

## ⇒ Call options

In a call option, the option buyer has the right (But not the obligation) to buy the commodity at the predetermined price.

For ex:- Jerry House paid a premium of ₹ 4 per share for one 6-months call option contract (total of ₹ 400 for 100 shares) of the Mahony Corporation.

At the time of the purchase, Mahony stock was selling for ₹ 56 per share and exercise price of call option was ₹ 55.

① Determine Jerry's profit or loss if the price of Mahony's stock is ₹ 54 when option is exercised?

② What is Jerry's profit or loss if the price of Mahony's stock is ₹ 62 when option is exercised? Ignore tax and transaction cost.

Sol<sup>n</sup> - ① Cost of call  $\Rightarrow$  ~~£400~~.

$$\Rightarrow (\text{£ } 4 \text{ premium}) \times 100 \Rightarrow 400$$

$$\text{ending value} = (-400 \text{ cost}) + (\text{gain})$$

$$= 400 \text{ loss.}$$

The option was worthless because the stock price is less than the exercise price at maturity.

$$\textcircled{2} \text{ Cost of call} = \text{£ } 400.$$

$$\text{Ending Value} = -400 + (62 - 55) \times$$

$$100$$

$$= -400 + 700$$

$$= 300 \text{ gain.}$$