

Chapter 25

Shares and Dividends

REMEMBER

Before beginning this chapter, you should be able to:

- Learn some basic concepts related to shares and dividends.
- Understand the term dividend.

KEY IDEAS

After completing this chapter, you would be able to:

- Study classification of share capital.
- Learn about nominal value and market value.
- Understand about dividend in detail.
- Find return on investments.

INTRODUCTION

The total amount of money required to start a business enterprise or a company is called the '**capital**'. A business enterprise may be a sole proprietary concern, a partnership firm, or a company.

The capital received to start a significantly big company runs into several crores of rupees. A group of entrepreneurs called '**promoters**' start a company, but they cannot possibly invest huge amount capital. Hence, the whole capital is divided into many small and equal units. These units are called 'shares'. Later, the company invites the public to invest money in its business by buying these shares. All companies cannot raise capital from the public. Only public limited companies can exercise this right.

The money arranged and used for setting up a company or a business enterprise is called the '**investment**'. Those who arrange this money are called '**investors**'.

A public limited company is a company limited by shares with no restriction on the maximum number of shareholders, transfer of shares, and acceptance of public deposits. The minimum number of shareholders is seven.

CLASSIFICATION OF SHARE CAPITAL

Authorised capital is the capital limit authorised by the registrar of companies. It is the specified amount up to which shares can be issued to the members or public. The paid-up share capital is the paid portion of the capital subscribed by the shareholders. The minimum limit of authorised capital for a public limited company is ₹500,000.

In other words, **authorised capital** is the capital with which a company is registered. The company can issue shares up to the maximum level of its authorized capital. Paid-up capital means the amount of capital actually paid by the shareholders in respect of shares allotted to them.

The following example gives a clear idea of the division of capital into shares.

Example: Suppose the capital requirement of a company is ₹15 crores.

Then, the whole capital can be divided into:

1. 15 lakh shares of ₹100 each, or
2. 30 lakh shares of ₹50 each, or
3. 60 lakh shares of ₹25 each.

For every investment, the company issues a share certificate reflecting the value of each share and the number of shares held by the investors.

A person who is allotted shares or who buys shares is called a 'shareholder'. After the shares are allotted, the shareholder can sell those in the stock market.

Nominal Value of a Share (NV)

Nominal value of a share is the value printed on the share certificate. It is also known as the 'face value' (FV) or 'par value'.

Market Value of a Share (MV)

Market value is the value of a share at which it is bought or sold in the stock market.

Notes A share is said to be:

1. at premium or above par, if $MV > FV$.
2. at discount or below par, if $MV < FV$.
3. at par, if $MV = FV$.

Dividend

Dividend is a part of the annual profit distributed among the shareholders.

Dividend is paid on per share or as a percentage. If it is paid as a percentage, it is reckoned on the face value of the share.

Notes

1. The face value of a share always remains the same.
2. The market value of a share changes from time to time.
3. Dividend is always paid on the face value of a share.
4. The number of shares held by a person

$$= \frac{\text{Total income}}{\text{Income from each share}} = \frac{\text{Total face value}}{\text{Face value of each share}}.$$

Return on Investment

$$\text{Rate of return} = \frac{\text{Annual income}}{\text{Total investment}} \times 100.$$

EXAMPLE 25.1

Find the market value of ₹200 share bought at a premium of ₹50.

SOLUTION

Face value of the share = ₹200

The share was bought at a premium of ₹50.

∴ Market value of the share = ₹(200 + 50) = ₹250.

EXAMPLE 25.2

If a ₹100 share is available at a discount of ₹10, then find the market value of 270 such shares.

SOLUTION

Face value of the share = ₹100

The share is available at a discount of ₹10

Market value of each share = $100 - 10 = ₹90$

Market value of 270 such shares = $90(270) = ₹24,300$.

EXAMPLE 25.3

Satish invests a certain amount of money in 200, ₹60 shares of a company by paying a dividend of 8%. Find his annual income from the investment.

SOLUTION

Face value of the share = ₹60

Number of shares bought = 200

Rate of dividend paid = 8%

$$\text{Annual income from each share} = \frac{8}{100}(60) = \frac{480}{100} = ₹4.80.$$

∴ Annual income Satish earned from 200 shares = $4.8 \times 200 = ₹960$.

EXAMPLE 25.4

Karan invests ₹18,000 by buying ₹100 shares of a company available at a discount of ₹10. If the company pays a dividend of 10%, then find the number of shares bought by Karan, and the rate of return on his investment.

SOLUTION

Total investment = ₹18,000

Face value of each share = ₹100

The shares are available at a discount of ₹10.

Market value of each share = $100 - 10 = ₹90$.

$$\text{Number of shares bought} = \frac{\text{Total investment}}{\text{Market value of each share}} = \frac{18000}{90} = 200$$

⇒ Number of shares bought by Karan = 200

Rate of dividend = 10%

His annual income from each share = $10\% (100) = ₹10$

⇒ His annual income from 200 shares = $200 (10) = ₹2000$

$$\begin{aligned}\Rightarrow \text{The rate of return on his investment} &= \frac{\text{Annual income}}{\text{Total investment}}(100) = \frac{2000}{18000}(100) \\ &= \frac{100}{9}\% = 11\frac{1}{9}\%\end{aligned}$$

∴ Karan receives a return of $11\frac{1}{9}\%$ pa on his investment.

Alternative solution:

We have, $\text{FV} \times \text{Rate of dividend} = \text{MV} \times \text{Rate of return}$.

$$100 \times 10\% = 90 \times \text{Rate of return}$$

$$\Rightarrow \text{Rate of return} = 11\frac{1}{9}\%.$$

EXAMPLE 25.5

Which is a better investment: ₹200 shares at ₹220 which pay a dividend of 10%, or ₹100 shares at ₹120 which pay a dividend of 12%?

SOLUTION

Case 1: ₹200 shares at ₹220 paying a dividend of 10%

$$\text{Rate of return} = \frac{\text{FV} \times \text{Rate of dividend}}{\text{MV}} = \frac{200 \times 10\%}{220} = 9\frac{1}{11}\%.$$

Case 2: ₹100 shares at ₹120 paying a dividend of 12%

$$\begin{aligned}\text{Rate of return} &= \frac{\text{FV} \times \text{Rate of dividend}}{\text{MV}} \\ &= \frac{100 \times 12\%}{120} = 10\%.\end{aligned}$$

∴ 12%, ₹100 shares at ₹120 is a better investment.

TEST YOUR CONCEPTS

Very Short Answer Type Questions

1. The whole capital divided into small and equal units are called _____.
2. The value of a share printed on the share certificate is called its _____.
3. Dividend is always calculated on the _____ of a share.
4. _____ is the annual profit distributed among the shareholders.
5. The value at which a share is bought or sold in the market is called its _____.
6. A person who is allotted shares or who buys shares is called a _____ of the company.
7. Does the face value of a share remain constant all the time?
8. Is the market value of a share always constant?
9. If a ₹180 share is quoted at a premium of ₹27, then the market value of each share is _____.
10. If a ₹100 share is available at par, then its market value is _____.

Short Answer Type Questions

11. If Anil bought a ₹150 share at a premium of ₹20 while Raju bought the same kind of share at a discount of ₹20 of the same company, then the dividend earned by Anil is _____ the dividend earned by Raju. [equal to/less than/more than]
12. Find the market value of 300, ₹150 shares bought at a premium of ₹30.
13. Find the annual income derived from an investment of ₹18,000 in ₹150 shares available at ₹180 of a company paying 11% dividend.
14. ₹60,000 is invested in buying ₹120 shares of a company which are available at a premium of 25%. Find the number of shares bought and the annual rate of return on the investment, if dividend is paid at the rate of 10% per annum.
15. An investment of ₹36 on a share earns the investor a return of 10%. If dividend is 12% on each share, then what is its face value?
16. A man invests ₹20,000 in ₹80 shares of a company available at a premium of ₹20. If the company pays a dividend of 8%, then find the rate of return on the investment.
17. If Satish bought 120, ₹200 shares of a particular company at a premium of ₹24, paying 9% dividend, then find Satish's annual income.
18. If an investment of ₹42,000 in ₹300 shares of a company, paying a dividend of 7%, results in an annual income of ₹2,100, then find the market value of each share.
19. A person invested ₹18,000 in buying ₹150 shares of a company which are available at a premium of ₹50. If the company pays a 9% dividend, then find the number of shares bought by him and also the annual income he earned from the investment.
20. Which is a better investment, (A) ₹60 shares at ₹75 paying a dividend of 10%; or (B) ₹100 share at ₹120 paying a dividend of 12%?

Essay Type Questions

21. Naresh invested a certain amount of money in ₹100 shares at a discount of ₹20 paying a dividend of 7%, while Sahil invested an equal amount in ₹90 shares at a discount of ₹10 paying a dividend of 8%. Who earns more?
22. How much should a man invest in 12%, ₹150 shares of a company available at a premium of ₹30, if the annual income earned is to be ₹3,600?
23. Rupesh invests ₹45,000 partly in ₹150 shares at ₹180 for 8% and partly in ₹75 shares at ₹135 for 12%. If the annual incomes from the investments are in the ratio 2 : 3 respectively, then find the investments made by Rupesh in the two types of shares.

24. Rahul invested a certain amount in buying ₹25 shares of a company, which pays a dividend of 12%. If he earns 10% per annum on his investment, then find the market value of each share.
25. Kavya bought 300, ₹50 shares paying a dividend of 8%. If she sold them when the price rose to ₹90 and invested the proceeds in 10%, ₹50 shares at ₹30, then find the change in her annual income.

CONCEPT APPLICATION

Level 1

- If a ₹200 share is bought at a discount of ₹50 and the dividend paid is 9%, then the rate of return is _____ per annum.
(a) 18% (b) 9%
(c) 10% (d) 12%
- A person invests ₹20,000 at 20%, ₹150 shares at a premium of ₹50. The income from these shares in is ₹ _____.
(a) 1,000 (b) 3,000
(c) 1,500 (d) 2,000
- If 200, ₹100 shares are bought at a premium of ₹20, then the total investment made is ₹ _____.
(a) 20,000 (b) 40,000
(c) 24,000 (d) 48,000
- A person invests ₹15,000 in ₹50 shares of a company paying 10% dividend. If the company pays a dividend of ₹6,250, the market value of each share is _____.
(a) ₹8 (b) ₹10
(c) ₹12 (d) ₹7
- A man buys 24 shares at ₹150 per share having the par value of ₹100. If the dividend is 7.5% pa, then the ratio of total annual income to his total investment is _____.
(a) 1 : 10 (b) 10 : 1
(c) 1 : 20 (d) 20 : 1
- The total investment made in buying ₹X shares at a premium of 25% is ₹125X. The number of shares bought is _____.
(a) 500 (b) 250
(c) 125 (d) 100
- Praveen invests ₹24,000 in ₹100 shares of a company paying 10% dividend. If his annual income from these shares is ₹1,200, then the market value of each share is ₹ _____.
(a) 100 (b) 200
(c) 300 (d) 400
- Which of the following is/are true for the statement: '9%, ₹100 shares at ₹120'?
(a) Dividend on 1 share = ₹9
(b) Rate of return is 7.5%
(c) Both (a) and (b)
(d) None of the above
- A man has 62 shares of ₹100 each, dividend is 7.5% pa. If he wants to increase his annual income by ₹150, then he should buy _____ more shares.
(a) 20 (b) 40
(c) 10 (d) 30
- The market value of x, ₹50 shares, at a discount of ₹10 is ₹4,000, then $x =$ _____.
(a) 10 (b) 100
(c) 50 (d) 75

Level 2

- A man buys 500, ₹10 shares at a premium of ₹3 on each share. If the rate of dividend is 12%, then the rate of interest received by him on his money is _____ (approximately).
(a) 6.5% (b) 7.5%
(c) 9.23% (d) 5%
- Rishi bought ₹50 shares of a company for ₹75 each. The company pays a dividend of 12% per



annum. The effective rate of return on his investments is _____.

- (a) 6% (b) 8%
(c) 9% (d) 10%

13. If ₹56,000 is invested in buying ₹120 shares at a discount of $16\frac{2}{3}\%$, then find the number of shares bought is _____.

- (a) 2,800 (b) 560
(c) 280 (d) 400

14. The market value of a share is ₹90, its face value is ₹80, and the dividend is 8%. The rate of return is _____.

- (a) $8\frac{1}{3}\%$ (b) $7\frac{1}{9}\%$
(c) $6\frac{2}{3}\%$ (d) $5\frac{2}{3}\%$

15. Ankit invests ₹18,000 in buying ₹270 shares in a company at a premium of ₹30. If the dividend paid is 10% per annum, then Ankit's annual income from these shares is _____.

- (a) ₹162 (b) ₹1620
(c) ₹16.20 (d) ₹16,200

16. Which is a better investment: '15%, ₹220 shares at ₹240 of company A' or '18%, ₹200 shares at ₹240 of company B'?

- (a) Company A
(b) Company B
(c) Both (a) and (b)
(d) Cannot say

17. Mr Gellard invested ₹16,000 in 7%, ₹200 shares at ₹160. He sold the shares at ₹150 each. He incurred a _____.

- (a) loss of ₹1,300
(b) loss of ₹1,000
(c) profit of ₹1,000
(d) profit of ₹1,200

18. Priya invested ₹27,000 in ₹180 shares at ₹150 at the beginning of a financial year. The company paid a dividend of 12%. Priya sold all her shares at the

end of the year. Over this period, her net earnings were ₹1828. She sold the shares for _____ each.

- (a) ₹160.15 (b) ₹181.75
(c) ₹185 (d) ₹138.56

19. Teja brought ₹80 shares of a company which pays 15% dividend. If the rate of return is 12%, then the market price is _____.

- (a) ₹90 (b) ₹80
(c) ₹100 (d) ₹99

20. Randeep invests ₹25,200 in buying shares of face value of ₹40 each at 5% premium. The dividend on these shares is 10% per annum. Find the dividend he receives annually.

- (a) ₹2,520 (b) ₹2,400
(c) ₹4,200 (d) ₹3,680

21. Mr Prudhvi invested ₹16,900 in buying shares worth ₹100 at a premium of ₹30. Find the number of shares bought by him.

- (a) 169 (b) 150
(c) 130 (d) 129

22. The dividend received from 10% ₹125 shares at ₹150, is ₹1,875. Find the number of shares.

- (a) 125 (b) 150
(c) 270 (d) 135

23. Find the market value of 200 shares worth ₹120, each bought at a discount of ₹20. (in ₹)

- (a) 28,000 (b) 24,000
(c) 26,000 (d) 20,000

24. Ms Meenakshi invested ₹32,400 in buying certain shares of a company. If the amount of dividend received by her is ₹4,860, then find the rate of return.

- (a) 15% (b) 12%
(c) 14% (d) 13%

25. Ms Shriya bought 1000 shares worth ₹500 each at 12% premium. Find the market value of each share.

- (a) ₹612 (b) ₹560
(c) ₹760 (d) ₹840



Level 3

26. Which of the following is a better investment?
- (A) 10%, ₹100 shares at ₹120.
(B) 9%, ₹100 shares at ₹110.
- (a) A
(b) B
(c) Both (A) and (B)
(d) Data insufficient
27. Vamsi invested some amount buying ₹150 shares of a company which pays dividend at the rate of 8% per annum. If he gets back 10% pa on his investment, then the value at which he bought the shares is ____.
- (a) ₹100 (b) ₹120
(c) ₹180 (d) ₹210
28. Mr Srikar bought ₹80 shares of a company at a premium of ₹10. If the company pays a dividend at the rate of $x\%$ per annum, and Mr Srikar earns at the rate of $y\%$ per annum on his investment, then $x:y$ is ____.
- (a) 1 : 8 (b) 8 : 1
(c) 8 : 1 (d) 9 : 8
29. Sachin invests ₹15,000 on buying ₹100 shares of a company at a premium of ₹50 and gets $6\frac{2}{3}\%$ per annum on his investment. Then the rate at which the company pays the dividend is ____.
- (a) 5% (b) 8%
(c) 9% (d) 10%
30. Praveen made an investment of ₹54,000 in 10%, ₹100 shares at ₹90, while Vijay made an investment of ₹60,000 in 8%, ₹150 shares at ₹120. If both of them sold their shares at the end of the year for ₹110 each, then their individual earnings are _____, respectively.
- (a) ₹12,000 and ₹12,000
(b) ₹18,000 and ₹1,000
(c) ₹12,000 and ₹1,000
(d) ₹18,000 and ₹1,200
31. If ₹25,000 more invested, then 400 more shares can be purchased. Find the market value of each share.
- (a) ₹62.50
(b) ₹77.50
(c) ₹85.00
(d) Cannot be determined
32. Which of the following is/are true for the statement: '15%, ₹120 shares at ₹200'?
- (a) Face value of each share is ₹120.
(b) Market value of each share is ₹200.
(c) Dividend from each share is ₹18.
(d) All of these
33. Find the rate of return from ' $d\%$ ₹ f at ₹ m '. (in %)
- (a) fd/m
(b) md/f
(c) fm/d
(d) None of these
34. Shares worth ₹150 each were bought at ₹180. Which of the following is necessarily true?
- (a) Each share was bought at ₹30 discount.
(b) Each share was bought at ₹30 premium.
(c) Each share was bought at 30% discount.
(d) Each share was bought at 30% premium.
35. Mrs Pravallika has 100 shares worth ₹100 at a premium of ₹100. If the rate of dividend is 10%, then find the total dividend received by her at the end of a year (in ₹).
- (a) ₹4,000 (b) ₹3,000
(c) ₹2,000 (d) ₹1,000
36. Mr Anil bought ₹110 shares of a company at a discount of ₹10. If the company pays a dividend at the rate of $x\%$ per annum, and Mr Anil earns at the rate of $y\%$ per annum on his investment, then $x : y$ is ____.
- (a) 10 : 9 (b) 9 : 10
(c) 11 : 10 (d) 10 : 11





37. Mr Balu invested ₹15,000 in 10%, ₹100 shares at ₹120, and also invested ₹24,000 in 12%, ₹120 shares at ₹100. The total earnings from the two investments is _____.

- (a) ₹4,500 (b) ₹4,706
(c) ₹4,700 (d) ₹4,509

38. Mrs Apoorva invests ₹12,000 in buying ₹200 shares in a company at a premium of ₹50. If the dividend paid is 10% per annum, then Apoorva's annual income from these shares is _____.

- (a) ₹1,020 (b) ₹960
(c) ₹840 (d) ₹780

39. Mr Krish made an investment of ₹27,000 in 10%, ₹100 shares at ₹90 while Mr Ram made an investment of ₹30,000 in 8%, ₹150 shares at ₹120.

If both of them sold their shares at the end of a year for ₹110 each, then their individual earnings are _____, respectively.

- (a) ₹2,000 and ₹1,200
(b) ₹1,800 and ₹1,000
(c) ₹9,000 and ₹500
(d) ₹1,800 and ₹1,200

40. Mrs Karuna invested some amount in buying ₹120 shares of a company which pays a dividend at the rate of 10% per annum. If she gets back 8% pa on her investment, then the value at which she bought the shares is _____.

- (a) ₹100 (b) ₹150
(c) ₹180 (d) ₹210

TEST YOUR CONCEPTS

Very Short Answer Type Questions

- | | |
|---|----------------|
| 1. shares | 6. shareholder |
| 2. face value (or) nominal value (or) par value | 7. Yes |
| 3. face value | 8. No |
| 4. Dividend | 9. ₹207 |
| 5. market value | 10. ₹100 |

Short Answer Type Questions

- | | |
|--------------|--|
| 11. equal to | 16. 6.4% |
| 12. ₹54,000 | 17. ₹2,160 |
| 13. ₹1,650 | 18. ₹420 |
| 14. 400; 8% | 19. 90; ₹1,215 |
| 15. ₹30 | 20. ₹100 shares at ₹120 paying a dividend of 12% |

Essay Type Questions

- | | |
|--------------------------|------------|
| 21. Sahil | 24. ₹30 |
| 22. ₹36,000 | 25. ₹3,300 |
| 23. ₹18,000 and ₹27,000. | |

CONCEPT APPLICATION

Level 1

1. (d) 2. (b) 3. (c) 4. (c) 5. (c) 6. (d) 7. (b) 8. (c) 9. (a) 10. (b)

Level 2

11. (c) 12. (b) 13. (b) 14. (b) 15. (b) 16. (b) 17. (b) 18. (d) 19. (c) 20. (b)
21. (c) 22. (b) 23. (d) 24. (a) 25. (b)

Level 3

26. (a) 27. (b) 28. (d) 29. (d) 30. (b) 31. (a) 32. (d) 33. (a) 34. (b) 35. (d)
36. (d) 37. (b) 38. (b) 39. (c) 40. (b)



CONCEPT APPLICATION

Level 1

- Rate of dividend $\times$ FV = Rate of return $\times$ MV
- First of all, the annual income from one share is to be found.
 - $MV = FV + \text{Premium}$.
 - Find the number of shares.

$$\frac{\text{Annual income}}{(\text{Number of shares} \times \text{FV})}$$
 - $\text{Income} = \frac{\times (\text{Rate of dividend})}{100}$.
- Investment = MV $\times$ (Number of shares)
- Rate of return = $\frac{\text{Annual income}}{\text{Total investment}} \times 100$.
 - By using the following formula find MV.
 Use, $FV \times \text{Rate of dividend} = MV \times \text{Rate of return}$.
- Require rates = Annual income = MV of 1 share.
 - Income from 1 share = $\frac{(FV \times \text{Rate of dividend})}{100}$.
- Then find the total income from 24 shares.
 - $MV = (150 + 100)$
 Total investment = MV $\times$ 24.
- Number of share = Total investment/MV.
- $MV = \frac{\text{Total investment}}{\text{Number of shares}}$
 - Rate of return = $\frac{\text{Annual income}}{\text{Total investment}} \times 100$.
 - By using the following formula find MV.
 Use, $FV \times \text{Rate of dividend} = MV \times \text{Rate of return}$.
- Find annual income from one share.
- Rate of dividend $\times$ FV = MV $\times$ Rate of return
 - In the given data, rate of interest is same as the rate of return.
 - $FV \times \text{Rate of dividend} = MV \times \text{Rate of return}$.

Level 2

- Same as Question No. 6
 Use the following formula to find the rate of return.
 $FV \times \text{Rate of dividend} = MV \times \text{Rate of return}$.
- Number of shares = $\frac{\text{Amount invested}}{MV}$.
- $MV \times \text{Rate of return} = \text{Rate of dividend} \times FV$.
- First of all, the number of shares is to be found.
- Find the dividends of the two companies.
 - Find the rate of return in two cases by using the following formula.
 $FV \times \text{Rate of dividend} = MV \times \text{Rate of return}$.
 - The one with greater rate of return is better.
- Number of shares = $\frac{\text{Total investment}}{MV}$.
 - Number of shares = $\frac{\text{Total investment}}{MV \text{ of each share}}$.
 - SP of total shares = ₹150 $\times$ Number of shares.
- Number of shares = $\frac{(\text{Total investment})}{(\text{MV of each share})}$.
 - Find the dividend paid on all the shares.
 - SP = $\frac{(27000 + 1828 - \text{Dividend})}{\text{Number of shares}}$.
- $MV \times \text{Rate of return} = \text{Rate of dividend} \times FV$.
- Total investment = ₹16,900
 $FV = ₹100$
 $\text{Premium} = ₹30$
 $MV = FV + \text{Premium} = ₹130$
 The number of shares

$$= \frac{\text{Total investment}}{MV} = \frac{16900}{130} = 130$$

22. $FV = ₹125$

$MV = ₹150$

Rate of dividend = 10%

Dividend from each shares = 10% of ₹125

= ₹12.5

Given, total dividend = ₹1,875.

The number of shares = $\frac{1875}{12.5} = 150$.

23. The number of shares = 200

Face value (FV) of each share = ₹120

Discount on each share = ₹20

Market value of each share = FV – Discount

= ₹120 – ₹20

= ₹100

∴ Market value of 200 shares (in ₹) = $200 \times 100 = ₹20,000$.

24. Total investment = ₹32,400

Dividend = ₹4860

Rate of return = $\frac{4860}{32400} \times 100\% = 15\%$.

25. The number of shares = 1000

FV = ₹500

Premium = 12% of ₹500 = ₹60

MV = FV + Premium = ₹560.

Level 3

27. (i) Same as Question No. 6

Use the following formula to find the MV.

$FV \times \text{Rate of dividend} = MV \times \text{Rate of return}$.

28. $MV \times \text{Rate of return} = \text{Rate of dividend} \times FV$.

29. (i) $MV = FV + \text{Premium}$.

(ii) Use the following formula to find the rate of dividend.

$FV \times \text{Rate of dividend} = MV \times \text{Rate of return}$.

30. (i) Find the dividends received by two persons.

(ii) Number of shares = $\frac{\text{Total investment}}{\text{MV of each share}}$.

(iii) Find their dividends by using FV and rate of dividend.

(iv) Find their profit/loss obtained by selling each at ₹110.

31. From the given data, 400 shares can be purchased with an investment of ₹25,000.

∴ Market value of each shares (in ₹)

= $\frac{25000}{400} = 62.50$.

32. $FV = ₹120$

$MV = ₹200$

Rate of dividend = 15%

Dividend from each share (in ₹) = 15% of 120 = 18

All the given options are true.

33. $FV = ₹f$

$MV = ₹M$

Rate of dividend = $d\%$

Rate of return = $\frac{FV \times \text{Rate of dividend}}{MV} = \frac{fd}{m}\%$.

34. $FV = ₹150$

$MV = ₹180$

Premium = $MV - FV = ₹30$ is true.

35. $FV = ₹100$

Rate of dividend = 10%

Number of shares = 100

Dividend from each share (in ₹) = 10% of 100 = 10

Total dividend from 100 shares (in ₹) = $100 \times 10 = 1000$.

36. Dividend $\times$ Face value = Market value $\times$ Rate of return

$\Rightarrow 110 \times x = 100 \times y \Rightarrow \frac{x}{y} = \frac{10}{11}$.





37. On the first Investment:

$$\text{Number of shares} = \frac{15000}{120} = 125$$

$$\text{Dividend earned} = \left(\frac{10}{100} \times 125 \right) 125 = ₹1250$$

On the second Investment:

$$\text{Number of shares} = \frac{24000}{100} = 240$$

$$\Rightarrow \text{Dividend earned} = 240 \times \frac{12}{100} \times 120 = ₹3456$$

Total earnings = ₹4706.

38. Market value = Face value + Premium = 200 + 50 = ₹250

Number of shares purchased

$$= \frac{\text{Total investment}}{\text{Market value}} = \frac{12000}{250} = 48$$

$$\text{Dividend is } 10\% \text{ of } ₹200 = \frac{10}{100} \times 200 = ₹20$$

$$\Rightarrow \text{Total income from 48 shares} = 48 \times 20 = ₹960.$$

39. Number of shares bought by Krish = $\frac{27000}{90} = 300$

$\Rightarrow$ Dividend earned on 300 shares

$$= 300 \times \frac{10}{100} \times 100 = ₹3000$$

Money received by selling these 30 shares = $300 \times 110 = ₹33,000$

$\Rightarrow$ Earnings received by Krish = $33,000 + 3000 - 27,000 = ₹9000$

Number of shares bought by Vijay

$$= \frac{\text{Total Investment}}{\text{Market Value}} = \frac{30000}{120} = 250$$

$\Rightarrow$ Total dividend earned on 500 shares

$$= 250 \times \frac{8}{100} \times 150 = ₹3000$$

Money received by selling these 500 shares = $250 \times 110 = ₹27,500$

$\Rightarrow$ Earnings received by Vijay = $27,500 + 3000 - 30000 = ₹500$.

40. Rate of dividend $\times$ FV = Rate of return $\times$ MV

$$10 \times 120 = 8 \times \text{Market value}$$

$$\therefore \text{Market value} = ₹150.$$