

CHAPTER 2

Valuation of Shares

INTRODUCTION

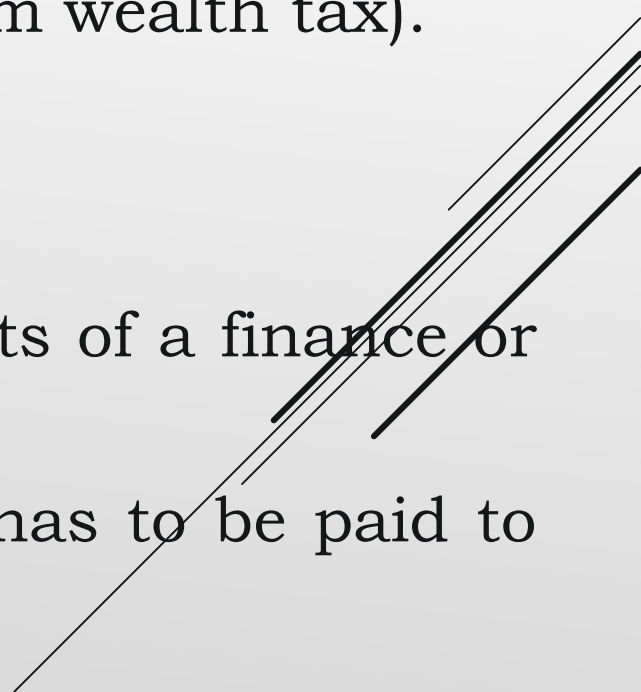
- The problem of valuation of shares is one of the most complicated problems facing an accountant. Generally, the shares of public companies are quoted on recognized stock exchanges, and there is no difficulty in fixing the values of such shares. But the prices quoted on stock exchanges are many times not enough for certain purposes, because they are influenced by a number of external factors like government policy, political situation, etc. over which the company has no control.
- Further, shares of all the public companies are not quoted on the Stock Exchanges. Shares of those public companies which do not fulfill the listing requirements or which do not apply to the stock exchange for listing their shares are not quoted on the stock exchange. Hence, the shares of such public companies have to be valued in accordance with some accepted principles.

NEED FOR VALUATION OF SHARES

The following are the particular circumstances where it becomes necessary to value the shares:

- When unquoted shares of private or public companies are bought and sold.
- When two or more companies amalgamate or are absorbed by some other company, it becomes necessary to arrive at the value of shares held by the members of the company being absorbed.
- When partners in a firm jointly hold shares and the partnership is dissolved, the value of such shares are to be determined for fair distribution of property of the firm.
- When loan is to be obtained on the security of such shares.
- Where the company is reconstructed under Section 494, its shares are valued for acquiring shares of dissentient shareholders.

NEED FOR VALUATION OF SHARES_(CONT.)

- When shares of one class are to be converted into some other type of shares.
 - When shares in a company are gifted, they must be valued for gift tax purposes.
 - For wealth-tax purposes (Now shares are exempted from wealth tax).
 - When shares are acquired for controlling purposes.
 - For transfer of shares of private company.
 - When it becomes necessary to make valuation of assets of a finance or investment company.
 - When an industry is nationalized and compensation has to be paid to the shareholders of companies taken over.
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FACTORS AFFECTING VALUE OF SHARES

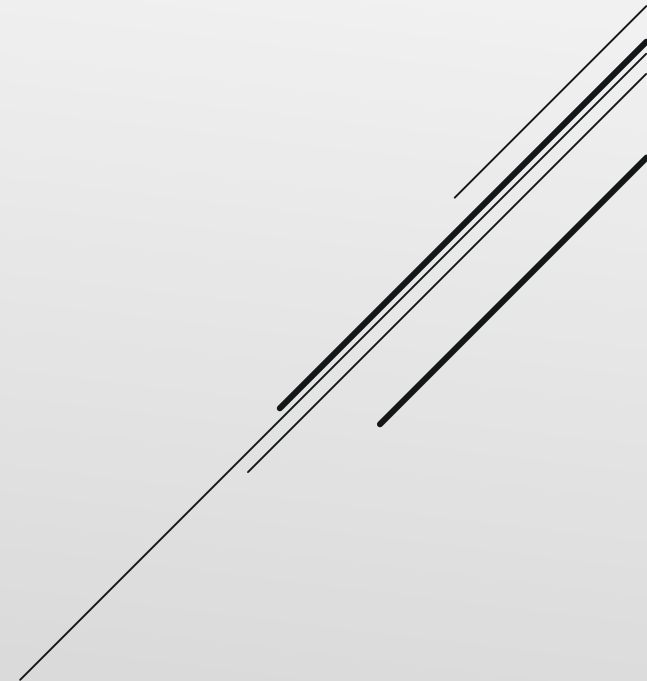
The factors that affect the valuation of shares are largely the same that affect the valuation of goodwill. Generally, shares are valued on the basis of yield and the factors that affect the yield are broadly divided into two categories, viz. (a) Internal factors and (b) External factors.

(a) Internal Factors

- i. Financial Position
- ii. Earning Capacity
- iii. Goodwill
- iv. Unfavorable Ratios
- v. Capital Employed

(b) External Factors

- i. Nature of Business
- ii. Quantum of Savings
- iii. Government Policy
- iv. Political Condition
- v. Facilities Available
- vi. Return on Shares of other Companies

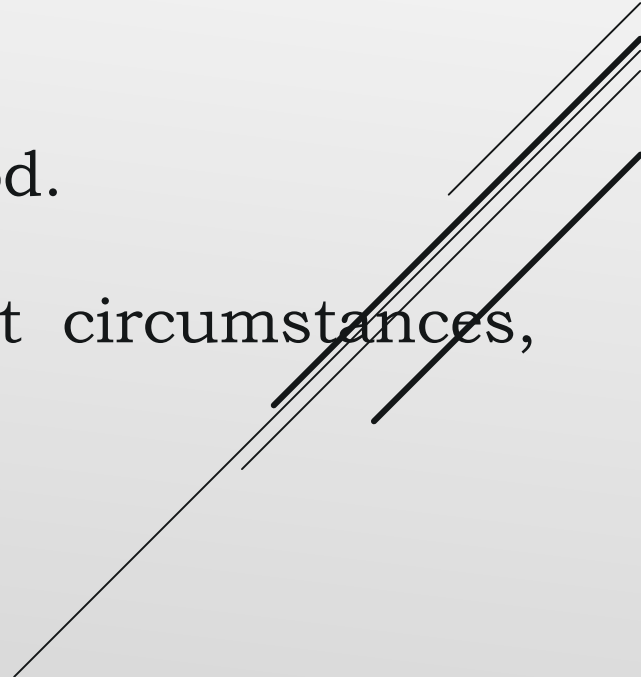


METHODS OF VALUATION OF SHARES

There are two generally accepted and widely used methods of valuing shares:

- I. Net Assets Valuation Method or Asset Backing Method or Intrinsic Value Method or Break-up Value Method
- II. Yield Method or Earning Capacity Valuation Method.

The above methods may be used in different circumstances, depending upon the purpose of valuation.



NET ASSETS VALUATION OR INTRINSIC VALUE METHOD

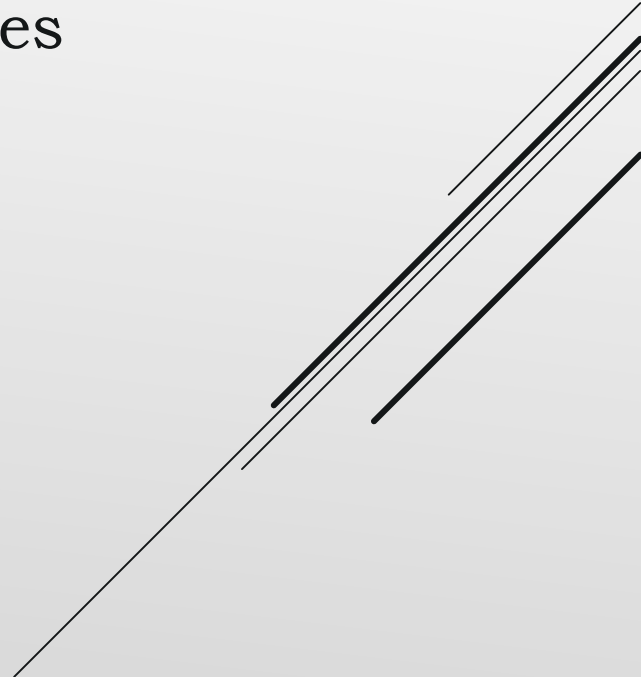
The valuation of shares under this method is made by dividing the Net Assets of the company by the number of shares. The value of assets included in total assets must, of course, be the market value on the date of valuation, e.g., the total assets of a company are valued at ₹ 1,00,000 and its liabilities amounted to ₹ 40,000 i.e., its Net Assets are ₹ 60,000. Suppose the number of equity shares are 3,000 of ₹ 100 each fully paid, then the value of share will be:

$$\begin{aligned}\text{Intrinsic Value of Share} &= \frac{\text{Net Assets}}{\text{Number of Shares}} \\ &= \frac{60,000}{3,000} = ₹ 20.\end{aligned}$$

This is the Intrinsic Value of Share.

NET ASSETS VALUATION OR INTRINSIC VALUE METHOD

The following points should be carefully studied in connection with Net Assets Method:

- ❑ Goodwill
 - ❑ Fictitious Assets
 - ❑ The assets should be valued at their realizable values
 - ❑ Depreciation
 - ❑ Non – trading Investments
 - ❑ The balances of accumulated profits
 - ❑ Liabilities
 - ❑ Preference Capital and Preference Dividend
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NET ASSETS VALUATION OR INTRINSIC VALUE METHOD

Share Valuation on basis of Net Assets

(Determining Intrinsic Value of Shares)

(1) Find out the Net Assets.

Net Assets = Total Assets – Total Liabilities

(i) If goodwill is to be found out, then add it to the total assets.

(ii) Pref. Share Capital and Arrears of Pref. dividend must be deducted from Net Assets.

(2) Find out the intrinsic value with the help of following formula.

$$\text{Intrinsic Value of Equity Shares} = \frac{\text{Net Assets}}{\text{No. of Equity Shares}}$$

1. From the following information, ascertain the value of Equity shares under the "Net Assets Method."

Balance Sheet
as at 31st March, 2020

Particulars	Note	Rs.
I. EQUITY AND LIABILITIES :		
(1) Shareholders' Funds :		
(a) Share Capital :		
1,000 Equity Shares of Rs. 100 each		1,00,000
1,000 10% Pref. Shares of Rs. 100 each		1,00,000
(2) Current Liabilities :		
(a) Trade Payables : Creditors		2,00,000
Total		<u>4,00,000</u>
II. ASSETS :		
(a) Fixed Assets :		
(i) Tangible Assets		3,80,000
(ii) Intangible Assets : Goodwill		10,000
(b) Other Non-Current Assets : Preliminary Expenses		10,000
Total		<u>4,00,000</u>

Sundry assets including Goodwill were valued at Rs. 5,10,000. There was an unrecorded liability of Rs. 10,000.

Solution:

Step – 1: Net Assets = Total Assets – Total Liabilities

Total Assets		₹
Sundry Assets including Goodwill		5,10,000
Less: Total Liabilities		
Creditors	2,00,000	
Unrecorded Liabilities	10,000	2,10,000
Net Assets		<u>3,00,000</u>
Less: 10% Pref. Capital		<u>1,00,000</u>
Capital Employed		<u>2,00,000</u>

$$\text{Step - 2: Intrinsic Value of Share} = \frac{\text{Net Assets}}{\text{No. of Equity Shares}}$$

$$= \frac{2,00,000}{1,000}$$

$$= \boxed{\text{₹ 200}}$$

Rs. 6,66,400 + 2,00,000
 (4) Rate of dividend 20% (1,12,000 × 100 / 1,00,000)
 (20% × 100 / 10% = 200).]

24. Following is the Balance Sheet of a company as on 31-3-2020 :

Particulars	Note	Rs.
I. EQUITY AND LIABILITIES :		
(1) Shareholders' Funds :		
(a) Share Capital :		
'A' 6,000 Equity Shares of Rs. 100 each,		3,60,000
Rs. 60 paid up		3,00,000
'B' 30,000 Equity Shares of Rs. 10 each fully paid		3,00,000
12% Preference Share Capital		1,20,000
(b) Reserves and Surplus : General Reserve		
(2) Non-Current Liabilities :		
(a) Long Term Provisions :		
Depreciation Fund :		
Building	45,000	
Machinery	75,000	
		1,20,000
(3) Current Liabilities :		
(a) Trade Payables : Creditors		
		5,10,000
	Total	17,10,000
II. ASSETS :		
(1) Non-Current Assets :		
(a) Fixed Assets :		
(i) Tangible Assets :		
Building		6,00,000
Machinery		5,25,000
		15,000
(b) Other Non-Current Assets : Preliminary Expenses		
(2) Current Assets :		
(a) Inventories : Stock		
		75,000
(b) Trade Receivables : Debtors		
		4,80,000
(c) Cash and Cash Equivalents : Cash balance		
		15,000
	Total	17,10,000

Goodwill is determined at Rs. 2,40,000. The market value of building is Rs. 7,50,000. The market value of machinery is 20% less than its book value. Find out the Intrinsic value of both types of equity shares.

Solution: Step – 1: Net Assets = Total Assets – Total Liabilities

Total Assets		₹
Goodwill		2,40,000
Building		7,50,000
Machinery (5,25,000 – Dep. 75,000)	4,50,000	
Less: 20 % of Book Value	<u>90,000</u> →	3,60,000
Stock		75,000
Debtors		4,80,000
Cash Balance		15,000
		<hr/>
	Total Assets	19,20,000
Less: Total Liabilities: Creditors		<u>5,10,000</u>
		14,10,000
Less: 12% Preference Share Capital		<u>3,00,000</u>
		11,10,000
Add: Uncalled Amount of Equity Shares		
(6,000 Eq. Shares × ₹ 40 per share uncalled amount)		<u>2,40,000</u>
		<hr/>
	Net Assets / Capital Employed	13,50,000

Now, we have to divide total net assets into two types of shares in their capital ratio.

Type A Equity Shares = 6,000 shares of ₹ 100 each = ₹ 6,00,000
and Type B Equity Shares = 30,000 shares of ₹ 10 each = ₹ 3,00,000.

So, the capital ratio of A and B is 2 : 1.

So, we have divide Total Net Assets in 2 : 1.

Net Assets for Type 'A' Eq. Shares = $13,50,000 \times \frac{2}{3} = ₹ 9,00,000$ and

Net Assets for Type 'B' Eq. Shares = $13,50,000 \times \frac{1}{3} = ₹ 4,50,000$.

$$\text{Step - 2: Intrinsic Value of Share} = \frac{\text{Net Assets}}{\text{No. of Equity Shares}}$$

$$\text{For, Type 'A' Eq. Shares (Fully paid)} = \frac{9,00,000}{6,000} = \boxed{\text{₹ 150}}$$

$$\text{Type 'A' Eq. Shares (Partly paid)} = \text{₹ 150} - \text{₹ 40} = \boxed{\text{₹ 110}}$$

$$\text{Intrinsic Value of Type 'B' Eq. Shares} = \frac{4,50,000}{30,000} = \boxed{\text{₹ 15}}$$

YIELD VALUATION METHOD

This method takes into account the earnings available for distribution for valuing shares. The value so calculated is generally known as “Market Value”. When an investor thinks of purchasing shares of a company, he is interested in the income that he will receive from his investments. Hence, the shares are generally valued on the basis of yield. This method is known as “Yield Valuation Method” or “Earning Capacity Valuation Method”.

While ascertaining the value of shares according to Net Assets Method we think in terms of closing down the company, that is what the assets would realize if the company is wound up and what amount per share would be returned to shareholders out of the proceeds. In other words, we calculate the Asset Backing per share. However, an investor does not think of winding up of the company when he purchases shares. He has an eye on the earnings.

YIELD VALUATION METHOD

Under this method, the following steps are essential for finding out the value of shares:

Valuation of Shares on Yield Basis (Market Value of shares)

1. Find out of the average net profits i.e. future maintainable profit (after making necessary adjustments).
2. Find out the rate of dividend that can be paid on equity shares on the basis of average profits.
3. Find out the market value of shares by following formula :

$$\frac{\text{Percentage of Dividend}}{\text{Expected Rate of Return}} \times \text{Paid up amount per share}$$

YIELD VALUATION METHOD

❑ Future Maintainable Profit: The profit of the company which the company is expected to earn and maintain in future should be ascertained. Certain adjustments must be made in the average profit so arrived at in order to get the “Future Maintainable Profits”.

❑ Non-recurring items should be excluded.

❑ Income-tax must be provided for out of the profits.

❑ Dividend on Preference shares should be deducted.

❑ Rate of Dividend = $\frac{\text{Profit Available For Dividend}}{\text{Equity Share Capital}} \times 100$

❑ Value of Share = $\frac{\text{Rate of Dividend}}{\text{Normal Rate of Return (ERR)}} \times \text{Paid up Value of Share}$

FAIR VALUE METHOD

The fair value of a share may be taken to mean the average of the intrinsic value based on Net Assets and market value based on Yield.

This value is fair in circumstances when the net profits of the company are small and at the same time its net assets are substantial. In such a case there will be a marked difference between the values computed under the two methods and a compromise is effected by ascertaining the mean of these two values which is known as “Fair Value”. In fact, this value has no utility except that it is a compromise in certain circumstances.

$$\square \text{ Fair Value of Share} = \frac{\text{Intrinsic Value} + \text{Market Value}}{2}$$

ABS. value of Equity share Rs. 200, Net Assets Rs. 2,00,000

2. The following is the position of Gita-Kanchan Ltd. as on 31-3-2020.

	Rs.		Rs.
Goodwill	1,00,000	Building	2,00,000
Machinery	5,00,000	Debentures	1,00,000
Reserve and Surplus	2,00,000	Cash	10,000
Bank Balance	50,000	Debtors	72,000
Bad Debts Reserve	2,000	Stock	80,000
Investments :		Workmen's Profit :	
(a) Shares of Subsidiary company	40,000	Sharing Fund	40,000
(b) 10% Government Securities	50,000	12% Pref. Shares	1,00,000
Workmen's Compensation Fund	10,000	Creditors	60,000
		Advertisement	
		Suspense Account	1,00,000

5,000 Equity shares of Rs. 100 each, on which Rs. 80 per share have been paid.

2,000 Equity shares of Rs. 100 each, fully paid.

Additional Informations :

- (1) The book value of stock and machinery is to be reduced by 25% and 20% respectively and building is to increased by 50%.

168

- (2) The average annual profit of last three years after deducting income-tax at 50% is Rs. 1,02,000.
 - (3) The expected rate of return on capital employed in this type of business is considered to be 10%.
 - (4) The Goodwill of the company is now valued at Rs. 2,70,000.
- From the above particulars, ascertain the fair value of equity shares of the company.

Solution: Step – 1: Net Assets = Total Assets – Total Liabilities

Total Assets		₹
Goodwill		2,70,000
Machinery	(5,00,000 – Decrease 20%)	4,00,000
Building	(2,00,000 + 50%)	3,00,000
Investment (a) Shares of Subsidiary Company		40,000
	(b) 10% Government Securities	50,000
Stock	(80,000 – 25%)	60,000
Debtors	(72,000 – B.D.R. 2,000)	70,000
Cash Balance		10,000
Bank Balance		50,000
Total Assets		<u>12,50,000</u>
Less: Total Liabilities: Debentures	1,00,000	
Creditors	60,000	
Workmen's Profit Sharing Fund	40,000	2,00,000
		<u>10,50,000</u>
Less: 12% Preference Share Capital		<u>1,00,000</u>
		9,50,000
Add: Uncalled Amount of Equity Shares		
	(5,000 Eq. Shares × ₹ 20 per share uncalled amount)	1,00,000
		<u>1,00,000</u>
Net Assets / Capital Employed		<u>10,50,000</u>

$$\text{Step - 2: Intrinsic Value of Share} = \frac{\text{Net Assets}}{\text{No. of Equity Shares}}$$

$$\text{For, Fully paid Eq. Shares} = \frac{10,50,000}{7,000} = \boxed{\text{₹ 150}}$$

$$\begin{aligned} \text{Partly paid Eq. Shares} &= \text{Intrinsic Value of Fully paid} \\ &\quad - \text{Uncalled Amount per share} \\ &= \text{₹ 150} - \text{₹ 20} \\ &= \boxed{\text{₹ 130}} \end{aligned}$$

(B) Yield Value or Market Value:

Step – 1: Future Maintainable Profit:

Particulars	₹
Average Profit after tax	1,02,000
Less: Preference Dividend (1,00,000 × 12%)	<u>12,000</u>
So, Future Maintainable Profit	90,000

$$\begin{aligned}\text{Step – 2: Rate of Dividend} &= \frac{\text{Profit Available For Dividend}}{\text{Equity Share Capital (Paid up)}} \times 100 \\ &= \frac{90,000}{6,00,000} \times 100 = \mathbf{15\%}\end{aligned}$$

Where, Total Paid up capital = 5,000 Eq. shares of ₹ 80 + 2,000 Eq. shares of ₹ 100
= 4,00,000 + 2,00,000 = ₹ 6,00,000

Step – 3: Market Value of Share = $\frac{\text{Rate of Dividend}}{\text{Normal Rate of Return (ERR)}} \times \text{Paid up Value of Share}$

$$\text{For, Fully paid} = \frac{15}{10} \times 100 = \boxed{\text{₹ 150}}$$

$$\text{Partly paid} = \frac{15}{10} \times 80 = \boxed{\text{₹ 120}}$$

(C) Fair Value of Eq. shares = $\frac{\text{Intrinsic Value} + \text{Market Value}}{2}$

$$\text{Fully paid} = \frac{150 + 150}{2} = \boxed{\text{₹ 150}}$$

$$\text{Partly paid} = \frac{130 + 120}{2} = \boxed{\text{₹ 125}}$$

3. The Balance Sheet of Jasmine Ltd. as on 31-3-2020 is given below.
Balance Sheet as on 31-3-2020

Particulars	Note	Rs.
I. EQUITY AND LIABILITIES :		
(1) Shareholders' Funds :		
(a) Share Capital :		
Equity shares of Rs. 10 each		20,00,000
Reserves and Surplus : General Reserve		10,00,000
(2) Non-Current Liabilities :		
(a) Long Term Borrowings : 12% Debentures		5,00,000
(3) Current Liabilities :		
(a) Trade Payables : Creditors		5,00,000
Total		<u>40,00,000</u>
II. ASSETS :		
(1) Non-Current Assets :		
(a) Fixed Assets :		
(i) Tangible Assets :		
Land & Building		5,00,000
Furniture		2,00,000
Plant & Machinery		20,00,000
(2) Current Assets :		
(a) Inventories : Stock		8,00,000
(b) Trade Receivables : Debtors		2,00,000
(c) Cash and Cash Equivalents : Bank balance		3,00,000
Total		<u>40,00,000</u>

Additional Informations :

- (1) The present value of the assets of the company is to be taken as double.
- (2) The goodwill of the company is to be valued at double the average super profit of last three years.
- (3) The profit of last three years of the Company was Rs. 12,00,000, Rs. 12,00,000 and Rs. 12,00,000 respectively.
- (4) The expected rate of return in the Company's line of business is 10%.
- (5) For the last three years, the Company has been transferring 25% of the profit earned every year to its General Reserve Account and distributing the balance amount to shareholders as dividend.

From the above information find out the, (1) Intrinsic value, (2) Average yield value, and (3) Fair value of the shares of the company.

Solution: Here, value of goodwill is not given, so we have to find out it first.

Step – 1: Net Assets = Total Assets – Total Liabilities

Total Assets		₹
Land & Building	(5,00,000 × 2)	10,00,000
Furniture	(2,00,000 × 2)	4,00,000
Plant & Machinery	(20,00,000 × 2)	40,00,000
Stock	(8,00,000 × 2)	16,00,000
Debtors		2,00,000
Bank Balance		3,00,000
Total Assets		75,00,000
Less: Total Liabilities:		
12% Debentures	5,00,000	
Creditors	5,00,000	10,00,000
Net Assets / Capital Employed		65,00,000

Step – 2: Expected Profit = Capital Employed × E.R.R.

$$= ₹ 65,00,000 \times 10\%$$

$$= ₹ 6,50,000$$

Step – 3: Find out Average Profit or Future Maintainable Profit:

$$\text{Average Profit} = \frac{\text{Total Profit}}{\text{No.of years}}$$

Here, total profit of last three years:

$$12,00,000 + 12,00,000 + 12,00,000 = 36,00,000.$$

$$\text{So, Average Profit} = \frac{36,00,000}{3}$$

$$= ₹ 12,00,000$$

Step – 4: Super Profit = Future Maintainable Profit

– Expected Profit

$$= ₹ 12,00,000 – ₹ 6,50,000$$

$$= ₹ 5,50,000$$

Step – 5: Goodwill = Double of Average Super Profit

$$= ₹ 5,50,000 × 2$$

$$= ₹ 11,00,000$$

Now, We will find out fair value of shares and for that first we need to find Intrinsic value and Market value of share.

(A) Intrinsic Value of Share

Step – 1: Net Assets = Total Assets – Total Liabilities

Here, Net Assets as in goodwill	65,00,000
Add: Goodwill	11,00,000
	<hr/>
So, Net Assets for valuation of share	76,00,000
	<hr/>

$$\text{Step – 2: Intrinsic Value of Share} = \frac{\text{Net Assets}}{\text{No. of Equity Shares}}$$

$$\text{Fully paid Eq. Shares} = \frac{76,00,000}{2,00,000}$$

$$= \boxed{\text{₹ 38}}$$

(B) Yield Value or Market Value:

Step – 1: Future Maintainable Profit:

	₹
Average profit	12,00,000
Less: Transfer to G.R. (25%)	3,00,000
Future Maintainable Profit	<u>9,00,000</u>

$$\text{Step – 2: Rate of Dividend} = \frac{\text{Profit Available For Dividend}}{\text{Equity Share Capital (Paid up)}} \times 100$$

$$= \frac{9,00,000}{20,00,000} \times 100$$

$$= 45 \%$$

Step – 3: Market Value of Share = $\frac{\text{Rate of Dividend}}{\text{Normal Rate of Return (ERR)}} \times \text{Paid up Value of Share}$

$$= \frac{45}{10} \times 10$$

$$= \text{₹ } 45$$

(C) Fair Value of Eq. shares = $\frac{\text{Intrinsic Value} + \text{Market Value}}{2}$

$$= \frac{38 + 45}{2}$$

$$= \text{₹ } 41.5$$

4. Following is the Balance Sheet of Laghu Kailas Co. Ltd. as at 31-12-2019 :

Particulars	Note	Rs.
I. EQUITY AND LIABILITIES :		
(1) Shareholders' Funds :		
(a) Share Capital : Equity Shares of Rs. 100 each		10,00,000
(b) Reserves and Surplus		
General Reserve		2,50,000
Profit & Loss A/c		2,50,000
(2) Current Liabilities :		
(a) Trade Payables : Creditors		5,00,000
Total		<u>20,00,000</u>
II. ASSETS :		
(1) Non-Current Assets :		
(a) Fixed Assets :		
(i) Tangible Assets :		
Land & Building		4,00,000
Furniture		25,000
Machinery		4,50,000
Motor Car		25,000
(b) Non-Current Investments : 20% Investments		50,000
(c) Other Non-Current Assets : Advt. Suspense A/c		20,000
(2) Current Assets :		
(a) Inventories : Stock		7,25,000
(b) Trade Receivables : Debtors		2,00,000
(c) Cash and Cash Equivalents : Bank balance		1,05,000
Total		<u>20,00,000</u>

Additional Informations :

- (1) Building and Machinery are to be valued at Rs. 6,00,000 and Rs. 5,20,000 respectively.
- (2) All investments are to be valued at 60% above cost.
- (3) Depreciation on appreciated value of Building and Machinery is not to be considered for valuation of goodwill.
- (4) Profit after 50% tax are as follows :

2016	Rs. 3,05,000	2018	Rs. 4,24,000
2017	Rs. 3,84,000	2019	Rs. 5,04,000
- (5) In similar business, expected rate of return on capital employed is 20% (after tax).
- (6) In 2017 machinery (book value Rs. 20,000) was sold for Rs. 20,000, but the proceeds were wrongly credited to profit and loss A/c. This mistake has not yet been rectified. Depreciation has been charged at 10% per annum on straight line method.
- (7) Goodwill is to be valued on the basis of 3 years' purchase of super profits based on weighted average profit of the last four years.
- (8) Find out the fair value of equity shares.

Solution: Here, value of goodwill is not given, so we have to find out it first.

Step – 1: Net Assets = Total Assets – Total Liabilities

Total Assets		₹
Land & Building		6,00,000
Furniture		25,000
Machinery		5,20,000
Motor Car		25,000
Stock		7,25,000
Debtors		2,00,000
Bank Balance		1,05,000
Total Assets		22,00,000
Less: Total Liabilities:		
Creditors	5,00,000	5,00,000
Net Assets / Capital Employed		17,00,000

Step – 2: Expected Profit = Capital Employed × E.R.R.

$$= ₹ 17,00,000 \times 20\%$$

$$= ₹ 3,40,000$$

Step – 3: Find out Average Profit or Future Maintainable Profit:

$$\text{Weighted Average Profit} = \frac{\text{Total Weighted Profit}}{\text{Total Weight}}$$

Here, Profit of the company after tax is given so we find first profit before tax and the scrutiny of profits reveals following adjustments :

Particulars	2016	2017	2018	2019
Profit before tax	6,10,000	7,68,000	8,48,000	10,08,000
(1) Capital Income considered revenue	---	(20,000)	---	---
(2) Depreciation of capital income	---	2,000	2,000	2,000
So, Adjusted Profit before tax	6,10,000	7,50,000	8,50,000	10,10,000

Now, the Weighted profits and total weights of the last four years are as under:

Year	Profit	Weight	Weighted Profit
2016	6,10,000	1	6,10,000
2017	7,50,000	2	15,00,000
2018	8,50,000	3	25,50,000
2019	10,10,000	4	40,40,000
Total	---	10	87,00,000

So, Weighted Average Profit = $\frac{87,00,000}{10} = ₹ 8,70,000$

□ Future Maintainable Profit:

Weighted Average Profit

Less: Interest on 20% Investment (50,000 × 20%)

Less: Taxes (50%)

So, Future Maintainable Profit

₹
8,70,000
10,000
<hr/>
8,60,000
4,30,000
<hr/>
4,30,000
<hr/>

Step – 4: Super Profit = Future Maintainable Profit

– Expected Profit

$$= ₹ 4,30,000 – ₹ 3,40,000$$

$$= ₹ 90,000$$

Step – 5: Goodwill = Super Profit × No. of Purchasing years'

$$= ₹ 90,000 × 3$$

$$= ₹ 2,70,000$$

Now, We will find out fair value of shares and for that first we need to find Intrinsic value and Market value of share.

(A) Intrinsic Value of Share

Step – 1: Net Assets = Total Assets – Total Liabilities

Here, Net Assets as in goodwill	17,00,000
Add: Goodwill	2,70,000
Non – trade Investment (50,000 + 60%)	80,000
So, Net Assets for valuation of share	<u>20,50,000</u>

$$\text{Step – 2: Intrinsic Value of Share} = \frac{\text{Net Assets}}{\text{No.of Equity Shares}}$$

$$\text{Fully paid Eq. Shares} = \frac{20,50,000}{10,000}$$

$$= \text{₹ 205}$$

(B) Yield Value or Market Value:

Step – 1: Future Maintainable Profit:

	₹
Weighted Average profit as in goodwill	8,70,000
Less: Taxes (50%)	4,35,000
Profit available for Dividend	<u>4,35,000</u>

$$\begin{aligned}\text{Step – 2: Rate of Dividend} &= \frac{\text{Profit Available For Dividend}}{\text{Equity Share Capital (Paid up)}} \times 100 \\ &= \frac{4,35,000}{10,00,000} \times 100 \\ &= \mathbf{43.5 \%}\end{aligned}$$

Step – 3: Market Value of Share = $\frac{\text{Rate of Dividend}}{\text{Normal Rate of Return (ERR)}} \times \text{Paid up Value of Share}$

$$= \frac{43.5}{20} \times 100$$

$$= \boxed{\text{₹ 217.50}}$$

(C) Fair Value of Eq. shares = $\frac{\text{Intrinsic Value} + \text{Market Value}}{2}$

$$= \frac{205 + 217.5}{2}$$

$$= \boxed{\text{₹ 211.25}}$$

6. The following is the Balance Sheet of Priyanka Ltd. as on 31st March 2020 :

Particulars	Note	Rs.
I. EQUITY AND LIABILITIES :		
(1) Shareholders' Funds :		
(a) Share Capital :		
'A' Equity Shares of Rs. 100 each fully paid up		6,00,000
'B' Equity Shares of Rs. 100 each, Rs. 75 paid up		3,00,000
(b) Reserves and Surplus : General Reserve		
4,00,000		4,00,000
(2) Current Liabilities :		
(a) Trade Payables : Creditors		
		3,00,000
Total		<u>16,00,000</u>
II. ASSETS :		
(1) Non-Current Assets :		
(a) Fixed Assets		
		10,00,000
(2) Current Assets :		
(Including Bank balance Rs. 1,00,000)		
		6,00,000
Total		<u>16,00,000</u>

The market value of all the assets of the Company is 20% more than the book value.

The average profit of the Company after taxes at 35% is Rs. 1,80,000 and expected rate of return is 10%.

Calculate the value of both Shares as per Intrinsic Value Method and Yield Method.

Solution:

Step – 1: Net Assets = Total Assets – Total Liabilities

Total Assets	₹
Fixed Assets (10,00,000 + 20 %)	12,00,000
Current assets other than bank balance (5,00,000 + 20%)	6,00,000
Bank Balance	1,00,000
Total Assets	19,00,000
Less: Total Liabilities	
Creditors	3,00,000
	16,00,000
Add: Uncalled Amount of 'B' Equity shares (4,000 Eq. shares × ₹ 25 per share)	1,00,000
Net Assets/Capital Employed	17,00,000

$$\text{Step - 2: Intrinsic Value of Share} = \frac{\text{Net Assets}}{\text{No. of Equity Shares}}$$

$$\text{For, Fully paid Eq. Shares} = \frac{17,00,000}{10,000} = \boxed{\text{₹ 170}}$$

$$\begin{aligned} \text{Partly paid Eq. Shares} &= \text{Intrinsic Value of Fully paid} \\ &\quad - \text{Uncalled Amount per share} \\ &= \text{₹ 170} - \text{₹ 25} \\ &= \boxed{\text{₹ 145}} \end{aligned}$$

(B) Yield Value or Market Value:

Step – 1: Future Maintainable Profit = ₹ 1,80,000

Step – 2: Rate of Dividend = $\frac{\text{Profit Available For Dividend}}{\text{Equity Share Capital (Paid up)}} \times 100$

$$= \frac{1,80,000}{9,00,000} \times 100$$

$$= \mathbf{20\%}$$

Step – 3: Market Value of Share = $\frac{\text{Rate of Dividend}}{\text{Normal Rate of Return (ERR)}} \times \text{Paid up Value of Share}$

For, Fully paid = $\frac{20}{10} \times 100 = \mathbf{₹ 200}$

Partly paid = $\frac{20}{10} \times 75 = \mathbf{₹ 150}$

$$\text{(C) Fair Value of Eq. shares} = \frac{\text{Intrinsic Value} + \text{Market Value}}{2}$$

$$\text{Fully paid} = \frac{170 + 200}{2} = \boxed{\text{₹ 185}}$$

$$\text{Partly paid} = \frac{145 + 150}{2} = \boxed{\text{₹ 147.5}}$$

The Balance Sheet of Ayodhya Ltd. as on 31-3-2020 is as under :

Particulars	Note	Rs.
I. EQUITY AND LIABILITIES :		
(1) Shareholders' Funds :		
(a) Share Capital :		
5,000 Equity Shares of Rs. 100 each Rs.50 paid		2,50,000
30,000 Equity Shares of Rs. 10 each		3,00,000
10% Pref. Share Capital		2,00,000
(b) Reserves and Surplus :		
General Reserve		1,90,000
Worker's Accident Compensation Fund		1,000
(2) Non-Current Liabilities :		
(a) Long Term Borrowings : 10% Debentures		1,25,000
(b) Long Term Provisions :		
Provident Fund		15,000
Depreciation Fund :		
Land & Building		37,500
Machinery		52,500
(3) Current Liabilities :		
(a) Trade Payables : Creditors		49,000
Total		<u>12,20,000</u>
II. ASSETS :		
(1) Non-Current Assets :		
(a) Fixed Assets :		
(i) Tangible Assets :		
Land & Building		3,75,000
Machinery		3,50,000
(ii) Intangible Assets : Goodwill		1,25,000

(b) Non-Current Investments :		
Shares of Subsidiary Company		75,000
12% P.F. Investments		15,000
10% Govt. Bonds		50,000
(c) Other Non-Current Assets :	Preliminary Expenses	28,500
(2) Current Assets :		
(a) Inventories : Stock		
(b) Trade Receivables :		99,500
Debtors	75,000	
– Bad Debts Reserve	3,000	
(c) Cash and Cash Equivalents : Cash balance		72,000
		30,000
	Total	<u>12,20,000</u>

Additional Informations :

- (1) The market value of land and buildings is Rs. 4,50,000.
- (2) Rs. 7,500 dividend is received on the shares of subsidiary company.
- (3) The average profit of Ayodhya Ltd. after providing 60% tax of the last three years is Rs. 1,22,000.
- (4) The expected rate of return in capital employed is 10%.
- (5) The goodwill of the company is to be calculated on the basis of two years' purchase of super profits.

From the above informations, find out the Intrinsic Value and Market Value of the equity share.

Solution: Here, value of goodwill has to be find out first.

Step – 1: Net Assets = Total Assets – Total Liabilities

Total Assets		₹
Land & Building		4,50,000
Machinery (3,50,000 – Depreciation 52,500)		2,97,500
Shares of Subsidiary Company		75,000
12 % P. F. Investment		15,000
Stock		99,500
Debtors (75,000 – B.D.R. 3,000)		72,000
Cash Balance		30,000
Total Assets		10,39,000
Less: Total Liabilities: 10% Debentures	1,25,000	
Provident Fund	15,000	
Creditors	49,000	
		1,89,000
		8,50,000
Less: 10% Preference Share Capital		2,00,000
Net Assets / Capital Employed		6,50,000

Step – 2: Expected Profit = Capital Employed × E.R.R.

$$= ₹ 6,50,000 \times 10\%$$

$$= ₹ 65,000$$

Step – 3: Find out Average Profit or Future Maintainable Profit:

Here, Profit of the company after tax is given so we find first profit before tax.

We assume Profit before tax as 100, so tax is 60 and profit after tax is 40.

So, here Profit after tax is ₹ 1,22,000 then, profit before tax is

Particulars	₹
Profit before tax (1,22,000 × 100 ÷ 40)	3,05,000
Less: Interest of Non-trading investment (50,000 × 10%)	5,000
	<hr/>
	3,00,000
Less: Taxes (60%)	1,80,000
	<hr/>
Profit After tax	1,20,000
Less: Preference Dividend (2,00,000 × 10%)	20,000
	<hr/>
Future Maintainable Profit	1,00,000

Step – 4: Super Profit = Future Maintainable Profit

– Expected Profit

$$= ₹ 1,00,000 – ₹ 65,000$$

$$= ₹ 35,000$$

Step – 5: Goodwill = Super Profit × No. of Purchasing years'

$$= ₹ 35,000 × 2$$

$$= ₹ 70,000$$

Now, We will find out fair value of shares and for that first we need to find Intrinsic value and Market value of share.

(A) Intrinsic Value of Share

Step – 1: Net Assets = Total Assets – Total Liabilities

Here, Net Assets as in goodwill	6,50,000
Add: Goodwill	70,000
Non – trade Investment (10% govt. securities)	50,000
Uncalled amount of Eq. Shares (5,000 × 50)	2,50,000
	<hr/>
So, Net Assets for valuation of share	10,20,000
	<hr/>

Now, we have to divide total net assets into two types of shares in their capital ratio.

Type A Equity Shares = 5,000 shares of ₹ 100 each = ₹ 5,00,000
and Type B Equity Shares = 30,000 shares of ₹ 10 each = ₹ 3,00,000.

So, the capital ratio of A and B is 5 : 3.

So, we have divide Total Net Assets in 5 : 3.

Net Assets for Type 'A' Eq. Shares = $10,20,000 \times \frac{5}{8} = ₹ 6,37,500$ and

Net Assets for Type 'B' Eq. Shares = $10,20,000 \times \frac{3}{8} = ₹ 3,82,500$.

$$\text{Step - 2: Intrinsic Value of Share} = \frac{\text{Net Assets}}{\text{No. of Equity Shares}}$$

$$\text{For, Type 'A' Eq. Shares (Fully paid)} = \frac{6,37,500}{5,000} = \boxed{\text{₹ 127.5}}$$

$$\text{Type 'A' Eq. Shares (Partly paid)} = \text{₹ 127.5} - \text{₹ 50} = \boxed{\text{₹ 77.5}}$$

$$\text{Intrinsic Value of Type 'B' Eq. Shares} = \frac{3,82,500}{30,000} = \boxed{\text{₹ 12.75}}$$

(B) Yield Value or Market Value:

Step – 1: Future Maintainable Profit:

	₹
Average profit before tax as in goodwill	3,05,000
Less: Taxes (60%)	<u>1,83,000</u>
Profit after tax	1,22,000
Less: Preference Dividend (2,00,000 × 10%)	<u>20,000</u>
Profit available for Dividend	<u>1,02,000</u>

Step – 2: Rate of Dividend = $\frac{\text{Profit Available For Dividend}}{\text{Equity Share Capital (Paid up)}} \times 100$

$$= \frac{1,02,000}{5,50,000} \times 100$$
$$= \mathbf{18.54 \%}$$

Step – 3: Market Value of Share = $\frac{\text{Rate of Dividend}}{\text{Normal Rate of Return (ERR)}} \times \text{Paid up Value of Share}$

$$\text{For, Type 'A' Fully paid} = \frac{18.54}{10} \times 100 = \boxed{\text{₹ 185.4}}$$

$$\text{Type 'A' Partly paid} = \frac{18.54}{10} \times 50 = \boxed{\text{₹ 92.70}}$$

$$\text{Type 'B' Fully paid} = \frac{18.54}{10} \times 10 = \boxed{\text{₹ 18.54}}$$

(C) Fair Value of Eq. shares = $\frac{\text{Intrinsic Value} + \text{Market Value}}{2}$

$$\text{For, Type 'A' Fully paid} = \frac{127.5 + 185.4}{2} = \boxed{\text{₹ 156.45}}$$

$$\text{Type 'A' Partly paid} = \frac{77.5 + 92.7}{2} = \boxed{\text{₹ 85.10}}$$

$$\text{Type 'B' Fully paid} = \frac{12.75 + 18.54}{2} = \boxed{\text{₹ 15.645}}$$

value of Rs. 100 share Rs. 92.70 and Rs. 100 share Rs. 100.00

9. The Balance Sheet of Rajan Ltd. on 31-3-2020 is as under.

Particulars	Note	Rs.
I. EQUITY AND LIABILITIES :		
(1) Shareholders' Funds :		
(a) Share Capital :		
Equity Shares of Rs. 100 each fully paid up		7,00,000
Equity Shares of Rs. 100 each, Rs. 50 paid		1,50,000
9% Pref. Shares of Rs. 100 each fully paid		5,00,000
		3,54,900
(b) Reserves and Surplus : General Reserve		
(2) Non-Current Liabilities :		
(a) Long Term Borrowings : 6% Debentures		
		1,00,000
(3) Current Liabilities :		
(a) Trade Payables : Creditors		
		50,100
(b) Short Term Provisions :		
Proposed Dividend on Pref. Shares		45,000
Taxation Provision		3,00,000
Total		22,00,000
II. ASSETS		
(1) Non-Current Assets :		
(a) Fixed Assets :		
(i) Tangible Assets : Land & Building		
		12,69,000
(ii) Intangible Assets : Goodwill		
		91,000
(b) Non-Current Investments : 10% Govt. Securities		
		1,00,000
(c) Other Non-Current Assets : Advt. Suspenses A/c		
		84,000
(2) Current Assets :		
(a) Inventories : Stock		
		2,06,000
(b) Trade Receivables : Debtors		
		1,00,000
(c) Cash and Cash Equivalents :		
Cash balance		50,000
Bank balance		3,00,000
Total		22,00,000

Calculate the goodwill and find out the intrinsic value of shares from the following details :

- (1) Land and Buildings are to be valued at Rs. 15,00,000 and the value of other assets is considered to be equal to their book values.
- (2) The profit of the company before tax for last four years is increasing every year by Rs. 1,20,000.
- (3) Income-tax assessment upto the 2018-2019 is completed and there remains no liability for that. The provision for taxation equal to 50% of profit is created for the current year.
- (4) Valuation of goodwill is to be calculated at two years' purchase of super profit.
- (5) The market price of the shares of the company giving 60% dividend is three times of its paid up value.

Solution: Here, value of goodwill has to be find out first.

Step – 1: Net Assets = Total Assets – Total Liabilities

Total Assets		₹
Land & Building		15,00,000
Stock		2,06,000
Debtors		1,00,000
Cash Balance		50,000
Bank Balance		3,00,000
Total Assets		<u>21,56,000</u>
Less: Total Liabilities: 6% Debentures	1,00,000	
Creditors	50,100	
Taxation Provision	<u>3,00,000</u> →	<u>4,50,100</u>
		17,05,900
Less: 9% Preference Share Capital		5,00,000
Proposed Dividend on Preference Shares		45,000
		<u>5,45,000</u>
Net Assets / Capital Employed		<u>11,60,900</u>

Step – 2: Expected Profit = Capital Employed × E.R.R.

= ₹ 11,60,900 × 20% (60% which is three times of paid up value)

= ₹ 2,32,180

Step – 3: Find out Average Profit or Future Maintainable Profit:

$$\text{Weighted Average Profit} = \frac{\text{Total Weighted Profit}}{\text{Total Weight}}$$

Here, Profit of the company before tax for last four years is increasing every year by ₹ 1,20,000.

In this sum, the profit of current year is calculated on the basis of taxation provision. Because it is clear that the income-tax assessment upto the last year is completed. So we can say that the provision of taxation in the balance sheet is the provision of current year.

Here, Provision of taxation is 50% of Current year's profit and it is ₹ 3,00,000.

So, if Profit is 100% then the profit of current year is ₹ 6,00,000 ($3,00,000 \times \frac{100}{50}$).

From the current year's profit we can find last three year's profit by decreasing ₹ 1,20,000 from every year's profit.

Now, the Weighted profits and total weights of the last four years are as under:

Year	Profit	Weight	Weighted Profit
2016-'17	2,40,000	1	2,40,000
2017-'18	3,60,000	2	7,20,000
2018-'19	4,80,000	3	14,40,000
2019-'20	6,00,000	4	24,00,000
Total	---	10	48,00,000

$$\text{So, Weighted Average Profit} = \frac{48,00,000}{10} = \text{₹ } 4,80,000$$

□ Future Maintainable Profit:

Weighted Average Profit

₹
4,80,000

Less: Interest of 10% Govt. Securities (1,00,000 × 10%)

10,000

4,70,000

Less: Taxes (50%)

2,35,000

2,35,000

Less: Preference Dividend (5,00,000 × 9%)

45,000

1,90,000

So, Future Maintainable Profit

Step – 4: Super Profit = Future Maintainable Profit

– Expected Profit

$$= ₹ 1,90,000 – ₹ 2,32,180$$

$$= ₹ - 42,180$$

Step – 5: Goodwill = Super Profit × No. of Purchasing years'

The value of goodwill is NIL.

Because the amount of Super Profit is negative. So, there is no goodwill of the company for current year.

Now, We will find out fair value of shares and for that first we need to find Intrinsic value and Market value of share.

(A) Intrinsic Value of Share

Step – 1: Net Assets = Total Assets – Total Liabilities

Here, Net Assets as in goodwill	11,60,900
Add: Non – trade investment (10% govt. securities)	1,00,000
Uncalled amount of share (3,000 × 50 per share)	1,50,000
So, Net Assets for valuation of share	<u>14,10,900</u>

$$\text{Step – 2: Intrinsic Value of Share} = \frac{\text{Net Assets}}{\text{No.of Equity Shares}}$$

$$\text{Fully paid Eq. Shares} = \frac{14,10,900}{10,000} = \text{₹ } 141.09$$

$$\text{Partly paid Eq. Shares} = \text{₹ } 141.09 - \text{₹ } 50 = \text{₹ } 91.09$$

(B) Yield Value or Market Value:

Step – 1: Future Maintainable Profit:

	₹
Weighted Average profit before tax as in goodwill	4,80,000
Less: Taxes (50%)	<u>2,40,000</u>
Profit after tax	2,40,000
Less: Preference Dividend (5,00,000 × 9%)	<u>45,000</u>
Profit available for Dividend	<u>1,95,000</u>

Step – 2: Rate of Dividend = $\frac{\text{Profit Available For Dividend}}{\text{Equity Share Capital (Paid up)}} \times 100$

$$= \frac{1,95,000}{8,50,000} \times 100$$
$$= \mathbf{22.94 \%}$$

Step – 3: Market Value of Share = $\frac{\text{Rate of Dividend}}{\text{Normal Rate of Return (ERR)}} \times \text{Paid up Value of Share}$

$$\text{For, Fully paid} = \frac{22.94}{20} \times 100 = \boxed{\text{₹ 114.70}}$$

$$\text{Partly paid} = \frac{22.94}{20} \times 50 = \boxed{\text{₹ 57.35}}$$

(C) Fair Value of Eq. shares = $\frac{\text{Intrinsic Value} + \text{Market Value}}{2}$

$$\text{Fully paid} = \frac{141.09 + 114.70}{2} = \boxed{\text{₹ 127.895}}$$

$$\text{Partly paid} = \frac{91.09 + 57.35}{2} = \boxed{\text{₹ 74.22}}$$