NUMERICALS FOR PRACTICE: BREAK EVEN ANALYSIS

(The answers are given in blue)

Q1) Given: Price = Rs 8, AVC= Rs 6 and TFC = Rs 50,000. Find break even quantity.

a) What happens to break even quantity if price increases to Rs 10
b) What happens to break even quantity if AVC increases to Rs 7

ANS:

Break even quantity= TFC/P-AVC

= 50000/8-6

= 50000/2

= 25000 units

a) Price increases to Rs 10

Break even quantity= TFC/P-AVC

= 50000/10-6

=50000/4

=12500 units. Thus an increase in price will reduce break even quantity

b) AVC increases to Rs 7

Break even quantity= TFC/P-AVC

=50000/8-7

=50000/1

=50000 units. An increase in AVC will increase break even quantity

Q2) For a firm ABC Ltd the price of the product is Rs 50, TFC is Rs 10000 and AVC is Rs 10

a) Calculate break even output for the firm
b) How does break even quantity change is price falls to Rs 35?
c) How does break even quantity change if TFC decreases to 8000
d) How does break even quantity change if AVC rises to Rs 30

ANS:

a) Break even quantity= TFC/P-AVC

= 10000/50-10

=250 units

b) Break even quantity= TFC/P-AVC

= 10000/35-10

=400 units

c) Break even quantity= TFC/P-AVC

= 8000/50-10

=200 units

d) Break even quantity= TFC/P-AVC

=10000/50-30

=500 units