# STATISTICAL ANALYSIS OF GRAVITY BASED

## **POWER GENERATION**

A PROJECT REPORT SUBMITTED FOR THE PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE IN

### BACHELOR OF TECHNOLOGY

IN

### MECHANICAL ENGINEERING

BY

SHAIK MANSOOR	(16811A0377)
M CHANDU	(16811A0340)
P PAVAN KUMAR	(16811A0366)
S HEMANTH KUMAR	(16811A0376)

Under the Esteemed Guidance of

#### A PRADEEP KUMAR MTech

Assistant 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 to certify that the project work entitled "STATISTICAL ANALYSIS OF GRAVITY BASED POWER GENERATION" is a bona fide work done by SHAIK MANSOOR (16811A0377), M CHANDU (16811A0340), P PAVAN KUMAR (16811A0366), S HEMANTH KUMAR (16811A0376) for the partial fulfilment of the requirements for the award of degree in BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING by JAWAHARLAL NEHRU TECHNOLOGY UNIVERSITY, KAKINADA during the academic year 2019-2020.

A PRADEEP KUMAR M Tech

ASSISTANT PROFESSOR

V HARI KIRAN (MTech, PhD)

**HEAD OF THE DEPARTMENT** 

**Mechanical Engineering** 

**Project Guide** 

EXTERNAL EXAMINER

### ABSTRACT

In the present world we are using fossil fuels for the generation of power. With the decline of fossil fuel reserves in the nature the demand for the use of renewable resources has increased. The emissions produced from the combustion of fossil fuels contains CO2, SOx, NOx and CO are creating hazardous damage to the nature. Hence the emissions from the exhaust has to be reduced in order to save the world. The power generation by using renewable resources doesn't cause much damage to the nature. Hence, we are using the renewable resource, Gravitational force as a source of energy in producing power. In our present work with the variation of load and height the voltage and power output are varied. By using Taguchi Analysis, we determined that the parameter weight is having more influence than the other design parameters.