ABRICATION OF PEDAL POWERED WATER PUMPING SYSTEM.

# A PROJECT REPORT IN PARTIAL FULFILLMENT OF THE

## REQUIREMENTS FOR THE

#### AWARD OF THE

#### DEGREE OF

#### **BACHELOR OF TECHNOLOGY**

#### IN

### MECHANICAL ENGNEERING

#### BY

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# DEPARTMENT OF MECHANICAL ENGINEERING

# CERTIFICATE

This is to certify that project report is entitled "FABRICATION OF PEDAL POWERED WATER PUMPING SYSTEM, carried out by G.SANDEEP (16815A0311), CH.ASHOK KUMAR(16815A0306), K.CHAITHANYA (16815A0319), T.ARVINDH (15811A03D1) in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in "MECHANICAL ENGINEERING" To JNTUK university at AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY, Narsipatnam, during the acadamic years 2016-2019.

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#### ABSTRACT

Pedal Powered Water Pump (PPWP) is an eco friendly water pump system. The PPWP works on mechanical energy without electricity. PPWP provides drinking water and irrigation in remote areas where electricity is not available. PPWP is not only free from pollution but also provide healthy exercise. PPWP reduces the rising energy costs.

The mechanism consists of regenerative turbine pump which is connected with the rear wheel of bicycle with the help of V-belt. Paddling for just a minute or two is enough to pump 30-40 liters of water to a height of 10 feet at least. Our project could prove helpful for rural areas. Which are facing load shedding problem? It can be used mainly for irrigation and water drawing water from wells and other water bodies. This is a regenerative turbine water pump which is run by rotating the pedal of a cycle. The system comprises a bicycle, rim, regenerative turbine pump, impeller, pulley and inlet and delivery pipes. This innovation is useful for pumping water from river, ponds, wells and similar water sources thus enabling poor farmers for pumping water for irrigation and cultivation. To overcome flow problems, and to move liquids from place to place, against a higher pressure or to a higher elevation, energy must be added to the liquid. To add the required energy to liquids, we use PUMPS, The type depends on the function the pump is to perform and the size (and speed) depends on the amount (volume) of liquid to be moved in a given time.

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