Assignment1

G Harsha Vardhan Reddy CS21BTECH11017

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variable	symbol	formula
Total investment	T	-
Value of each share	CP	-
Discount	d	-
Market Price	MP	CP - d
No.of shares	n	$\frac{\text{T}}{\text{MP}}$
dividend per share	d_1	-
Total dividend	D	$d_1 \times n$
Rate of return	r	$\frac{D}{T}$

Given
Total investment(T) = ₹22,500.
The value of each share (CP) = ₹50
Discount on each share (d) = 10%

$$\implies d = \frac{10}{100} \times 50$$
$$\implies d = 5$$

∴ discount = ₹5 on each share
∴The Market price of each share(MP) = $CP - d$

$$\implies MP = 50 - 5$$

∴ Market Price (MP) = ₹45 .

1) Total number of shares purchased (n)

$$n = \frac{CP}{MP}$$
$$\implies n = \frac{22500}{45}$$
$$\implies n = 500$$

∴On total 500 shares were purchased.

2) Given
Dividend paid by the company (D) = 12%
Dividend on each share (d_1) = 12% of (CP)

$$\implies d_1 = \frac{12}{100} \times 50$$
$$\implies d_1 = 6$$

∴ Dividend on each share (d_1) = ₹6
Total dividend(D) = $d_1 \times n$

$$\implies D = 6 \times 500$$
$$\implies D = 3000.$$

∴Total dividend paid by the company (D) = ₹3000.

3) Rate of return he gets on investment

$$(r) = \frac{D}{T} \times 100$$
$$\implies r = \frac{3000}{22500} \times 100$$
$$\implies r = 13.33\%$$
$$\implies r \approx 13\%$$

∴ He gets 13% return on his investment.