## HW - Chapter 9 - Dividend Policy - Q5

| Cost of Equity (Ke) | $10 \%$ |
| :--- | :--- |
| Number of shares in the beginning (n) | 25,000 |
| Current Market Price (P0) | Rs. 100 |
| Net Profit (E) | Rs. 2,50,000 |
| Expected Dividend (D1) | Rs. 5 per share |
| Investment (I) | Rs. 5,00,000 |


|  | Div is declared | Div is NOT declared |
| :---: | :---: | :---: |
| $\mathrm{P}_{\mathrm{o}} \quad=\quad\left(\mathrm{P}_{1}+\mathrm{D}_{1}\right) \div\left(1+\mathrm{K}_{\mathrm{e}}\right)$ | $\begin{array}{r} 100=(P 1+5) \\ \div(1+0.10) \end{array}$ | $\begin{array}{r} 100=(P 1+0) \\ \div(1+0.10) \end{array}$ |
|  | P0 = 105 | P1 = 110 |
| Find how much investment is Required <br> (-) How much retained earning is left after paying dividend | $\begin{array}{r} 5,00,000 \\ (1,25,000) \end{array}$ | $\begin{array}{r} 5,00,000 \\ (2,50,000) \end{array}$ |
| Amount to be raised by Fresh Issue $\div P 1$ | $\begin{array}{r} \hline 3,75,000 \\ 105 \end{array}$ | $\begin{array}{r} \hline 2,50,000 \\ 110 \end{array}$ |
| New shares to be issued | 3,571.14 | 2273.73 |
| Existing Shares <br> (+) new shares to be issued | $\begin{array}{r} 25000 \\ 3571.14 \end{array}$ | $\begin{array}{r} 25000 \\ 2273.73 \end{array}$ |
| Total Shares | 28571.14 | 27273.73 |
| x P1 | 105 | 110 |
| Market Capitalisation of the Firm (after 1 year) | 30,00,000 | 30,00,000 |
| - Investment | $(-500,000)$ | $(-500,000)$ |
| + Earnings | 2,50,000 | 2,50,000 |
| FINAL Market Capitalisation of the Firm (after 1 year) | 27,50,000 | 27,50,000 |
| $\div(1+\mathrm{Ke})$ | 1.1 | 1.1 |
| Market Value Today | 25,00,000 | 25,00,000 |

