ABSTRACT:

The rising cost of construction material is a matter of concern. The reason for increase in cost is high demand of concrete and scarcity of raw material. Hence the concrete technologists must search for some economical alternative to the coarse aggregate. Here we make use of coconut shell as a partial substitute to coarse aggregate.

In this study, M20 grade of concrete was produced by partially replacing Coarse Aggregate by coconut shell. Cubes were cast and their compressive strength and Split tensile strength were evaluated at 7, 28 and 56 days by replacing coarse aggregate by coconut shell at 10%,20%, and 30%. The compressive strength of concrete reduced as the percentage replacement increased. It can be replaced up to 20%. With the increase in the replacement of coconut shell the slump value increases, which lead to increase in workability. Its utilization is cost effective and ecofriendly.