

**Question – 02**

MK Ltd. is considering acquiring NN Ltd. The following information is available:

Company	Earning after Tax (₹)	No. of Equity Shares	Market Value Per Share (₹)
MK Ltd.	60,00,000	12,00,000	200.00
NN Ltd.	18,00,000	3,00,000	160.00

Exchange of equity shares for acquisition is based on current market value as above. There is no synergy advantage available.

- (i) Find the earning per share for company MK Ltd. after merger, and
- (ii) Find the exchange ratio so that shareholders of NN Ltd. would not be at a loss.

**(SM TYK – 03 & MTP October – 2020)**

**Solution:**

**(i) Earning per share of company MK Ltd after merger:-**

Exchange ratio  $160 : 200 = 4 : 5$ .

that is 4 shares of MK Ltd. for every 5 shares of NN Ltd.

$$\begin{aligned} \therefore \text{Total number of shares to be issued} &= 4/5 \times 3,00,000 \\ &= 2,40,000 \text{ Shares.} \end{aligned}$$

$\therefore$  Total number of shares of MK Ltd. and NN Ltd.

$$\begin{aligned} &= 12,00,000 \text{ (MK Ltd.)} + 2,40,000 \text{ (NN Ltd.)} \\ &= 14,40,000 \text{ Shares} \end{aligned}$$

Total profit after tax = ₹ 60,00,000 MK Ltd.

= ₹ 18,00,000 NN Ltd.

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$$= ₹ 78,00,000$$

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$\therefore$  EPS. (Earning Per Share) of MK Ltd. after merger

$$₹ 78,00,000 / 14,40,000 = ₹ 5.42 \text{ per share}$$

**(ii) To find the exchange ratio so that shareholders of NN Ltd. would not be at a Loss:**

Present earning per share for company MK Ltd.

$$= ₹ 60,00,000 / 12,00,000 = ₹ 5.00$$

Present earning per share for company NN Ltd.

$$= ₹ 18,00,000 / 3,00,000 = ₹ 6.00$$

∴ Exchange ratio should be 6 shares of MK Ltd. for every 5 shares of NN Ltd.

∴ Shares to be issued to NN Ltd.

$$= 3,00,000 \times 6/5 = 3,60,000 \text{ shares}$$

Now, total No. of shares of MK Ltd. and NN Ltd.

$$= 12,00,000 \text{ (MK Ltd.)} + 3,60,000 \text{ (NN Ltd.)}$$

$$= 15,60,000 \text{ shares}$$

$$\therefore \text{EPS after merger} = ₹ 78,00,000 / 15,60,000 = ₹ 5.00 \text{ per share}$$

Total earnings available to shareholders of NN Ltd. after merger

$$= 3,60,000 \text{ shares} \times ₹ 5.00 = ₹ 18,00,000.$$

This is equal to earnings prior merger for NN Ltd.

∴ Exchange ratio on the basis of earnings per share is recommended.

**Question – 03**

Cauliflower Limited is contemplating acquisition of Cabbage Limited. Cauliflower Limited has 5 lakh shares having market value of ₹ 40 per share while Cabbage Limited has 3 lakh shares having market value of ₹ 25 per share. The EPS for Cabbage Limited and Cauliflower Limited are ₹ 3 per share and ₹ 5 per share respectively. The managements of both the companies are discussing two alternatives for exchange of shares as follows:

- (i) In proportion to relative earnings per share of the two companies.
- (ii) 1 share of Cauliflower Limited for two shares of Cabbage Limited.

Required:

- (a) Calculate the EPS after merger under both the alternatives.
- (b) Show the impact on EPS for the shareholders of the two companies under both the alternatives.

**(RTP November – 2021)**

**Solution:**

**(i) Exchange ratio in proportion to relative EPS**

Company	Existing No. of shares	EPS	Total earnings
Cauliflower Ltd.	5,00,000	5.00	25,00,000
Cabbage Ltd.	3,00,000	3.00	<u>9,00,000</u>
Total earnings			<u>34,00,000</u>

No. of shares after merger  $5,00,000 + 1,80,000 = 6,80,000$

Note: 1,80,000 may be calculated as  $= \left(3,00,000 \times \frac{3.00}{5.00}\right)$

EPS for Cauliflower Ltd. after merger  $= \frac{34,00,000}{6,80,000} = 5.00$

**Impact on EPS**

	₹
<u>Cauliflower Ltd. 's shareholders</u>	
EPS before merger	5.00
EPS after merger	<u>5.00</u>
Increase/ Decrease in EPS	<u>0.00</u>
<b>Cabbage Ltd. 's shareholders</b>	
EPS before merger	<u>3.00</u>
EPS after the merger $5.00 \times 3/5$	<u>3.00</u>
Increase/ Decrease in EPS	<u>0.00</u>

**(ii) Merger effect on EPS with share exchange ratio of 1:2**

Total earnings after merger	₹ 34,00,000
No. of shares post merger	

## MERGER ACQUISITION & CORPORATE RESTRUCTURING

5,00,000 + 1,50,000 (0.5 × 3,00,000)	6,50,000
EPS (34,00,000 ÷ 6,50,000)	₹ 5.23

### Impact on EPS

	₹
<b>Cauliflower Ltd. 's shareholders</b>	
EPS before merger	5.00
EPS after merger	<u>5.23</u>
Increase/ Decrease in EPS	<u>0.23</u>
<b>Cabbage Ltd. 's shareholders</b>	
EPS before merger	<u>3.000</u>
EPS after the merger $5.23 \times 0.5$	<u>2.615</u>
Decrease in EPS	<u>0.385</u>

### Question – 04

ABC Ltd. is a company operating in the software industry. It is considering the acquisition of XYZ Ltd. which is also into software industry. The following information are available for the companies:

	ABC Ltd.	XYZ Ltd.
Earnings after tax (₹)	9,00,000	2,40,000
Number of equity shares	1,50,000	60,000
P/E ratio (no. of times)	14	10

ABC Ltd. is planning to offer a premium of 25% over the market price of XYZ Ltd. Required:

- (i) What is the swap ratio based on current market price?
- (ii) Find the number of shares to be issued by ABC Ltd. to the shareholders of XYZ Ltd.
- (iii) Compute the new EPS of ABC Ltd. after merger and comment on the impact of merger.
- (iv) Determine the market price of the share when P/E ratio remains unchanged.
- (v) Compute the market price when P/E declines to 12 and comment on the results. Figures are to be rounded off to 2 decimals.

**Solution:**

**Computation of Market Price of the Shares**

Particulars	ABC Ltd.	XYZ Ltd.
EAT	₹ 9,00,000	₹ 2,40,000
No. of Equity Shares	1,50,000	60,000
EPS	₹ 6.00	₹ 4.00
P/E Ratio	14.00	10.00
Market Price Per Share	₹ 84.00	₹ 40.00

**(i) Exchange Ratio based on Current Market Price**

Exchange ratio  $40 \times 1.25:84 = 50:84$

that is 50 shares of ABC Ltd. for every 84 shares of XYZ Ltd. or

25 shares of ABC Ltd. for every 42 shares of XYZ Ltd.

**(ii) No. of Shares to be issued**

$\frac{50}{84} = 0.596$  i.e. 0.60 share for 1 share of XYZ Ltd.

$60,000 \times 0.60 = 36,000$

**(iii) Computation of EPS and Impact after Merger**

Total earnings after merger	₹ 11,40,000
No. of shares post merger (1,50,000 + 36,000)	1,86,000
EPS	6.13

**Impact on EPS**

<b>For ABC Ltd.'s shareholders</b>	₹
EPS before merger	6.00
EPS after merger	<u>6.13</u>
Increase in EPS	<u>0.13</u>
<b>For XYZ Ltd.'s Shareholders</b>	
EPS before merger	4.00
Equivalent EPS after the merger (6.13×0.6)	<u>3.68</u>

## MERGER ACQUISITION & CORPORATE RESTRUCTURING

Decrease in EPS	0.32
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Thus, with the proposed merger while the EPS for shareholders of ABC Ltd. will improve and EPS for shareholders of XYZ Ltd. will be decreased.

### (iv) Market Price of Share after Merger

New EPS	₹ 6.13
PE Ratio	14
New Price of the Share (₹ 6.13 × 14)	₹ 85.82

### (v) New Market Price of share if PE Ratio falls to 12

New EPS	₹ 6.13
PE Ratio	12
New Price of the Share (₹ 6.13 × 12)	₹ 73.56

### Gain/ loss from the Merger to the shareholders of ABC Ltd.

Market Price of Share	₹ 73.56
Market Price of Share before Merger	₹ 84.00
Loss from the merger (per share)	₹ 10.44

### Gain/ loss from the Merger to the shareholders of XYZ Ltd.

Equivalent Market Price of Share (73.56 × 0.6)	₹ 44.14
Market Price of Share before Merger	₹ 40.00
Gain from the merger (per share)	₹ 4.14

**Comments:** With the merger there is a decrease in the market price of shares for the shareholders of ABC Ltd and a gain for shareholders of XYZ Ltd.

### Question – 05

B Ltd. Wants to acquire S Ltd. and has offered a swap ratio of 2:3 (2 shares for every 3 share of S Ltd.). Following information is available:

Particulars	B Ltd.	S Ltd.
Profit after tax (in ₹)	21,00,000	4,50,000
Equity shares outstanding (Nos.)	6,00,000	1,80,000
EPS (₹)	3.5	2.5

## MERGER ACQUISITION & CORPORATE RESTRUCTURING

PE Ratio	10 times	7 times
Price quoting per share on BSE before the merger announcement (₹)	35.00	17.50

### **Required:**

- (i) The number of equity shares to be issued by B Ltd. for acquisition of S Ltd.
- (ii) What is the EPS of B Ltd. after the acquisition?
- (iii) Determine the equivalent earnings per share of S Ltd. and calculate per share gain or loss to shareholders of S Ltd.
- (iv) What is the expected market price per share of B Ltd. after the acquisition, assuming its PE Multiple remains unchanged?
- (v) Determine the market value of the merged firm.
- (vi) After the announcement of merger, price of shares of S Ltd. rose by 10% on BSE. Mr. X, an investor, having 10,000 shares of S Ltd. is having another investment opportunity, which yields annual return of 14% is seeking your advice whether he needs to offload the shares in the market or accept the shares from B Ltd.

**(RTP May – 2022)**

### **Solution:**

#### **(i) The number of shares to be issued by B Ltd.:**

The exchange ratio is 2:3

$$\text{So, new shares} = 1,80,000 \times \frac{2}{3} = 1,20,000 \text{ shares.}$$

#### **(ii) EPS of B Ltd. after acquisition:**

Total Earnings	(₹ 21,00,000 + ₹ 4,50,000)	₹ 25,50,000
No. of Shares	(6,00,000 + 1,20,000)	7,20,000
EPS	(₹ 25,50,000/7,20,000)	₹ 3.5416 or 3.54

**(iii) Equivalent EPS of S Ltd. and gain/loss to shareholders:**

Equivalent EPS of S Ltd. ( $\text{₹ } 3.54 \times \frac{2}{3}$ )	₹ 2.36
Less: EPS before merger	2.50
Loss	(0.14)

**(iv) New market price of B Ltd. (P/E remaining unchanged):**

Present P/E Ratio of B Ltd.	10 times
Expected EPS after merger	₹ 3.54
Expected Market Price ( $\text{₹}3.54 \times 10$ )	₹ 35.40

**(v) Market value of merged firm:**

Total number of shares	7,20,000
Expected market price	₹ 35.40
Total value ( $7,20,000 \times 35.40$ )	₹ 2,54,88,000

**(vi)**

a) Equivalent EPS of S Ltd.	₹ 2.36
b) BSE price per share before merger announcement	₹ 17.50
c) After the merger announcement 10% increase in price of shares.	₹ 1.75
d) Present market price of share (b + c)	₹ 19.25
e) Return on market price per share (a/d)	12.26

As Mr. X is having another opportunity to earn 14% and expected return on S Ltd.'s share is 12.26%, it is advisable to offload in market.

**Question – 06**

Alfa Ltd. wants to acquire Beta Ltd. and has offered a swap ratio of 1:2 (0.5 shares for every one share of Beta Ltd.) Following information is provided:

	Alfa Ltd.	Beta Ltd.
Profit after tax (₹)	18,00,000	3,60,000
Equity shares outstanding (Nos.)	6,00,000	1,80,000
EPS (₹)	3	2
PE Ratio	10 times	7 times
Market price per share (₹)	30	14

(i) You are required to determine:

## MERGER ACQUISITION & CORPORATE RESTRUCTURING

- (a) The number of equity shares to be issued by Alfa Ltd. for acquisition of Beta Ltd.
- (b) The EPS of Alfa Ltd. after the acquisition.
- (c) The equivalent earnings per share of Beta Ltd.
- (d) The expected market price per share of Alfa Ltd. \* after the acquisition, if PE increases to 12 times.
- (e) The market value of the merged firm.
- (ii) If you are the shareholder of Beta Ltd. and holding 100 shares, will you be interested to sell your stake? Why?

**(Exam November – 2022) (8 Marks)**

### Solution:

**(i) (a) The number of shares to be issued by Alfa Ltd.:**

The Exchange ratio is 0.5

So, new Shares = 1,80,000 × 0.5 = 90,000 shares.

**(b) EPS of Alfa Ltd. after acquisition:**

Total Earnings (₹ 18,00,000 + ₹ 3,60,000)	₹ 21,60,000
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No. of Shares (6,00,000 + 90,000)	6,90,000
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EPS (₹ 21,60,000)/6,90,000)	₹ 3.13
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**(c) Equivalent EPS of Beta Ltd.:**

No. of new Shares	0.5
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EPS	₹ 3.13
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Equivalent EPS (₹ 3.13 × 0.5)	₹ 1.57 or ₹ 1.56
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**(d) New Market Price of Alfa Ltd. (P/E = 12):**

Revised P/E Ratio of Alfa Ltd.	12 times
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Expected EPS after merger	₹ 3.13
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## MERGER ACQUISITION & CORPORATE RESTRUCTURING

Expected Market Price (₹ 3.13 × 12) ₹ 37.56

**(e) Market Value of merged firm:**

Total number of Shares 6,90,000

Expected Market Price ₹ 37.56

Total value (6,90,000 × 37.56) ₹ 2,59,16,400

**(ii)** Present market Value of share of Beta Ltd. (100 × ₹ 14) ₹ 1,400

Revised market price of each share of Alfa Ltd. after Merger ₹ 37.56

Equivalent No. of Alfa Ltd. share in exchange of Beta Ltd. (0.50 × 100) 50

Equivalent Value of Alfa Ltd. share in exchange of Beta Ltd. (100 × 0.50 × ₹ 37.56) ₹ 1,878

Increase in Market Value (₹ 1,878 – ₹ 1,400) ₹ 478

No, I am not agreed to sell the stake as there is increase in market value.

**Question – 07**

R Ltd. and S Ltd. are companies that operate in the same industry. The financial statements of both the companies for the current financial year are as follows:

**Balance Sheet**

Particulars	R. Ltd. (₹)	S. Ltd (₹)
<b>Equity &amp; Liabilities</b>		
Shareholders Fund		
Equity Capital (₹ 10 each)	20,00,000	16,00,000
Retained earnings	4,00,000	
Non-current Liabilities		
16% Long term Debt	10,00,000	6,00,000
Current Liabilities	<u>14,00,000</u>	<u>8,00,000</u>
<b>Total</b>	<b><u>48,00,000</u></b>	<b><u>30,00,000</u></b>
<b>Assets</b>		
Non-current Assets	20,00,000	10,00,000
Current Assets	<u>28,00,000</u>	<u>20,00,000</u>

<b>Total</b>	<b>48,00,000</b>	<b>30,00,000</b>
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**Income Statement**

	Particulars	R. Ltd. (₹)	S. Ltd. (₹)
A.	Net Sales	69,00,000	34,00,000
B.	Cost of Goods sold	<u>55,20,000</u>	<u>27,20,000</u>
<b>C.</b>	<b>Gross Profit (A-B)</b>	13,80,000	6,80,00
D.	Operating Expenses	4,00,000	2,00,000
E.	Interest	<u>1,60,000</u>	<u>96,000</u>
<b>F.</b>	<b>Earnings before taxes [C-(D + E)]</b>	8,20,000	3,84,000
G.	Taxes @ 35%	2,87,000	1,34,400
H.	Earnings After Tax (EAT)	5,33,000	2,49,600

**Additional Information:**

No. of equity shares	2,00,000	1,60,000
Dividend payment Ratio (D/P)	20%	30%
Market price per share	₹ 50	₹ 20

Assume that both companies are in the process of negotiating a merger through exchange of Equity shares:

You are required to:

- (i) Decompose the share price of both the companies into EPS & P/E components. Also segregate their EPS figures into Return On Equity (ROE) and Book Value/Intrinsic Value per share components.
- (ii) Estimate future EPS growth rates for both the companies.
- (iii) Based on expected operating synergies, R Ltd. estimated that the intrinsic value of S Ltd. Equity share would be ₹ 25 per share on its acquisition. You are required to develop a range of justifiable Equity Share Exchange ratios that can be offered by R Ltd. to the shareholders of S Ltd. Based on your analysis on parts (i) and (ii), would you expect the negotiated terms to be closer to the upper or the lower exchange ratio limits and why?

**(SM TYK – 27)**

**Solution:**

**(i) Determination of EPS, P/E Ratio, ROE and BVPS of R Ltd. & S Ltd.**

	R Ltd.	S Ltd.
EAT (₹)	5,33,000	2,49,600
N	2,00,000	1,60,000
EPS (EAT ÷ N)	2.665	1.56
Market Price Per Share	50	20
PE Ratio (MPS/EPS)	18.76	12.82
Equity Fund (Equity Value)	24,00,000	16,00,000
BVPS (Equity Value ÷ N)	12	10
ROE (EAT ÷ EF) or	0.2221	0.156
ROE (EAT ÷ EF) × 100	22.21%	15.60%

**(ii) Determination of Growth Rate of EPS of R Ltd. & S Ltd.**

	R Ltd.	S Ltd.
Retention Ratio (1-D/P Ratio)	0.80	0.70
Growth Rate (ROE × Retention Ratio) or	0.1777	0.1092
Growth Rate (ROE × Retention Ratio) × 100	17.77%	10.92%

**(iii) Justifiable equity share exchange ratio**

- (a) Market Price Based =  $MPS_S / MPS_R$   
 = ₹ 20 / ₹ 50  
 = 0.40:1 (lower limit)
- (b) Intrinsic Value Based = ₹ 25 / ₹ 50  
 = 0.50:1 (max. limit)

Since R Ltd. has higher EPS, PE, ROE and higher growth expectations the negotiated term would be expected to be closer to the lower limit, based on existing share price.

**Question – 08**

X Ltd. is studying the possible acquisition of Y Ltd. by way of merger. The following data are available in respect of both the companies.

## MERGER ACQUISITION & CORPORATE RESTRUCTURING

Particulars	X Ltd.	Y Ltd.
Market Capitalization (₹)	75,00,000	90,00,000
Gross Profit Ratio	20%	20%
Inventory Turnover Ratio	5 times	4 times
Debtor Turnover Ratio	3 times	5 times
12% Debenture (₹)	10,00,000	-
10% Debenture (₹)	-	14,40,000
No. of Equity Shares	1,00,000	60,000
Operating Expenses	86%	78%
Corporate Tax Rate	30%	30%
Closing Stock (₹)	15,00,000	5,00,000
Debtors (₹)	10,00,000	8,00,000

You are required to calculate:

- (i) Swap ratio based on EPS & MPS respectively as weightage of 40% and 60%.
- (ii) Post Merger EPS
- (iii) Post Merger market price assuming same PE Ratio of X Ltd.
- (iv) Post Merger gain or loss in EPS.

**(MTP May – 2020)**

### **Solution:**

### **Working Notes:**

(1) Inventory Turnover Ratio =  $\frac{\text{COGS}}{\text{Closing Stock}}$

$$\text{X Ltd.}$$
$$5 = \frac{\text{COGS}}{15,00,000}$$

$$\text{COGS} = ₹ 75,00,000$$

$$\text{Y Ltd.}$$
$$4 = \frac{\text{COGS}}{5,00,000}$$

$$\text{COGS} = ₹ 20,00,000$$

Gross Profit Ratio = 20% means COGS is 80% of Sales, then

$$\text{Sales} = \frac{75,00,000 \times 100}{80}$$

$$\text{Sales} = \frac{20,00,000 \times 100}{80}$$

## MERGER ACQUISITION & CORPORATE RESTRUCTURING

= ₹ 93,75,000

= ₹ 25,00,000

### Statement of Profit

	X Ltd.	Y Ltd.
Sales	93,75,000	25,00,000
Less: Operating Exp.	80,62,500	19,50,000
EBIT	13,12,500	5,50,000
Less: Interest	1,20,000	1,44,000
EBT	11,92,500	4,06,000
Less: Tax @ 30%	3,57,750	1,21,800
EAT	8,34,750	2,84,200

(2)

	X Ltd.	Y Ltd.
No. of Shares	1,00,000	60,000
EPS (EAT/ No. of Shares)	8,34,750/1,00,000 = ₹ 8.34	2,84,200/60,000 = ₹ 4.74
Market Price Share (Market Capitalization/ No. Shares)	75,00,000/ 1,00,000 = ₹ 75	90,00,000/ 60,000 = ₹ 150
PE Ratio (MPS/ EPS)	75/ 8.34 = 8.99	150/ 4.74 = 31.65

(i) 
$$\text{Swap Ratio} = \frac{\text{Target Co.}}{\text{Acquirer Co.}}$$

	Acquirer Co. X Ltd.	Target Co. Y Ltd.	Weight
EPS	8.34	4.74	0.40
MPS	75	150	0.60

EPS	$\frac{4.74}{8.34} \times 0.40 =$	0.227
MPS	$\frac{150}{75} \times 0.60 =$	1.200
		1.427

(ii) Post Merger EPS

$$= \frac{\text{EAT}_X + \text{EAT}_Y}{\text{No. of Shares of Both Cos.}}$$

## MERGER ACQUISITION & CORPORATE RESTRUCTURING

$$\begin{aligned} &= \frac{8,34,750 + 2,84,200}{1,00,000 + (60,000 \times 1.427)} \\ &= \frac{11,18,950}{1,85,620} \\ &= 6.03 \end{aligned}$$

(iii) Post Merger market price assuming same PE of X Ltd.

$$\begin{aligned} \text{MPS} &= \text{PE} \times \text{EPS} \\ &= 8.99 \times 6.03 \\ &= ₹ 54.21 \end{aligned}$$

(iv) Gain or Loss to the share holders

	Pre-Merger EPS	Post Merger EPS
X Ltd.	₹ 8.34	₹ 6.03
Y Ltd.	₹ 4.74	₹ 6.03 × 1.427 = ₹ 8.60

While Shareholders of X Ltd. will lose EPS of ₹ 2.31 (₹ 8.34 – ₹ 6.03) per share the shareholders of Y Ltd. stands to gain EPS of ₹ 3.86 (₹ 8.60 – ₹ 4.74) per share.

### Question – 09

T Ltd. and E Ltd. are in the same industry. The former is in negotiation for acquisition of the latter. Important information about the two companies as per their latest financial statements is given below:

	T Ltd.	E Ltd.
₹ 10 Equity shares outstanding	12 Lakhs	6 Lakhs
Debt:		
10% Debentures (₹ Lakhs)	580	--
12.5% Institutional Loan (₹ Lakhs)	--	240
Earning before interest, depreciation and tax (EBIDAT) (₹ Lakhs)	400.86	115.71
Market Price/share (₹)	220.00	110.00

## MERGER ACQUISITION & CORPORATE RESTRUCTURING

T Ltd. plans to offer a price for E Ltd., business as a whole which will be 7 times EBIDAT reduced by outstanding debt, to be discharged by own shares at market price.

E Ltd. is planning to seek one share in T Ltd. for every 2 shares in E Ltd. based on the market price. Tax rate for the two companies may be assumed as 30%.

Calculate and show the following under both alternatives - T Ltd.'s offer and E Ltd.'s plan:

- (i) Net consideration payable.
- (ii) No. of shares to be issued by T Ltd.
- (iii) EPS of T Ltd. after acquisition.
- (iv) Expected market price per share of T Ltd. after acquisition.
- (v) State briefly the advantages to T Ltd. from the acquisition.

**Note:** Calculations (except EPS) may be rounded off to 2 decimals in lakhs.

**(SM TYK – 21 & Exam November – 2018) (12 Marks)**

### **Solution:**

#### **As per T Ltd.'s Offer**

	₹ In lakhs
<b>(i) Net Consideration Payable</b>	809.97
7 times EBIDAT, i.e. $7 \times ₹ 115.71$ lakh	<u>240.00</u>
Less: Debt	<u>569.97</u>
<b>(ii) No. of shares to be issued by T Ltd</b>	2,59,000
₹ 569.97 lakh/₹ 220 (rounded off) (Nos.)	
<b>(iii) EPS of T Ltd after acquisition</b>	516.57
Total EBIDT (₹ 400.86 lakh + ₹ 115.71 lakh)	88.00
Less: Interest (₹ 58 lakh + ₹ 30 lakh)	428.57
Less: 30% Tax	<u>128.57</u>
Total earnings (NPAT)	<u>300.00</u>
Total no. of shares outstanding (12 lakh + 2.59 lakh)	14.59 lakh
EPS (₹ 300 lakh/ 14.59 lakh)	20.56

<b>(iv) Expected Market Price:</b>	
Pre-acquisition P/E multiple:	400.86
EBIDAT (₹ in lakhs)	<u>58.00</u>
Less: Interest (580 × 10/100)( ₹ in lakhs)	342.86
EBT	<u>102.86</u>
Less: 30% Tax (₹ in lakhs)	240.00
EAT (₹ in lakhs)	12.00
(÷) No. of shares (lakhs)	₹ 20.00
EPS	11
Hence, PE multiple $\frac{220}{20}$	
Expected market price after acquisition (₹ 20.56 × 11)	₹ 226.16

**As per E Ltd's Plan**

	₹ In lakhs
<b>(i) Net consideration payable</b>	
6 lakhs shares × ₹ 110	660
<b>(ii) No. of shares to be issued by T Ltd</b>	
₹ 660 lakhs ÷ ₹ 220	3 lakh
<b>(iii) EPS of T Ltd after Acquisition</b>	
NOPAT (as per earlier calculations)	300.00
Total no. of shares outstanding (12 lakhs + 3 lakhs)	15 lakh
Earning Per Share (EPS) ₹ 300 lakh/ 15 lakh	₹ 20.00
<b>(iv) Expected Market Price (₹ 20 × 11)</b>	220.00

**(v) Advantages of Acquisition to T Ltd.**

Since the two companies are in the same industry, the following advantages could accrue:

- Synergy, cost reduction and operating efficiency.
- Better market share.
- Avoidance of competition

## MERGER ACQUISITION & CORPORATE RESTRUCTURING

### **Question – 10**

C Ltd. and P Ltd. both companies operating in the same industry decided to merge and form a new entity S Ltd. The relevant financial details of the two companies prior to merger announcement are as follows:

	C Ltd.	P Ltd.
Annual Earnings after Tax (₹ lakh)	10,000	5,800
No. Shares Outstanding (lakh)	4,000	1,000
PE Ratio (No. of Times)	8	10

The merger will be affected by means of stock swap (exchange) of 3 shares of C Ltd. for 1 share of P Ltd.

After the merger it is expected that due to synergy effects, Annual Earnings (Post Tax) are expected to be 8% higher than sum of the earnings of the two companies individually. Further, it is expected that P/E Ratio of S Ltd. shall be average of P/E Ratios of two companies before the merger.

Evaluate the extent to which shareholders of P Ltd. will be benefitted per share from the proposed merger.

**(MTP April – 2021)**

### **Solution:**

	C Ltd.	P Ltd.
EAT	10,000 lacs	5,800 lacs
÷ No.	4000	1000
EPS	2.50	5.80
(×) P/E Ration	8	10
MPS	₹ 20	₹ 58

No. of shares to be issued = 1,000 shares × 3/1  
= 3000 shares

Post Merger EPS =  $\frac{(10,000 + 5,800) (1.08)}{4,000 + 3,000}$   
= 2.438

Post Merger MPS = 2.438 × 9

$$= ₹ 21.94$$

$$\text{Avg P/E Ratio} = \frac{8 + 10}{2} = 9$$

**Gain or Loss to the Shareholders of P Ltd.**

MPS before Merger	₹ 58
MPS after Merger (21.94 × 3)	₹ 65.82
Gain =	<u>₹ 7.82</u>

**Question – 11**

Reliable Industries Ltd. (RIL) is considering a takeover of Sunflower Industries Ltd. (SIL). The particulars of 2 companies are given below:

Particulars	Reliable Industries Ltd	Sunflower Industries Ltd.
Earnings After Tax (EAT)	₹ 20,00,000	₹ 10,00,000
Equity shares O/s	10,00,000	10,00,000
Earnings per share (EPS)	2	1
PE Ratio (Times)	10	5

**Required:**

- (i) What is the market value of each Company before merger?
- (ii) Assume that the management of RIL estimates that the shareholders of SIL will accept an offer of one share of RIL for four shares of SIL. If there are no synergic effects, what is the market value of the Post-merger RIL? What is the new price per share? Are the shareholders of RIL better or worse off than they were before the merger?
- (iii) Due to synergic effects, the management of RIL estimates that the earnings will increase by 20%. What are the new post-merger EPS and Price per share? Will the shareholders be better off or worse off than before the merger?

**(SM TYK – 24)**

**Solution:**

**(i) Market value of Companies before Merger**

Particulars	RIL	SIL
EPS	₹ 2	Re.1
P/E Ratio	10	5
Market Price Per Share	₹ 20	₹ 5
Equity Shares	10,00,000	10,00,000
Total Market Value	2,00,00,000	50,00,000

**(ii) Post Merger Effects on RIL**

	₹
Post-merger earnings	30,00,000
Exchange Ratio (1:4)	
No. of equity shares o/s (10,00,000 + 2,50,000)	12,50,000
EPS: 30,00,000/12,50,000	2.4
PE Ratio	10
Market Value 10 × 2.4	24
Total Value (12,50,000 × 24)	3,00,00,000

<b>Gains From Merger:</b>	₹
Post-Merger Market Value of the Firm	3,00,00,000
Less: Pre-Merger Market Value	
RIL 2,00,00,000	
<u>SIL 50,00,000</u>	<u>2,50,00,000</u>
Total gains from Merger	<u>50,00,000</u>

**Apportionment of Gains between the Shareholders:**

Particulars	RIL (₹)	SIL (₹)
Post-Merger Market Value:		
10,00,000 × 24	2,40,00,000	--
2,50,000 × 24	-	60,00,000
Less: Pre-Merger Market Value	2,00,00,000	50,00,000
Gains from Merger:	40,00,000	10,00,000

Thus, the shareholders of both the companies (RIL + SIL) are better off than before