1) Gamma = 0.05

   Change in stock price = $5

   Initial delta = 0.60

            0.60(100)= 60

   Gamma=Change in delta/Change in stock price

   Change in delta=0.05 (5) = 0.25

   New delta = 0.60+0.25 = 0.85

       Total=0.85(100)=85

   For delta-neutral,

   net delta = 0

   This means we have to sell 85 shares.

2) Vega = 0.25

   Change in IV=5%

   Vega=change in price(of put option)/change in IV

   Change in put option price=0.25(0.05)=0.0125

                          = 1.25%

3) Thetha =-0.05

   No. of call option = 50

   No. of day=10

   Total time decay (10 days) = (thetha*No. of option)*No. of days

                          =-0.05*50*10=-25

   The value of 50 call options will decrease by $25 due to time decay over this period.

5) Basically, options Greeks are used to measure an option price's sensitivity to changes in underlying variables.

   Delta measures the rate of change in an option's price relative to a one-point move in the underlying asset.

   Gamma measures the rate of change in delta per one-point move in the underlying asset.

   Theta measures how much time decay affects an option's value over a one day period.

   Vega measures how much volatility affects an option's value.

   Rho measures how much interest rates affect an option's value.