

# REVENUE

TOTAL REVENUE, AVERAGE  
REVENUE, MARGINAL REVENUE AND  
ELASTICITY

# Total Revenue, Average Revenue Marginal Revenue

**Total Revenue**-Total revenue is the amount received by the seller from the sale of the quantity of the good sold in the market.  $TR = P \times Q$

**Average Revenue**- Average revenue is the revenue generated per unit of output sold.  $AR = TR/Q$

**Marginal Revenue**- Addition to Total Revenue by selling one more unit of the product.

$$MR_n = TR_n - TR_{n-1}$$

Where

$TR_n$  – the total revenue when the sales are at the rate of 'n' units per period.

$TR_{n-1}$  – the total revenue when the sales are at the rate of (n-1) units per period.

# Total Revenue, Average Revenue Marginal Revenue & Price Elasticity

Quantity	TR = AR X Q TR = P X Q	AR or Price= TR/Q	MR= TR <sub>n</sub> -TR <sub>n-1</sub>	Elasticity= AR/ (AR-MR)
1	10	10	10	
2	18	9	8	9
3	24	8	6	4
4	28	7	4	7/3
5	30	6	2	6/4
6	30	5	0	5/5
7	28	4	-2	4/6
8	24	3	-4	3/7

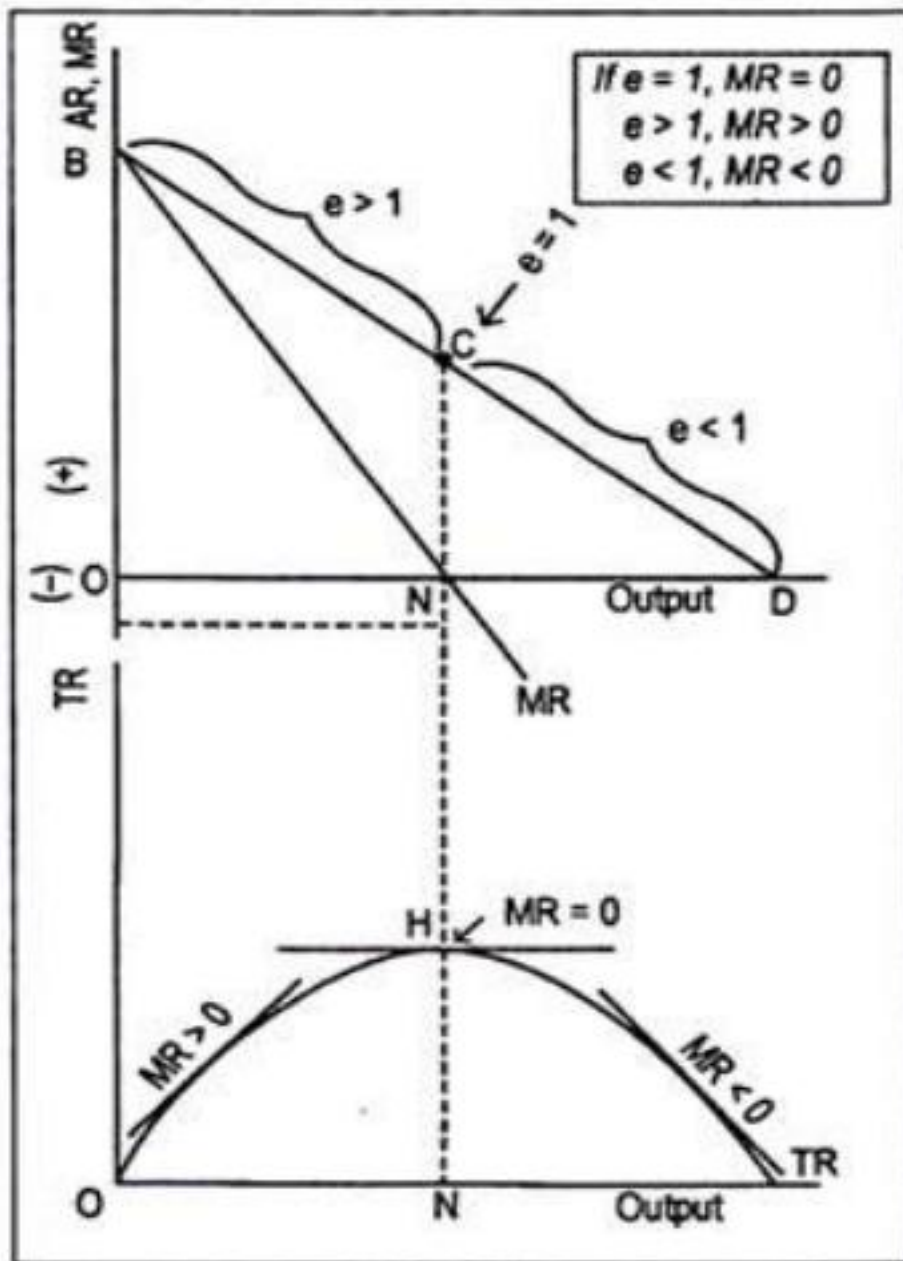


Fig. 5.1: TR, AR, MR and  $e$

- When TR is increasing MR is diminishing & price elasticity of demand ( $e > 1$ )
- When TR is maximum MR is zero & price elasticity of demand ( $e = 1$ )
- When TR is diminishing MR is diminishing and negative & price elasticity of demand ( $e < 1$ )

# Marginal Revenue, Average Revenue, Total Revenue and the Elasticity of Demand

$$E_{pd} = AR/(AR-MR)$$

marginal revenue, average revenue and price elasticity of demand are related to one another through the following formula:

$$MR = AR \times (e - 1) / e$$

where 'e' is the price elasticity of demand.

- If  $e = 1$ , then  $MR = AR \times 1 - 1 / 1 = 0$
- If  $e > 1$ , then MR is positive.
- If  $e < 1$ , then MR is negative.