Chapter 4. Shares and Dividends

Formulae

1. The nominal value (N.V.) of a share is also called the Register value, printed value, Face value (F.V.), etc.
2. The price of a share at any particular time is called its Market value (M.V.).
3. The market value of a share can be the same, more or less than the nominal value oi the share depending upon the performance and profits of the company.
    1. If the market value of a share is the same as its nominal value, the share is said to be at par.
    2. If the market value of a share is more than its nominal value, the share is said to be above par or at a premium.
    3. If the market value of a share is less than its nominal value, the share is said to be below par or at a discount.
4. The profit, which a share-holder gets (out of the profits of the company) from his investment in the company, is called dividend.
   The dividend is always expressed as a percentage of the nominal value, of the share.
5. Sum invested = No, of shares bought × M.V. of 1 share
   If the share is at par, market value = nominal value
   i.e., M.V. = N.V.

6. No. of shares bought

   $$= \frac{\text{Sum invested}}{\text{M.V. of 1 Share}}$$

   Also, no. of shares bought

   $$= \frac{\text{Total dividend}}{\text{Dividend on 1 Share}}$$

   $$= \frac{\text{Total income (profit)}}{\text{Income (profit) on 1 Share}}$$

7. Income (return or, profit)

   $$= \text{No. of shares} \times \text{rate of dividend} \times \text{F.V.}$$

   F.V. = Face value = Nominal value = N.V.

8. Return % = Income (profit)%

   $$= \frac{\text{Income}}{\text{Investment}} \times 100\%$$

Formulae Based Questions

Question 1. A man invested Rs. 45,000 in 15% Rs. 100 shares quoted at Rs. 125. When the market value of these share rose to Rs. 140. He sold same shares, just enough to raise Rs. 8,400 calculate.

(i) The number of shares he still holds.
(ii) The dividend due to him on remaining shares.

Solution : Number of shares bought

$$= \frac{45,000}{125} = 360$$

Number of shares sold to raise ₹ 8,400.

$$= \frac{8,400}{140} = 60.$$

(i) Number of shares he still holds

$$= 360 - 60 = 300.$$

(ii) Dividend on these shares

$$= ₹ (300 \times 15)$$
$$= ₹ 4,500.$$

Question 2. (i) Which in better investment: 7% Rs. 100 shares at Rs.120 or 8% Rs. 10 shares at Rs. 13.50.
(ii) Mamta invested Rs. 10,846 in buying the shares of a company at Rs. 17 each. If the face value of each share be? 10 and company paid 15% dividend at the end of the year, find the dividend earned by her.

Solution : (i) Case I.

Income on ₹ 120 $= 7\%$ of ₹ 100

$$= \frac{7 \times 100}{100} = ₹ 7$$

So   Income on ₹ 1 $= ₹ \frac{7}{120} = ₹ 0 \cdot 058$

Case II.

Income on ₹ 13·50 $= 8\%$ of ₹ 10

$$= \frac{8 \times 10}{100} = ₹ \frac{8}{10}$$

So   Income on ₹ 1 $= ₹ \dfrac{\frac{8}{10}}{13 \cdot 50}$

$$= ₹ 0 \cdot 059$$

We find that investment in the second case is better than investment in the first case.
Ans.

(ii) Market value of 1 share $= ₹ 17$

Total invested money $= ₹ 10,846$

Number of shares bought

$$= \frac{10,846}{17} = 638$$

Face value of 638 shares $= 638 \times ₹ 10$

$$= ₹ 6,380$$

Dividend received by Mamta

$$= ₹\left(6{,}380 \times \frac{15}{100}\right)$$

$$= ₹957. \quad \text{Ans.}$$

Question 3. Ajay owns 560 shares of a company. The face value of each share is Rs. 25. The company declares a dividend of 9%. Calculate:
(i) The dividend that Ajay will get.
(ii) The rate of interest on his investment, if Ajay had paid Rs. 30 for each share.

Solution : No. of shares = 560

N.V. of one share = ₹ 25

Rate of dividend = 9%

(i)   Dividend = No. of shares
$$\times \text{N.V.} \times \text{Rate of divd.}$$
$$= 560 \times 25 \times \frac{9}{100}$$
$$= ₹ 1{,}260$$

(ii)   Investment = No. of shares × M.V.
$$= 560 \times 30$$
$$= ₹ 16{,}800$$

∴ Rate of interest on investment

$$= \frac{\text{Dividend}}{\text{Investment}} \times 100$$

$$= \frac{1{,}260}{16{,}800} \times 100$$

$$= 7{\cdot}5\%. \quad \text{Ans.}$$