

Fuel Economy of motor vehicle

Ex-Principal , B.D.College of Engineering, Wardha

The fuel consumption of motor vehicle depends on the average fuel consumption of vehicle per Km of distance travelled during different types of motion. The vehicle performs various types of motions such as constant velocity motion, acceleration motion, deceleration, idling, overtaking etc. This paper analyses the various types of motion of vehicle at various speed and fuel consumption during each motion. The fuel economy of vehicle is possible if fuel consumption is lowest during motion. The paper derives the equation for fuel consumption per km of distance travelled during different gears engaged. The fuel consumption depends on number of parameters like gear ration, weight, aero dynamics of car, acceleration values. During constant velocity motion it is found that the fuel consumption of the vehicle is lowest in the top gear at a particular speed.