BONA FIDE CERTIFICATE

Certified that this project report **"DESIGN AND DEVELOPMENT OF BRAKE PAD WEAR INDICATOR FOR FOUR WHEELERS"** is a bona fide work of

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who carried out the project work under my supervision, for the partial fulfilment of the requirements for the award of the degree of Bachelor of Engineering in Mechanical Engineering. Certified further that to the best of my knowledge and belief, the work reported here in does not form part of any other project report or dissertation on the basis of which a degree or an award was conferred on an earlier occasion on these or any other candidate(s).

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ABSTRACT

The aim of this project is to develop a brake pad wear indicator for the four wheelers. Brake is a mechanical device that inhibits motion by absorbing energy from a moving system. It is used for slowing or stopping a moving vehicle by means of friction. The friction is achieved by means of drum brakes and brake pads in four wheelers. The brake pad wears out after a certain period of use. If the brake pads are left unchanged, the worn out brake pad may cause metal to metal contact between rotor and master cylinder. This may cause difficulty in slowing down the four wheeler and they may ultimately lead to accidents. In order to reduce such accidents, which happen mainly due to the negligence of the driver, a brake pad wear indicator is developed which indicates the driver about the thickness of the brake pad and to replace it when it reaches the minimum thickness.

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LIST OF SYMBOLS

P	-	PRESSURE
F	-	FORCE
A	-	AREA
T	-	TORQUE
μ	-	COEFFICIENT OF FRICTION
Ɵ	-	ANGULAR DIMENSION
Pa	-	PASCAL
K	-	KELVIN
Ω	-	OHM
V	-	VOLT

LIST OF ABBREVIATIONS

ABS	-	ANTI LOCK BRAKING SYSTEM
DPN	-	DIAMOND PYRAMID HARDNESS
IR	-	INFRA RED
LED	-	LIGHT EMITTING DIODE
IC	-	INTEGRATED CIRCUIT