CLASS – X
CHAPTER – 3

SHARES AND DIVIDENDS

MODEL QUESTION AND ANSWERS

Q1. Mr. Mukul invests Rs9000 in a company paying a dividend of 6% per annum when a share of face value Rs100 stands at Rs150. what is his annual income? He sells 50% of his shares when the price rises to Rs200. What is his gain on this transaction?

Ans1.

Investment = Rs9000, Face value = Rs100, Market value = Rs150

Number of shares purchased = $\frac{9000}{150} = 60$

Annual Income = $60 \times \frac{6}{100} \times 100 = Rs360$

Number of shares sold = 50% of 60 = $\frac{50}{100} \times 60 = 30$

Selling price of 30 shares = $200 \times 30 = Rs6000$

Cost price of 30 shares = $150 \times 30 = Rs4500$

His gain on this transaction = $6000 - 4500 = Rs1500$.

Q2. Two companies have shares of 7% at Rs116 and 9% at Rs145 respectively. In which of the shares would the investment be more profitable.

Company 1	Company 2
Face value $= $ Rs100	Face value $= $ Rs100
Market value $= $ Rs116	Market value $= $ Rs145
Dividend $= \frac{7}{100} \times 100 = Rs7$	Dividend $= \frac{9}{100} \times 100 = Rs9$
Profit % $= \frac{7}{116} \times 100\% = 6.03\%$	Profit % $= \frac{9}{145} \times 100\% = 6.2\%$

Investing in 9% at 145 is more profitable

Q3. A Man sold some Rs100 shares paying 10% dividend at a discount of 25% and invested the proceeds in Rs100 shares paying 16% dividend quoted at Rs80 and thus increased his income by Rs2000. Find the number of shares sold by him.

Ans3.

<u>Share 1</u>

Number of shares = n

Dividend = $\frac{10}{100} \times 100 \times n = 10n$

Market value = 100 − 25 = Rs75

Sale proceeds = 75n

<u>Share 2</u>

Number of shares = $\frac{75n}{80} = \frac{15n}{16}$

Dividend = $\frac{16}{100} \times \frac{15n}{16} \times 100 = 15n$

Given, 15n − 10n = 2000

5n = 2000

n = 400   i.e. He sold 400 shares.

Q4. A man invests Rs6750 partly in shares of 6% at Rs140 and partly in shares of 5% at Rs125. If his total income is Rs280, how much has he invested in each?

Ans4.

Share 1	Share 2
Amount invested = Rs x	Amount invested = Rs $6750 - x$
Number of shares = $\frac{x}{140}$	Number of shares = $\frac{6750 - x}{125}$
Dividend $= \frac{6}{100} \times 100 \times \frac{x}{140} = \frac{3x}{70}$	Dividend $= \frac{5}{100} \times 100 \times \frac{6750 - x}{125} = \frac{6750 - x}{25}$

Given, $\quad \dfrac{3x}{70} + \dfrac{6750 - x}{25} = 280$

$\dfrac{15x + 94500 - 14x}{350} = 280$

$x = 98000 - 94500 = 3500$

He invested Rs3500 in share-1 and Rs3250 in share - 2

Q5. A man buys Rs50 shares of a company which pays 12% dividend. He buys the share at such a price that his profit is 15% on his investment. At what price did he buy the share?

Ans5.

Dividend on one share of Rs50 = 12% of 50 = $\frac{12}{100} \times 50 = Rs6$

Let the market value of one share be Rs x.

His profit on one share = 15% of x = $\frac{15}{100} \times x = Rs\frac{3x}{20}$

Given, $\frac{3x}{20} = 6$

$x = 40$

The man buys each share at Rs40.