

## VALUATION OF SHARES

### Meaning

The term valuation of shares refers to the process of ascertaining the intrinsic value or the market value or the fair value of the shares of a company.

### Factors to be considered while valuing the shares

- The Nature of Business of the Company.
- The stability of earnings of the company
- The earning capacity of the company
- The capacity of the management of the company
- The demand for and the supply of shares of the company
- The economic and political conditions in the country
- The value of goodwill of the company
- The progress of the company
- The nature of competition

### Methods of valuation of shares

1. Net asset method or Intrinsic value method
2. Yield method
3. Earning Capacity method

### Method 1. Net asset method or intrinsic value method

Under this method, the value of shares is determined by adding the market values of all assets including unrecorded assets, goodwill and investments and deducting from that, the total liabilities payable to outsiders, i.e secured loans, unsecured loans and current liabilities. The amount so arrived is called net value of assets available to shareholders, from the value of net assets available to shareholders, the total paid up share capital and arrears of Preference dividend if any, must be deducted. The resulting balance is the net value of assets available for equity shareholders. The intrinsic value of each equity shares is calculated by dividing the net assets available for equity shareholders by number of equity shares.

### Calculation of Intrinsic value per share

Particulars	Amount	Amount
<b>Market value of Assets</b>		
Goodwill	xxx	
Land & buildings	xxx	
Plant & Machinery	xxx	
Furniture	xxx	
Patents and trademarks	xxx	
motor vehicle	xxx	
Investments	xxx	
cash in hand	xxx	
cash at bank	xxx	
sundry debtors	xxx	
bills receivable	xxx	
stock in trade	xxx	
prepaid expenses etc	xxx	
		xxx
<b>Less: Total Liabilities</b>		
Debentures	xxx	

Mortgage Loan	xxx	
Unsecured Loans	xxx	
Fixed Deposits from public	xxx	
Sundry Creditors	xxx	
Bills payables	xxx	
bank OD	xxx	
Unclaimed dividend	xxx	
provision for taxation	xxx	
proposed dividend	xxx	
employee provident fund	xxx	
workmen's saving Bank account	xxx	
Depreciation fund account	xxx	xxx
		xxx
Net value of net assets available to shareholders		
Less: Amount payable to preference shareholders		
a) Arrears of Preference dividend	xxx	
b) Preference share capital	xxx	xxx
<b>Net value of assets available to equity shareholders</b>		xxx

Intrinsic value of equity shares =  $\frac{\text{Net value of assets available for equity shareholders}}{\text{No of Equity shares}}$

#### Key Points

- The Assets must be considered at the MARKET VALUES at the time of valuation
- When there are both fully paid and partly paid shares ,the following procedure must be adopted in calculating their market values
  - Calculate the total value of Net Assets using the following formula  
Market value of assets- total liabilities + Notional Calls on partly paid Equity shares
  - Deduct from the above the total value of Net Assets, the claims of Preference share holders
  - Divide the balance by the total number of equity shares i.e. fully paid shares and partly paid shares.
  - From the value per share obtained, Deduct the Notional call per share in case of partly paid shares
  - The value in (c) represents intrinsic value of fully paid shares and the value in (d) represents the value of partly paid shares.
- When Preference share holders does not have any preferential right, either on capital or on arrears of dividend, then the intrinsic value must be calculated in the following order
  - Find the Net value of Assets as per format available to both shareholders i.e preference and equity.
  - Apportion the net value of asset to preference shareholders and equity shareholders in proportion to their respective capitals
  - Divide the proportional net value of assets by respective number of shares.
  - While calculating the market value of assets, the fictitious assets like Preliminary expenses, underwriting commission, discount on issue of shares and debentures, P/L account debit balance etc must be ignored.

#### **Method 2: Yield Method**

This method assumes that the company would continue to exist and would not dispose off its assets. The market value of the assets and liabilities are not taken into account for calculation of the value of the shares. Under this method, the profits available for equity dividend are taken into account while calculating the value of each equity shares.

#### Steps

1. Calculate the average profits of the company on the basis of available data
2. Calculate the profits available for dividends after deducting provision for tax and various appropriations towards reserves
3. Calculate the profits available for equity dividends by deducting the dividends payable to preference shareholders.
4. Calculate the capitalized profits by using the formula

$$\text{Capitalized Profits} = \frac{\text{Profits available for equity dividends}}{\text{NRR}} * 100$$

5. Calculate the market value or yield value of each equity share by using the formula

$$\text{Market value per share} = \frac{\text{Capitalized profits}}{\text{No of Equity shares}}$$

Alternatively,

Step 1: Calculate Avg Profits

Step 2: Calculate profits available for dividend

Step 3: calculate profits available to equity shareholders

Step 4: Calculate expected rate of return by using the following equation

$$\text{Expected rate of return} = \frac{\text{Profit available to equity shareholders}}{\text{Equity capital}} * 100$$

Step 5: Calculate Yield value of share by the following equation

$$\text{Value of share} = \frac{\text{Expected rate of return}}{\text{NRR}} * \text{Paid up value of equity shares}$$

Fair value per share

The fair value per preference share or equity share is the average of intrinsic value per share and the market price per share. It can be calculated by using the following formula

$$\text{Fair value per share} = \frac{\text{Intrinsic value Per share} + \text{Market value per share}}{2}$$

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### **Method 3: Earning Capacity Method**

Sometimes the rate of dividend declared by a company is much less than the rate of earnings of the company because of writing off of accumulated losses and also retention of profits.

The earning capacity method is an improvement over the yield method and it gives the proper value of equity share.

Steps

1. Calculate the rate earnings of the company

$$\text{Rate earnings} = \frac{\text{Avg profits}}{\text{Capital Employed}} * 100$$

2. Calculation of market value per share

$$\text{Market value per share} = \frac{\text{Rate of Earnings}}{\text{NRR}} * \text{Paid up value/share}$$

## Problems on Valuation of Shares

1. Following is the Balance Sheet of Max Co Ltd 31-03-2015

Liabilities	Amount	Assets	Amount
Share Capital			
1000 8 % Preference Shares 100 Each	100000	Fixed Assets	400000
30000 Equity Shares Of 10 Each	300000	Current Assets	250000
Debentures Redemption Fund	50000	Preliminary Expenses	20000
6% Debentures	100000	Discount On Issue Debenture	5000
Depreciation Fund	100000	P/L	45000
Creditors	70000		
	720000		720000

Calculate the Value of The Equity Share under Net Assets Method after Considered the following

- Debenture Interest Is Due For 1 Year
- Current Assets Include Book Debts of Which 12000 Which Were Doubtful For Which No Provision has been made.

2. Following is the Balance sheet of Fast Grow Ltd as on 31-3-2018

Liabilities	Amount	Assets	Amount
Equity shares of 100 each	300000	Land and building	150000
General Reserve	50000	Machinery	100000
Profit and loss account	25000	Investment At Cost (Market Value Of 40000)	45000
Creditors	40000	Debtors	100000
Provision for taxation	20000	Stock	40000
provident fund	10000	Cash	10000
	445000		445000

Additional Information

- Goodwill Is Taken At 50000
- Land And Building To 180000

3. The Following Is the Balance Sheet of Sunmate Ltd as On 31-03-2015

Liabilities	Amount	Assets	Amount
2000 6 % Preference Shares Of 10 Each	20000	Building	55000
8000 Equity Shares Of 10 Each	80000	Machinery	65000
Reserve Fund	50000	Patents	10000
Pl Account	16000	Stock	28000
Workmen Savings Account	15000	Debtors	40000
Creditors	49000	Cash	26000
		Preliminary Expenses	6000
Total	230000	Total	230000

- It Was Discovered that Machinery was under Depreciated By 5000
- Value of Building Is 130000 And Goodwill is 20000

- 6000 Worth of Debts are Bad
  - The Preference Shares Have Priority for Capital Repayment
- Find out the Intrinsic Value of Both Types Of shares

4. On 31-03-2015 the Balance Sheet of X Ltd Was As Follows

Liabilities	Amount	Assets	Amount
Share Capital		Land And Building	220000
Authorised And Issued		Plant And Machinery	95000
5000 Equity Shares Of	500000	Stock	350000
100 Each Fully Paid		Debtors	155000
Profit And Loss Account	103000		
Bank Overdraft	20000		
Creditors	77000		
Provision For Taxation	45000		
Proposed Dividend	75000		
Total	820000	Total	820000

The net profit of the company after deducting all working charges and providing for depreciation and taxation were as under

Year Ended 31 March	
2010-11	85000
2011-12	96000
2012-13	90000
2013-14	100000
2014-15	95000

On 31-03-2015 land building were valued 250000, plant and machinery 150000. In view of the nature of the business it is considered that 10 % is a reasonable return on the tangible capital. For the purpose of valuation of shares, Goodwill is calculated at 5 years purchase of the super profit based on the average profit of the last 5 years. Calculate intrinsic value

SOLN  
CALCN OF GOODWILL

STEP 1: Calcn of Avg Profits

Avg profits =  $85000 + 96000 + 90000 + 100000 + 95000 / 5 = 93200$

STEP 2: Calcn of Avg Capital Employed

particulars	AMT
MV of Assets	
L& B	250000
Machinery	150000
Stock	350000
Debtors	155000
	905000
Less- Outsiders Liability	
BOD	20000
Crs	77000
Prov for tax	45000
Proposed dividend	75000
Capital Employed	688000
Less- 1/2 of Current yrs profit (95000/2)	47500



1000 equity shares of 100 each 50 called up	50000
1000 equity shares of 100 each 50 called up	25000
1000 equity shares of 100 each fully called up	100000
	475000

### Reserves And Surplus

General Reserve	200000	
Pl Account	50000	250000
		725000

On a fair valuation of all the assets of the company it is found. it is found that they have a appreciation of Rs. 75000. the articles of association provided that in case of liquidation the preference shareholders will have a further claim to extent of 10% of the surplus assets. Ascertain the value of each preference shares and equity shares.

### 7. Following Is Balance Sheet of Sukh Chain Ltd as On 31-03-2015

Liabilities	Amount	Assets	Amount
Share Capital			
30000 Equity Shares Of 20 Each Fully Paid	600000	Goodwill	25000
25000 Equity Shares Of 20 Each 8 Paid	200000	Building	600000
15000 Equity Shares Of 10each Fully Paid	150000	Machinery	375000
10000 Equity Shares Of 10 Each 5 Paid	50000	Investment	50000
		Stock	300000
General Reserves	450000	Debtors	150000
Pl Account	50000	Br	50000
Creditors	200000	Bank	130000
		Miscellaneous:	
		Discount On Issue Of Shares	20000
	1700000		1700000

Goodwill is Valued at 15000, Building at 1200000, and Machinery at 300000, and Investment at 35000 Stock 250000, Debtors at 140000 and There was a Contingent Liability of 20000.

### 8. Balance sheet of work ltd as on 31 -3-2015

Liabilities	amount	Assets	amount
share capital		sundry assets	510000
1000 6% preference shares	100000	discount of debentures	10000
of 10 each fully paid		preliminary expenses	30000
30000 ordinary shares of	300000	P/L	60000
10 each fully paid			
debentures redemption fund	30000		
debenture	50000		
depreciation fund	30000		
creditors	100000		
	610000		610000

The sundry assets worth 525000 one year interest owes on debentures and the dividends on preference shares are in arrears. For two years you are required to value the shares on the net assets method

- Preference shares have priority both as to the payment of capital and arrears of dividend, in the event of liquidation.
- Preference shares have no priority as to capital of arrears of dividend
- Preference shares have priority as to payment of capital only
- Preference shares have priority as to the payment of arrears of dividend only.

9. From the following information, calculate the value of an equity share under Yield Method.

- 1) The paid up capital of a Company consists of 1000, 15% preference shares of Rs.100 each and 20,000 equity shares of Rs.10 each
- 2) The avg. annual profit of the company, after providing for Depn and taxation amounted to Rs. 75,000. It is considered necessary to transfer Rs.10000 to Gen. Reserve before declaring dividend.
- 3) The normal return expected by investors on equity shares from this type of business carried on by the company is 10%.

10. Following information relates to Deepika Ltd.

4000 10% preference shares of Rs.100 each	Rs.4, 00,000
5,000 equity shares of Rs.100 each	Rs.5, 00,000
Avg. Profits before tax	Rs.3, 22,580
Rate of Tax	38%
Transfer to be made to Reserve	20%
NRR	15%

Ascertain the value of each equity share under yield method.

### 11. (Intrinsic Value and Yield method)

Following are the particulars of XYZ Limited:

Equity shares of Rs.10 each	4, 00,000
5% debenture	1, 00,000
Current liabilities	1, 30,000
Current assets	2, 00,000
Fixed assets	5, 50,000
Goodwill	50,000

The profit for the last three years were Rs.51,600; Rs.52,000 and Rs.51,650 respectively.20% is transferred to reserve. Normal rate of return is 10%. Compute the value of shares under:

- 1) Net assets method
- 2) Yield method

12. The following particulars are available in relation to X Ltd.

1) Capital 450, 6% preference share of Rs. 100each fully paid and 4500 equity shares of Rs. 10 each fully paid.

2) External liabilities Rs.7500

3) Reserves and surplus Rs.3500

4) The average expected profit (after taxation) earned by the company Rs. 8500



5) The normal profit earned on the market value of equity shares (fully paid) of the same type of companies is 9%.

6) 10% of the profits after tax each year are transferred to reserves.

Calculate the intrinsic value per equity share and the value per equity share according to yield basis. Assume that out of total assets, assets worth Rs. 350 are fictitious.

**13.** Compute the value of shares the:

1) Net Assets method.

2) Yield Method, form the following balance sheet of a Ltd. Company as on

31 March 2015.

LAIBILITIES	AMOUNT	ASSETS	AMOUNT
80,000 shares of Rs.10 each	8,00,000	goodwill	50,000
Reserve fund	1,00,000	Fixed Assets	10,00,000
Profit & loss a/c	50,000	Current assets	4,00,000
5% Debenture	1,00,000		
Creditors	3,00,000		
Provision for tax	1,00,000		
	14,50,000		14,50,000

On 31.3.2013 fixed assets were valued at Rs.12, 00,000 and goodwill at Rs.75, 000. The net profits for the last three years were Rs.75, 000; Rs.78, 000 and Rs.87, 000 of which 20% was placed to reserve. The rate of return is 10%.

**14.** Form the information given below and the balance sheet of A Ltd. on 31 March 2015, find the values of its equity shares by intrinsic value method and yield method.

a) Company's prospects for 2015-16 are good;

b) Buildings are now worth Rs. 3, 50,000;

c) Profits for the last three years have showed an annual increase of Rs.50, 000. The annual transfer to reserve is 25% of net profit;

d) Preferential shares have preference as to capital and dividend;

e) Normal rate of return expected is 15%.

LIABILITIES	AMOUNT	ASSETS	AMOUNT
1000, 8% preferential shares of Rs.100 each fully paid	1,00,000	Buildings	70,000
4,000 equity shares of Rs. 100 each fully paid	4,00,000	Furniture	3000
Reserves	1,50,000	Stock(market value)	4,50,000
Profit & loss a/c: Balance on 1.4.2014 Add: Profit for 2014-15 (before transfer to reserve)	80,000 4,30,000	Investment(at cost) (Face value Rs. 4,00,000)	3,35,000
Creditors	48,000	Debtors	2,80,000

		Bank	60,000
		Preliminary expenses	10,000
	12,08,000		12,08,000

15. Briefly explain the various method of valuing goodwill.

Following is the balance sheet of surya Ltd., as on 31.3.2015.

LIABILITIES	AMOUNT	ASSETS	AMOUNT
Equity shares capital (Rs.10 each)	16,00,000	goodwill	2,00,000
Reserves and surplus	3,00,000	Other fixed assets	24,00,000
10% Debenture	4,00,000	Current assets	4,00,000
Creditors	4,00,000		
Provision for tax	3,00,000		
	30,00,000		30,00,000

On the above date, an independent valuation of goodwill and other fixed assets was made at Rs.3, 00,000 and Rs. 30, 00,000 respectively. Current assets include debtors of Rs. 2, 00,000 out of which 15% is bad. The net profit of the company for the past 3years were Rs. 2,40,000; Rs. 2,80,000 and Rs. 3,05,000 of which 20% was placed to reserve. The normal rate of return is 10%. Calculate the value of share by net assets method and yield method.

**16. (Intrinsic Value and Yield method and fair market value per equity share)**

Following is the summarised balance sheet of X ltd. as on 31.3.2015:

LIABILITIES	AMOUNT	ASSETS	AMOUNT
40,000 SHARES OF Rs.10 each	4,00,000	Goodwill	1,00,000
Reserve Fund	1,00,000	Fixed assets	4,50,000
Profit & loss a/c	35,000	Current assets	1,90,000
9% debentures	1,00,000	Preliminary exp.	25,000
Current liabilities	1,30,000		
	7,65,000		7,65,000

For the purpose of valuation of shares, fixed assets were valued at Rs,5,00,000 and goodwill at Rs.1,50,000.there is a necessity of R.B.D. at 10% on debtors of Rs.75,000. It is found that stock was overvalued by Rs. 9000. The net profit for three years were Rs.69,000;Rs.71,800 and 90,200 respectively after taxation out of this profit 20% was placed to reserve, the proportion being considered reasons in the industry in which the company is engaged and where the normal rate of return is 10%.

Compute the value of each equity share by assets method and yield method and also calculate the fair value of share.

17.

**Balance sheet of diamond ltd. as on 31.12.2015**

LIABILITIES	AMOUNT	ASSETS	AMOUNT
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Share capital: Issues, subscribed and paid up:2000 shares of Rs. 100 each	2,00,000	Land and buildings	1,10,000
General reserve	40,000	Plant and machinery	1,30,000
Profit and loss a/c	32,000	Patents and trade marks	20,000
Sundry creditors	1,28,000	Stock	48,000
Income tax reserve	60,000	Debtors bank	88,000
		Preliminary exp.	12,000
		Bank	52,000
	4,60,000		4,60,000

The expert valuer valued the land and building at Rs 2, 40,000; goodwill at Rs.1, 60,000, and plant and machinery at Rs. 1, 20,000. Out of the total debtors, it is found that debtors of Rs 8000 are bad. The profits of the company have been as follows:

2012-13 Rs.90, 000

2013-14 Rs.80, 000

2014-15 Rs.1, 06,000

The company follows the practice of transferring 25% of profit to general reserve. Similar type of companies each at 10% of the value of their shares. Ascertain the value of shares of the company under:

- 1) Intrinsic value method
- 2) Yield value method
- 3) Fair value method

### 18. (Intrinsic Value and Yield method and earning capacity method)

On March 31, 2015 the balance sheet of a limited company reveals the following position:

Liabilities	Amount	Assets	Amount
Issued capital in Rs.10 shares	4,00,000	Fixed assets	5,00,000
Reserves	90,000	Current assets	2,00,000
Profits and loss a/c	20,000	goodwill	40,000
5% debentures	1,00,000		
Current liabilities	1,30,000		
	7,40,000		7,40,000

On March 31, 2015 the fixed assets were independently valued at Rs, 3, 50,000 and the goodwill at Rs.50, 000. Te net profits for the three years were: 2012-13Rs.52,000; 2014-15 Rs51,650 of which 20% was placed under reserve, this proportion being considered reasonable in the industry in which the company is engaged and where a fair investment return may be taken at 10%. Compute the valued of the company's shares by (a) the net assets method (b) the yield value method and (c) the earning capacity method.

