ABSTRACT

This project work titled **"DESIGN AND FABRICATION OF QUICK LIFTING JACK"** has been conceived having studied the difficulty in lift heavy vehicles. A quick lifting jack can also be designed and fabricated without the use of a hydraulic system. One alternative approach is to use a mechanical screw-type lifting mechanism, which involves a screw shaft that rotates to lift or lower the load. To fabricate a quick lifting jack using a screw-type lifting mechanism, the following components are needed: a screw shaft, a lifting platform, a handle, and a frame or base to support the lifting platform.

The screw shaft is a long, threaded rod that is turned by the handle. As the handle is rotated, the screw shaft moves up or down, depending on the direction of rotation. The lifting platform is attached to the top of the screw shaft, and moves up or down as the screw shaft rotates. To use the quick lifting jack, the load is placed on the lifting platform and the handle is rotated to lift the load. The screw shaft provides the lifting force, and the lifting height can be adjusted by rotating the handle in either direction.

Overall, a quick lifting jack without a hydraulic system can be a simple and effective solution for lifting heavy loads in situations where hydraulic equipment is not available or practical. However, it may not be suitable for lifting extremely heavy loads, as the lifting force is limited by the strength of the screw shaft and other mechanical components.