

# SNS COLLEGE OF TECHNOLOGY



### An Autonomous Institution Coimbatore-35

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A+'Grade Approved by AICTE, New Delhi & Affiliat ed to Anna University, Chennai

## Department of Automobile Engineering

III YEAR/ VI SEMESTER

19MEE301 / Engineering Economics and cost Analysis UNIT-2

Elasticity of demand - types of elasticity

Elasticity of Demand refers to the degree of responsiveness of quantity demanded to the changes in the determinants of demand . There are mainly three quantifiable determinants of demand:-

### **Types of Elasticity Of Demand**

Elasticity of demand can be of three types

- 1. Price Elasticity of Demand.
- 2.Income Elasticity of Demand.
- 3. Cross Elasticity of Demand.

### **Price elasticity of Demand:**

Concept Of Elasticity of demand Alfred Marshall introduced the concept of elasticity in 1890 to measure the magnitude of percentage change in the quantity demanded of a commodity to a certain percentage change in its price or the income of the buyer or in the prices of related goods

.In this section we look at the sensitivity of demand for a product to a change in the product's own price. Since Price Elasticity of Demand is predominantly used in economic analysis it is alternatively referred to as Elasticity of Demand.

**Definition:**Price Elasticity of demand is the degree of responsiveness of demand to a change in its price.In technical terms it is the ratio of the percentage change in demand to the percentage change in price. Thus,  $E_P$  = Pecentage change in quantity demanded/Percentage change in price.In mathematical terms it can be represented as:  $E_P = (\Delta q/\Delta p)$  (p/q).

From the definition it follows that

when percentage change in quantity demanded is greater than the percentage change in price then, price elasticity will be greater than one and in this case demand is said to be elastic.

when percentage change in quantity demanded is equal to the percentage change in price then price elasticity will be equal to one and in this case demand is said to be unit elastic.