Assignment1

G Harsha Vardhan Reddy CS21BTECH11017

ICSE 2018 5(B)

variable	symbol	formula	value
Total investment	T	-	₹22500
cost of each share	CP	-	₹50
Discount	d	-	10%
Market Price	MP	CP - d	?
No.of shares	n	$\frac{T}{MP}$	?
Dividend per share	d_1	-	12%
Total dividend	D	$d_1 \times n$	?
Rate of return	r	$\frac{D}{T}$	?

' ? ' $\implies$ To be calculated

' - ' $\implies$ Primary variables

Given

Total investment(T) = ₹$22,500$.

cost of each share (CP) = ₹50

Discount on each share (d) = 10%

$$\implies d = \frac{10}{100} \times 50 \tag{1}$$

$$\implies d = 5 \tag{2}$$

$\therefore$ discount = ₹5 on each share

$\therefore$The Market price of each share(MP)

$$MP = CP - d \tag{3}$$

$$\implies MP = 50 - 5 \tag{4}$$

$\therefore$ Market Price (MP) = ₹45 .

1) Total number of shares purchased (n)

$$n = \frac{CP}{MP} \tag{5}$$

$$\implies n = \frac{22500}{45} \tag{6}$$

$$\implies n = 500 \tag{7}$$

$\therefore$ On total 500 shares were purchased.

2) Given

Dividend paid by the company (D) = 12%

Dividend on each share (d_1)

$$d_1 = 12\% \ of \ CP \tag{8}$$

$$\implies d_1 = \frac{12}{100} \times 50 \tag{9}$$

$$\implies d_1 = 6. \tag{10}$$

$\therefore$ Dividend on each share (d_1) = ₹6.

$$\text{Total dividend}(D) = d_1 \times n \quad (11)$$

$$\implies D = 6 \times 500 \quad (12)$$

$$\implies D = 3000. \quad (13)$$

$\therefore$Total dividend paid by the company $(D) =$ ₹3000.

3) Rate of return he gets on investment

$$(r) = \frac{D}{T} \times 100 \quad (14)$$

$$\implies r = \frac{3000}{22500} \times 100 \quad (15)$$

$$\implies r = 13.33\% \quad (16)$$

$$\implies r \approx 13\% \quad (17)$$

$\therefore$ He gets 13% return on his investment.