## 10 Business and Shares

By studying this lesson you will acquire knowledge on the following :

- Capital, shares, initial public offering (I.P.O)
- The meanings of the terms: nominal value and market value
- Calculating the dividend from investments
- Calculations needed to invest in profitable shares


### 10.1 Introduction

The initial financial investment needed to commence a business is known as the capital. A capital is essential to commence a business. The capital for a business can be a personal investment or an investment by a number of people being shareholders in a joint business. When the money needed for the business is high, the capital is supplied by dividing the particular fund of capital into shares and selling it to the public. These shares are sold at the beginnig of the business and it is called the initial public offering (I.P.O)

The sharing of the fund of capital can be explained as follows:
Consider that one million rupees is needed to commence a business. Suppose that it is decided to acquire this amount of money by selling Rs 10 shares to the public. To raise the capital of one million rupees, a total of 100000 shares should be sold at 10 rupees each. The price of a share is Rs 10 . The price decided for a share by the business is called the nominal value of the share. The nominal value of a share of the business mentioned above is Rs 10 . The nominal value is decided by the business. According to its actual selling price, the sale can be classified as follows:
(i) If a share is sold at its nominal value, it is being sold at the par value.
(ii) If a share is sold at a value higher than the nominal value, it is said to be sold at share premium or above par
(iii) If a share is sold at a value less than the nominal value, it is said to be sold at share discount or below par

The par value, share premium and share discount are known as market values.

### 10.2 Dividends

Consider that a person purchased Rs 10 shares at a premium of Rs 12 each. If he invested Rs 6000 for this purpose, he could buy 500 shares. But the nominal value of all these shares is Rs 5000 . Also, if he purchased Rs 10 shares at the discount of Rs 8 each, he could buy 750 shares for Rs 6000 . The nominal value of these shares is Rs 7500.

A business institute pays to its shareholders an allotted percentage of the nominal value of the shares, as the profit at the end of a year. This is known as the dividend. Irrespective of the rate a share is bought at, the dividends are always paid on the nominal value of the shares.

### 10.3 Share market

The buying and selling of shares of business institutes takes place via the share market. This activity is done through brokers who are involved with the share market. Due to various reasons the share market increases or decreases. That is, the market price of a share increases or decreases.

## Example 1

A person invests Rs 10000 in a business which pays a dividend of $5 \%$, to buy Rs 25 shares at Rs 20 per share.
(i) What is the number of shares he bought?
(ii) What is the nominal value of the shares?
(iii) What is the dividend income?
(iv) State the annual income as a percentage of the investment.

## Solution

(i) Number of shares bought $\quad=\operatorname{Rs} \frac{10000}{20}=500$
(ii) The nominal value of the shares $=$ Rs $25 \times 500=$ Rs 12500
(iii) The dividend income $\begin{aligned} & =\operatorname{Rs} 12500 \times \frac{5}{100} \\ & =\text { Rs } 625\end{aligned}$
(iv) The annual income as a percentage of the investment

$$
\begin{aligned}
& =\frac{625}{10000} \times 100 \% \\
& =\underline{\underline{6.25 \%}}
\end{aligned}
$$

## Example 2

A person who had a sum of Rs 52000 , invests Rs 24000 of it to buy Rs 10 shares at Rs 12 per share of a business which pays an $8 \%$ dividend. He invests the rest of the money to buy Rs 25 shares at Rs 28 per share of a business which pays a $15 \%$ dividend. Find the total dividend income from both invesments.

The sum invested in the $1^{\text {st }}$ business which pays a dividend of $8 \% \quad=$ Rs 24000
The sum invested in the $2^{\text {nd }}$ business which pays a dividend of $15 \%$
= Rs 52000 - Rs 24000
$=$ Rs 28000
The nominal value of the shares of the $1^{\text {st }}$ business
Income from the $1^{\text {st }}$ business

$$
=\frac{24000}{12} \times 10
$$

$$
=\operatorname{Rs} 20000
$$

$=20000 \times \frac{8}{100}$
$=$ Rs 1600
The nominal value of the shares of the $2^{\text {nd }}$ business

$$
\begin{aligned}
& =\frac{28000}{28} \times 25 \\
& =\operatorname{Rs} 25000 \\
& =25000 \times \frac{15}{100} \\
& =\operatorname{Rs} 3750 \\
& =\text { Rs } 1600+\operatorname{Rs} 3750 \\
& =\text { Rs } 5350
\end{aligned}
$$

## Example 3

A person who owns Rs 10 shares of a company which pay a dividend of $12 \%$ receives Rs 2400 as his dividend income. If he sold all the shares for Rs 26000 , find the number of shares he owned and the selling price of a share.

| Dividend income | $=$ Rs 2400 |
| :--- | :--- |
| Nominal value of the shares | $=\operatorname{Rs} \frac{2400}{12} \times 100$ |
|  | $=\operatorname{Rs~} 20000$ |
| Number of shares | $=\frac{20000}{10}$ |

2000
Selling price of a share

$$
\begin{aligned}
& =\operatorname{Rs} \frac{26000}{2000} \\
& =\operatorname{Rs} \underline{\underline{13}}
\end{aligned}
$$

## Example 4

The dividend income of a person who bought Rs 10 shares at Rs 14 was Rs 2250. The company paid a dividend of $9 \%$. Find the amount invested by him.

| The dividend income | $=\operatorname{Rs} 2250$ |
| :--- | :--- |
| Nominal value of the shares | $=\operatorname{Rs} \frac{2250}{9} \times 100$ |
|  | $=\operatorname{Rs} 25000$ |
| Amount invested | $=\operatorname{Rs} \underline{25000} \times 14$ |
|  | $=\operatorname{Rs} \underline{\underline{35000}}$ |

## Example 5

If a person who invested Rs 40500 to by Rs 10 shares at Rs 13.50 received Rs 3300 as dividend income, find the dividend paid for the shares.

| Amount invested | $=\operatorname{Rs~} 40500$ |
| :--- | :--- |
| Number of shares purchased | $=\frac{40500}{13.50}$ |
|  | $=3000$ |
| Nominal value of the shares | $=$ Rs $3000 \times 10$ |
|  | $=$ Rs 30000 |
| Dividend income | $=$ Rs 3300 |
| Dividend | $=\frac{3300}{30000} \times 100 \%$ |
|  | $=\underline{\underline{11 \%}}$ |

## Exercise 10.1

(1) Fill in the blanks in the table given below

| Cash <br> invested in <br> the business | Nominal <br> value of a <br> share | Market <br> value of a <br> share | Number of <br> shares <br> purchased | Nominal <br> value of <br> shares in the <br> business | Dividend | Profit |
| :---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Rs 3000 | Rs 10 | Rs 12 | - | - | $8 \%$ | - |
| - | Rs 10 | Rs 8 | - | - | $6 \%$ | Rs 750 |
| - | Rs 25 | Rs 30 | - | Rs 2500 | - | Rs 375 |
| - | - | Rs 15 | Rs 400 | Rs 4000 | $14 \%$ | - |
| Rs 9000 | Rs 25 | - | - | Rs 7500 | - | Rs 900 |

(2) Kumara invested Rs 15000 to buy Rs 25 shares at Rs 30 per share in a business which pays an $8 \%$ dividend.
(i) What is the number of shares he bought?
(ii) What is the nominal value of the shares?
(iii) Find the annual income
(iv) Express the annual income as a percentage of the investment
(3) A person invested some amount of money to buy Rs 10 shares at Rs 15 per share in a business which pays a $12 \%$ dividend. If he received an annual income of Rs 1500 , find the amount of money he invested.
(4) A person who invested Rs 18000 to buy Rs 100 shares in a business which pays a $6 \%$ dividend, got Rs 1200 as the annual income. How much money did he pay per share?
(5) A person invested Rs12 000 to buy Rs 10 shares at Rs12 per share in a company which pays a $15 \%$ dividend. After getting the annual income he sold his shares at Rs 15 per share and invested that and the annual income to buy Rs 25 shares in a company which pays a $12 \%$ dividend. His annual income increased by Rs 750 . Find the market value of a share in the second company.
(6) A person invested Rs 27000 to buy Rs 10 shares at Rs 9 per share in a company which pays a $12 \%$ dividend. After getting the annual income he sold his shares at par value. He invested that money and the income, to buy Rs 10 shares at Rs 12 per share in another company which pays a $15 \%$ dividend. What is the income he gained from the second company?
(7) A person purchased shares of Rs 10 in Naveen and Company which pays a $16 \%$ dividend, and gained a profit of Rs 4000 at the end of the year. What is the nominal value of the shares in Naveen and Company?
(8) A person having an amount of Rs 45000 , invested Rs 24000 of it to buy Rs 10 shares at Rs 8 per share in a company which pays a $12 \%$ dividend, and the rest to buy Rs 10 shares at Rs 15 per share in another company which pays an $18 \%$ dividend. Find his dividend income.
(9) A person having Rs 10 shares of value Rs 6000 in a company which pays a 7\% dividend, invested the money gained by selling those shares and bought Rs 25 shares at Rs 24 per share in a business which pays $6 \%$ dividend. From this, his income increased by Rs 105 . What is the price at which he sold the Rs 10 shares which pays a $7 \%$ dividend?
(10) A person having Rs 80000 , invested Rs 36000 of it to buy Rs 10 shares at Rs 12 per share in a company which pays $15 \%$ dividend, and the rest to buy Rs 20 shares at Rs 22 per share in a company which pays a $14 \%$ dividend. Express the total dividend income as a percentage of his investment.
(11) A person bought an equal number of Rs 100 shares from company $A$, which pays a dividend of $5 \%$ and from company B , which pays a dividend of $4 \%$. He gained a total profit of Rs 2700 from both companies. Then he invested the money he gained by selling shares of company A at Rs 108 , and company B at Rs 90 , to buy Rs 10 shares at Rs 18 in a company which pays a dividend of $12 \%$.
(i) What is the total amount of money received by selling the shares?
(ii) What is the nominal value of the shares which pay a $12 \%$ dividend?
(iii) What is the dividend dincome from Rs 10 shares?

