# DESIGN AND ANALYSIS OF PORTABLE WEIGHING MACHINE FOR LIGHT COMMERCIAL VEHICLES (LCV).

PARAG PATNI 1,

## SUDHANSHU AUTHANKAR 2,

### SWAPNIL KAMBOJ 3,

#### AKASH MATE 4

#### P.V. EKHANDE 5

1,2,3,4&5 Dept. of Mechanical Engineering, Walchand Institute of Technology, Solapur, India

#### ABSTRACT

A portable weighing machine is a designed and developed for Light Commercial Vehicles (LCV). Light commercial vehicles are those vehicles whose gross weight is not more than 3.5 Tonnes. This machine is used to reduce the efforts of a vehicle to visit the weighing station, instead a portable machine can be moved on the field and the LCV's weight can be measured. This is a technological approach towards the weighing industry and the requirements of transportation of vehicles which may reduce and in turn leads to the drastic change in the entire weighing system. This research paper provide an overview of practical implementation of the device and decide the gross weight of a vehicle for finding overweight or not by comparing it with the actual official gross weight given by the company. The weight of a LCV measured in kilograms may be informed to the owner and to main server through a Global System for Mobile (GSM). This includes the technology like Internet of things (IoT) which include the load cell sensors and the information is stored in the server.

**KEYWORDS**: Light Commercial Vehicle(LCV's), Gross weight, Global System for Mobile (GSM), Internet of Things (IoT)