## ABSTRACT

In recent year's Natural fiber reinforced composite (NFRC) are considered as a suitable alternative to engineering material. Due to their advantages like low cost, low density, high strength and stiffness to weight ratio, resistance to breakage during processing, low energy consumption, a lesser amount of pollutant emissions and biodegradable materials. They have excellent properties and are being extensively used in verity of engineering application like Automobile and aerospace etc. This project work examines the mechanical properties of maize fiber and Prosopis Juliflora and egg shell powder particles reinforced polyester composites with various ratio 70.30 %, 65.35% and 60.40%. This project work examines the mechanical properties of maize fiber and Prosopis Juliflora and egg shell powder particles reinforced polyester composites with the aim of producing a composite material. Composite samples are produced from these mixtures and the Effects of the Tensile, Compressive, Flexural, Impact strength were studied.



***Key words:*** NFRC, Prosopis Juliflora, Egg shell, powder hand-lay-up method.