

THREE WHEEL HANDICAPPED STEERING PROPULSION CYCLE

A project report submitted in partial fulfillment of requirements for the award of Degree of

Bachelor of Technology

in

Mechanical Engineering

SUBMITTED BY

CH. YESWANTH DURGA CHELLA RAO (17815A0308)

O. RAMANA (17815A0350)

G. TEJA (17815A0316)

R. APPALANAIDU (17815A0352)

V. SAI KRISHNA (16811A0389)

Under the Guidance of

Dr. CHALLA SURESH Ph.D.

Associate Professor



DEPARTMENT OF MECHANICAL ENGINEERING

AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

(Permanently affiliated to JNTU-Kakinada, accredited by NBA & NAAC (A), approved by AICTE, recognized by UGC 12f & 2b)

TAMARAM (V), MAKAVARAPALEM (M),

VISAKHAPATNAM DISTRICT - 531113

2016-2020

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(APPROVED BY AICTE AFFILIATED TO JNTU-KAKINADA)

(AN NAAC & NBA ACCREDITED INSTITUTION)

TAMARAM, MAKAVARAPALEM, VISAKHAPATNAM-531113

DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is certify that the project work entitled "THREE WHEEL HANDICAPPED STEERING PROPULSION CYCLE" is a bonafide record of work done by CH.YESWANTH DURGA CHELLA RAO (17815A0308), O.RAMANA (17815A350), G.TEJA (17815A0316), R.APPALANAIDU (17815A0352), V.SAI KRISHNA (16811A0389) in partial fulfillment of the requirement for the award of Bachelor of technology in MECHANICAL ENGINEERING by Jawaharlal Nehru technology university, Kakinada. During the year 2016-2020

Dr. CH. SURESH Ph.D.

PROJECT GUIDE

Sri V. HARI KIRAN M.Tech (Ph.D.)

HEAD OF THE DEPARTMENT

EXTERNAL EXAMINER

ABSTRACT

Mobility of physically disabled persons is a concerning social issue now a days. Various hand driven tricycles, wheelchairs, retrofitted vehicles etc. are commonly available for disabled people as a mode of transportation. The basic Tricycle is a three-wheeled design, pedaled by disabled persons in the side and seat in the middle for sitting arrangement. They use only one hand to steer the handle because other hand is used to rotate the pedal. Our aim is to design and fabricate a low cost tricycle for the handicap people to be propelled by the novel link mechanism attached to the steering column converting into cranking, using the advantage of leverage, with proper balance and distribution of mass and centre of gravity to crank the wheel shaft for propelling. As he can use both hands on the steering for better control.