**ABSTRACT**

Coconut shell and coir fibres are the natural ingredients that are abundantly available in tropical regions. Wastes generated by way of industrial and agricultural techniques have created disposal and management issues which pose serious challenges to efforts towards environmental conservation. An enormous amount of coconut shells and fibres remain in the environment as waste, so usage of those materials for construction may be an important step to enhance sustainability and green creation. In addition to that it is going to assist to supply light weight and economically profitable materials in construction sector. This gives importance to suitability of partial replacing of coarse aggregate with coconut shell and coir fibres. To evaluate the above, conduct the test for compressive strength, splitting tensile strength, temperature resistance, water absorption, electrical resistance, chemical resistance, pH test of sample have been conducted. The specific gravity, bulk density and water absorption of coconut shell and fibres have been analyzed. A research on the economic factors was also executed. The addition of fly ash helps to growth the strength and workability of concrete. The outcomes obtained from above might be compared with conventional concrete of identical mix.