggshell powder, Quarry dust, lime, Compressive strength, Water absorption.

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