

MERGER ACQUISITION & CORPORATE RESTRUCTURING

- (d) H Ltd. to issue shares of ₹ 100 each to the shareholders of B Ltd. in terms of the exchange ratio as arrived on a Fair Value basis. (Please consider weights of 1 and 3 for the value of shares arrived on Net Asset basis and Earnings capitalization method respectively for both H Ltd. and B Ltd.)

You are required to arrive at the value of the shares of both H Ltd. and B Ltd. under:

- (i) Net Asset Value Method
- (ii) Earnings Capitalization Method
- (iii) Exchange ratio of shares of H Ltd. to be issued to the shareholders of B Ltd. on a Fair value basis (taking into consideration the assumption mentioned in point 4 above.)

(SM TYK – 17)

Solution:

(i) Net Asset Value

H Ltd.	$\frac{₹ 1300 \text{ Crores} - ₹ 300 \text{ Crores}}{₹ 3.50 \text{ Crores}} = ₹ 285.71$
B Ltd.	$\frac{₹ 31.50 \text{ Crores}}{0.65 \text{ Crores}} = ₹ 48.46$

(ii) Earning Capitalization Value

H Ltd.	$\frac{₹ 300 \text{ Crores} / 0.08}{₹ 3.50 \text{ Crores}} = ₹ 1,071.43^*$
B Ltd.	$\frac{₹ 10 \text{ Crores} / 0.08}{0.65 \text{ Crores}} = ₹ 192.31$

*Alternatively, Contingent Liability can also be deducted from this Valuation.

(iii) Fair Value

H Ltd.	$\frac{₹ 285.71 \times 1 + ₹ 1,071.43 \times 3}{4} = ₹ 875$
B Ltd.	$\frac{₹ 48.46 \times 1 + ₹ 192.31 \times 3}{4} = ₹ 156.3475$

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Exchange ratio ₹ 156.3475/₹ 875 = 0.1787

H Ltd should issue its 0.1787 share for each share of B Ltd.

Note: In above solution it has been assumed that the contingent liability will materialize at its full amount.

Question – 13

AB Ltd., is planning to acquire and absorb the running business of XY Ltd. The valuation is to be based on the recommendation of merchant bankers and the consideration is to be discharged in the form of equity shares to be issued by AB Ltd. As on 31.3.2006, the paid up capital of AB Ltd. consists of 80 lakhs shares of ₹ 10 each. The highest and the lowest market quotation during the last 6 months were ₹ 570 and ₹ 430. For the purpose of the exchange, the price per share is to be reckoned as the average of the highest and lowest market price during the last 6 months ended on 31.3.06.

XY Ltd.'s Balance Sheet as at 31.3.2006 is summarized below:

	₹ lakhs
Sources	
Share Capital	
20 lakhs equity shares of ₹10 each fully paid	200
10 lakhs equity shares of ₹10 each, ₹5 paid	50
Loans	<u>100</u>
Total	<u>350</u>
Uses	
Fixed Assets (Net)	150
Net Current Assets	<u>200</u>
	<u>350</u>

An independent firm of merchant bankers engaged for the negotiation, have produced the following estimates of cash flows from the business of XY Ltd.:

Year ended	By way of	₹ lakhs
31.3.07	after tax earnings for equity	105
31.3.08	Do	120
31.3.09	Do	125
31.3.10	Do	120
31.3.11	Do	100
	Terminal Value estimate	200

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It is the recommendation of the merchant banker that the business of XY Ltd. may be valued on the basis of the average of (i) Aggregate of discounted cash flows at 8% and (ii) Net assets value. Present value factors at 8% for years

1-5: 0.93 0.86 0.79 0.74 0.68

You are required to:

- (a) Calculate the total value of the business of XY Ltd.
- (b) The number of shares to be issued by AB Ltd.; and
- (c) The basis of allocation of the shares among the shareholders of XY Ltd.

(SM TYK – 26)

Solution:

Price/share of AB Ltd. for determination of number of shares to be issued

$$= (\text{₹ } 570 + \text{₹ } 430)/2 = \text{₹ } 500$$

Value of XY Ltd based on future cash flow capitalization $(105 \times 0.93) + (120 \times 0.86) + (125 \times 0.79) + (120 \times 0.74) \times (300 \times 0.68)$		
Value of XY Ltd based on net assets	₹ lakhs	592.40
Average value $(592.40 + 250)/2$	₹ lakhs	250.00
No. of shares in AB Ltd to be issued ₹ $4,21,20,000/500$		421.20
Basis of allocation of shares	Nos.	84,240
Fully paid equivalent shares in XY Ltd. $(20 + 5)$ lakhs		25,00,000
Distribution to fully paid shareholders $84,240 \times 20/25$		67,392
Distribution to partly paid shareholders $(84,240 - 67,392)$		16,848

Question – 14

Snake Ltd. is taking over Lizard Ltd, both are listed companies. The PE Ratio of Lizard Ltd. has been low as 4 and high as 7 and is currently 5. Lizard Ltd.'s previous year EPS was ₹ 3.40 and current expected EPS this year to be ₹ 4.00.

Determine the different range of values of shares using P/E Model.

(MTP Nov – 2021)

Solution:

The range of values using P/E Ratio and EPS either historic or projected are as follows.

EPS	Value (₹)	P/E Ratio	Value	Value of Shares
Historic	3.40	Lowest	4	13.60
Historic	3.40	Current	5	17.00
Historic	3.40	Highest	7	23.80
Expected	4.00	Lowest	4	16.00
Expected	4.00	Current	5	20.00
Expected	4.00	Highest	7	28.00

Question – 15

B Ltd. is a highly successful company and wishes to expand by acquiring other firms. Its expected high growth in earnings and dividends is reflected in its PE ratio of 17. The Board of Directors of B Ltd. has been advised that if it were to take over firms with a lower PE ratio than it own, using a share-for-share exchange, then it could increase its reported earnings per share. C Ltd. has been suggested as a possible target for a takeover, which has a PE ratio of 10 and 1,00,000 shares in issue with a share price of ₹ 15. B Ltd. has 5,00,000 shares in issue with a share price of ₹ 12.

Calculate the change in earnings per share of B Ltd. if it acquires the whole of C Ltd. by issuing shares at its market price of ₹12. Assume the price of B Ltd. shares remains constant.

(SM TYK – 01 & RTP November – 2018)

Solution:

Total market value of C Ltd is = $1,00,000 \times 15$ = ₹ 15,00,000

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PE ratio (given)	= 10
Therefore, earnings	= ₹ 15,00,000 / 10
	= ₹ 1,50,000
Total market value of B Ltd. is = 5,00,000 × ₹ 12	= ₹ 60,00,000
PE ratio (given)	= 17
Therefore, earnings	= ₹ 60,00,000 / 17
	= ₹ 3,52,941

The number of shares to be issued by B Ltd.

₹ 15,00,000 ÷ 12	= 1,25,000
Total number of shares of B Ltd	= 5,00,000 + 1,25,000
	= 6,25,000
The EPS of the new firm is	= (₹ 3,52,941 + ₹ 1,50,000) / 6,25,000
	= ₹ 0.80
The present EPS of B Ltd is	= ₹ 3,52,941 / 5,00,000
	= ₹ 0.71

So the EPS of firm B will increase from Re. 0.71 to ₹ 0.80 as a result of merger

Question – 16

The following information is provided related to the acquiring Firm Mark Limited and the target Firm Mask Limited:

	Firm Mark Limited	Firm Mask Limited
Earning after tax (₹)	2,000 lakhs	400 lakhs
Number of shares outstanding	200 lakhs	100 lakhs
P/E ratio (times)	10	5

Required:

- (i) What is the Swap Ratio based on current market prices?

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- (ii) What is the EPS of Mark Limited after acquisition?
- (iii) What is the expected market price per share of Mark Limited after acquisition, assuming P/E ratio of Mark Limited remains unchanged?
- (iv) Determine the market value of the merged firm.
- (v) Calculate gain/loss for shareholders of the two independent companies after acquisition

(SM TYK – 07)

Solution:

Particulars	Mark Ltd.	Mask Ltd.
EPS	₹ 2,000 Lakhs/ 200 lakhs = ₹ 10	₹ 400 lakhs / 100 lakhs ₹ 4
Market Price	₹ 10 × 10 = ₹ 100	₹ 4 × 5 = ₹ 20

- (i) The Swap ratio based on current market price is

$$₹ 20/₹ 100 = 0.2$$

or 1 share of Mark Ltd. for 5 shares of Mask Ltd.

$$\begin{aligned} \text{No. of shares to be issued} &= 100 \text{ lakh} \times 0.2 \\ &= 20 \text{ lakhs.} \end{aligned}$$

- (ii)
$$\text{EPS after merger} = \frac{2,000 \text{ lakhs} + 400 \text{ lakhs}}{200 \text{ lakhs} + 20 \text{ lakhs}}$$
$$= ₹ 10.91$$

- (iii) Expected market price after merger assuming P/E 10 times.

$$= ₹ 10.91 \times 10$$

$$= ₹ 109.10$$

- (iv) Market value of merged firm

$$= ₹ 109.10 \text{ market price} \times 220 \text{ lakhs shares}$$

$$= 240.02 \text{ crores}$$

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(v) Gain from the merger

Post merger market value of the merged firm ₹ 240.02 crores

Less: Pre-merger market value

Mark Ltd. 200 Lakhs × ₹ 100 = 200 crores

Mask Ltd. 100 Lakhs × ₹ 20 = 20 crores ₹ 220.00 crores

Gain from merger ₹ 20.02 crores

Appropriation of gains from the merger among shareholders:

	Mark Ltd.	Mask Ltd.
Post merger value	218.20 crores	21.82 crores
Less: Pre-merger market value	200.00 crores	20.00 crores
Gain to Shareholders	18.20 crores	1.82 crores

Question – 17

You have been provided the following Financial data of two companies:

	Krishna Ltd.	Rama Ltd.
Earnings after taxes	₹ 7,00,000	₹ 10,00,000
No. of Equity shares(outstanding)	2,00,000	4,00,000
EPS	3.5	2.5
P/E ratio	10 times	14 times
Market price per share	₹ 35	₹ 35

Company Rama Ltd. is acquiring the company Krishna Ltd., exchanging its shares on a one-to-one basis for company Krishna Ltd. The exchange ratio is based on the market prices of the shares of the two companies.

Required:

- (i) What will be the EPS subsequent to merger?
- (ii) What is the change in EPS for the shareholders of companies Rama Ltd. and Krishna Ltd.?
- (iii) Determine the market value of the post-merger firm. PE ratio is likely to remain the same.
- (iv) Ascertain the profits accruing to shareholders of both the companies.

Solution:

(i)	Exchange Ratio	1:1
	New Shares to be issued	2,00,000
	Total shares of Rama Ltd. (4,00,000 + 2,00,000)	6,00,000
	Total earnings (₹ 10,00,000 + ₹ 7,00,000)	₹ 17,00,000
	New EPS (₹ 17,00,000/6,00,000)	₹ 2.83
(ii)	Existing EPS of Rama Ltd.	₹ 2.50
	Increase in EPS of Rama Ltd (₹ 2.83 – ₹ 2.50)	₹ 0.33
	Existing EPS of Krishna Ltd.	₹ 3.50
	Decrease in EPS of Krishna Ltd. (₹ 3.50 – ₹ 2.83)	₹ 0.67
(iii)	P/E ratio of new firm (expected to remain same)	14 times
	New market price (14 × ₹ 2.83)	₹ 39.62
	Total No. of Shares	6,00,000
	Total market Capitalization (6,00,000 × ₹ 39.62)	₹ 2,37,72,000
	Existing market capitalization (₹ 70,00,000 + ₹ 1,40,00,000)	<u>₹ 2,10,00,000</u>
	Total gain	<u>₹ 27,72,000</u>

(iv)

	Rama Ltd.	Krishna Ltd	Total
No. of shares after merger	4,00,000	2,00,000	6,00,000
Market price	₹ 39.62	₹ 39.62	₹ 39.62
Total Mkt. Values	₹ 1,58,48,000	₹ 79,24,000	₹ 2,37,72,000
Existing Mkt. values	<u>₹ 1,40,00,000</u>	<u>₹ 70,00,000</u>	<u>₹ 2,10,00,000</u>
Gain to share holders	₹ 18,48,000	₹ 9,24,000	₹ 27,72,000

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or ₹ 27,72,000 ÷ 3 = ₹ 9,24,000 to Krishna Ltd. and ₹ 18,48,000 to Rama Ltd. (in 2 : 1 ratio)

CASH DEAL

Question – 18

The CEO of a company thinks that shareholders always look for EPS. Therefore, he considers maximization of EPS as his company's objective. His company's current Net Profits are ₹ 80.00 lakhs and P/E multiple is 10.5. He wants to buy another firm which has current income of ₹ 15.75 lakhs & P/E multiple of 10.

What is the maximum exchange ratio which the CEO should offer so that he could keep EPS at the current level, given that the current market price of both the acquirer and the target company are ₹ 42 and ₹ 105 respectively?

If the CEO borrows funds at 15% and buys out Target Company by paying cash, how much cash should he offer to maintain his EPS? Assume tax rate of 30%.

(SM TYK – 05 & MTP – 2020)

Solution:

(i)

	Acquirer Company	Target Company
Net Profit	₹ 80 lakhs	₹ 15.75 lakhs
PE Multiple	10.50	10.00
Market Capitalization	₹ 840 lakhs	₹ 157.50 lakhs
Market Price	₹ 42	₹ 105
No. of Shares	20 lakhs	1.50 lakhs
EPS	₹ 4	₹ 10.50

$$\text{Maximum Exchange Ratio} = \frac{10.50}{4} = 2.625:1$$

Thus, for every one share of Target Company 2.625 shares of Acquirer Company.

(ii) Let X lakhs be the amount paid by Acquirer company to Target Company. Then to maintain same EPS i.e. ₹ 4 the number of shares to be issued will be:

$$\frac{(80 \text{ lakhs} + 15.75 \text{ lakhs}) - 0.70 \times 15\% \times X}{20 \text{ lakhs}} = 4$$

$$\frac{95.75 - 0.105 X}{20} = 4$$

$$X = ₹ 150 \text{ lakhs}$$

Thus, ₹ 150 lakhs shall be offered in cash to Target Company to maintain same EPS.

Question – 19

The equity shares of XYZ Ltd. are currently being traded at ₹ 24 per share in the market. XYZ Ltd. has total 10,00,000 equity shares outstanding in number; and promoters' equity holding in the company is 40%.

PQR Ltd. wishes to acquire XYZ Ltd. because of likely synergies. The estimated present value of these synergies is ₹ 80,00,000.

Further PQR feels that management of XYZ Ltd. has been over paid. With better motivation, lower salaries and fewer perks for the top management, will lead to savings of ₹ 4,00,000 p.a. Top management with their families are promoters of XYZ Ltd. Present value of these savings would add ₹ 30,00,000 in value to the acquisition.

Following additional information is available regarding PQR Ltd.:

Earnings per share	:	₹ 4
Total number of equity shares outstanding	:	15,00,000
Market price of equity share	:	₹ 40

Required:

- (i) What is the maximum price per equity share which PQR Ltd. can offer to pay for XYZ Ltd.?
- (ii) What is the minimum price per equity share at which the management of XYZ Ltd. will be willing to offer their controlling interest?

(SM TYK – 31)

Solution:

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- (i) Calculation of maximum price per share at which PQR Ltd. can offer to pay for XYZ Ltd.'s share

Market Value (10,00,000 × ₹ 24)	₹ 2,40,00,000
Synergy Gain	₹ 80,00,000
Saving of Overpayment	₹ 30,00,000
	₹ 3,50,00,000
Maximum Price (₹ 3,50,00,000/10,00,000)	₹ 35

- (ii) Calculation of minimum price per share at which the management of XYZ Ltd.'s will be willing to offer their controlling interest

Value of XYZ Ltd.'s Management Holding (40% of 10,00,000 × ₹ 24)	₹ 96,00,000
Add: PV of loss of remuneration to top management	₹ 30,00,000
	₹ 1,26,00,000
No. of Shares	4,00,000
Minimum Price (₹ 1,26,00,000/4,00,000)	₹ 31.50

FREE FLOAT MARKET CAPITALIZATION

Question – 20

The following information relating to the acquiring Company Abhiman Ltd. and the target Company Abhishek Ltd. are available. Both the Companies are promoted by Multinational Company, Trident Ltd. The promoter's holding is 50% and 60% respectively in Abhiman Ltd. and Abhishek Ltd.:

	Abhiman Ltd.	Abhishek Ltd.
Share Capital (₹)	200 lakh	100 lakh
Free Reserve and Surplus (₹)	800 lakh	500 lakh
Paid up Value per share (₹)	100	10
Free float Market Capitalization (₹)	400 lakh	128 lakh
P/E Ratio (times)	10	4

Trident Ltd. is interested to do justice to the shareholders of both the Companies. For the swap ratio weights are assigned to different parameters by the Board of Directors as follows:

Book Value 25%

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EPS (Earning per share) 50%

Market Price 25%

- (a) What is the swap ratio based on above weights?
- (b) What is the Book Value, EPS and expected Market price of Abhiman Ltd. after acquisition of Abhishek Ltd. (assuming P.E. ratio of Abhiman Ltd. remains unchanged and all assets and liabilities of Abhishek Ltd. are taken over at book value).
- (c) Calculate:
- (i) Promoter's revised holding in the Abhiman Ltd.
- (ii) Free float market capitalization.
- (iii) Also calculate No. of Shares, Earning per Share (EPS) and Book Value (B.V.), if after acquisition of Abhishek Ltd., Abhiman Ltd. decided to :
- (1) Issue Bonus shares in the ratio of 1 : 2; and
- (2) Split the stock (share) as ₹ 5 each fully paid.

(SM TYK – 20)

Solution:

(a) Swap Ratio

	Abhiman Ltd.	Abhishek Ltd.
Share Capital	200 lakh	100 lakh
Free Reserve	<u>800 lakh</u>	<u>500 lakh</u>
Total	<u>1000 lakh</u>	<u>600 lakh</u>
No. of Shares	2 lakh	10 lakh
Book Value per share	₹500	₹ 60
Promoter's holding	50%	60 %
Non promoter's holding	50%	40 %
Free Float Market Cap.	400 lakh	128 lakh
Total market Cap.	800 lakh	320 lakh
No. of Shares	2 lakh	10 lakh
Market Price	₹ 400	₹ 32
P/E Ratio	10	4

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EPS	40	8
Profits (₹ 2 × 40 lakh)	80 lakh	-
(₹ 8 × 10 lakh)	-	₹ 80 lakh

Calculation of Swap Ratio

Book Value	$\frac{60}{500}$	= 0.12 × 25%	0.03
EPS	$\frac{8}{40}$	= 0.20 × 50%	0.10
Market Price	$\frac{32}{400}$	= 0.08 × 25%	<u>0.02</u>
		Total	<u>0.15</u>

Swap ratio is for every one share of Abhishek Ltd., to issue 0.15 shares of Abhiman Ltd. Hence total no. of shares to be issued.

$$10 \text{ Lakh} \times 0.15 = 1.50 \text{ lakh shares}$$

(b) Book Value, EPS & Market Price

Total No of Shares	= 2 Lakh + 1.5 Lakh = 3.5 Lakh
Total Capital	= ₹ 200 Lakh + ₹ 150 Lakh = ₹ 350 Lakh
Reserves	= ₹ 800 Lakh + ₹ 450 Lakh = ₹ 1,250 Lakh
BVPS	= $\frac{\text{₹ 350 Lakh} + \text{₹ 1,250 Lakh}}{3.5 \text{ Lakh}}$ = ₹ 457.14 per share
Post Merger EPS	= $\frac{\text{Total Profit}}{\text{No. of Share}}$ = $\frac{\text{₹ 80 Lakh} + \text{₹ 80 Lakh}}{3.5 \text{ Lakh}}$

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$$\begin{aligned} &= \frac{\text{₹ 160 Lakh}}{3.5} \\ &= \text{₹ 45.17} \end{aligned}$$

Expected Market Price EPS(₹ 45.71) × P/E Ratio (10) = ₹ 457.10

(c) (i) Promoter's holding

Promoter's Revised	Abhiman 50% i.e.	1.00 Lakh shares
Holding	Abhishek 60% i.e.	<u>0.90 Lakh shares</u>
	Total	<u>1.90 Lakh shares</u>

$$\text{Promoter's \%} = 1.90/3.50 \times 100 = 54.29\%$$

(ii) Free Float Market Capitalization

$$\begin{aligned} \text{Free Float Market} &= (3.5 \text{ Lakh} - 1.9 \text{ Lakh}) \times \text{₹ 457.10} \\ \text{Capitalization} &= \text{₹ 731.36 Lakh} \end{aligned}$$

(iii) (a) & (b)

$$\text{Revised Capital} = \text{₹ 350 Lakh} + \text{₹ 175 Lakh} = \text{₹ 525 Lakh}$$

$$\begin{aligned} \text{No. of shares before} \\ \text{Split (F.V ₹ 100)} &= 5.25 \text{ Lakh} \end{aligned}$$

$$\begin{aligned} \text{No. of Shares after} \\ \text{Split (F.V. ₹ 5)} &= 5.25 \times 20 = 105 \text{ Lakh} \end{aligned}$$

$$\text{EPS} = 160 \text{ Lakh} / 105 \text{ Lakh} = 1.523$$

$$\text{Book Value} = \frac{\text{Cap. ₹ 525 Lakh} + \text{₹ 1075 Lakh}}{105 \text{ Lakh}}$$

$$\text{No. of Shares} = 105 \text{ Lakh}$$

$$= \text{₹ 15.238 per share}$$

Question - 21

Intel Ltd., promoted by a Trans National Company, is listed on the stock exchange.

The value of the floating stock is ₹ 45 crores. The Market Price per Share (MPS) is ₹ 150.

The capitalization rate is 20 percent.

The promoters holding is to be restricted to 75 per cent as per the norms of listing requirement. The Board of Directors have decided to fall in line to restrict the Promoters' holding to 75 percent by issuing Bonus Shares to minority shareholders while maintaining the same Price Earnings Ratio (P/E).

You are required to calculate:

- (i) Bonus Ratio;
- (ii) MPS after issue of Bonus Shares; and
- (iii) Free float Market capitalization after issue of Bonus Shares

(Exam May – 2018) (8 Marks)

Solution:

1. No. of Bonus Shares to be Issued:

Free Float Capitalization	= ₹ 45 crore
Market Price Per Share	= ₹ 150
Shares of Minority	= $\frac{₹ 4,500 \text{ lacs}}{₹ 150} = 30 \text{ lacs}$
Minority Share Holding (100% – 80%*)	= 20%
Hence Total shares	= $\frac{30 \text{ lacs}}{0.20} = 150 \text{ lacs}$
Promoters holding 80%,	= 120 lacs shares
Shares remains the same, but holding % to be taken as 75%	
Hence Total shares	= $\frac{120 \text{ lacs}}{0.75} = 160 \text{ lacs}$
Shares of Minority	= 160 lacs – 120 lacs = 40 lacs
Bonus 10 lacs for 30 lacs i.e. 1 shares for 3 shares held.	

2. Market Price after Bonus Issue:

Let us compute PE with given k_e as follows:

$$PE = \frac{1}{k_e} = \frac{1}{0.20} = 5$$

Market Price Given = ₹ 150

Hence EPS will be (₹ 150/5) = ₹ 30

Total No. of shares before bonus issue = 150 lacs

Accordingly, Total PAT shall be (₹ 30 × 150 lacs) = ₹ 4,500 lacs

Total No. of shares after bonus issue = 150 lacs + 10 lacs = 160 lacs

EPS after Bonus Issue = ₹ 4,500 lacs/160 lacs = ₹ 28.125

Market Price After Bonus Issue = ₹ 28.125 × 5 = ₹ 140.63

3. Free Float Capitalization after Bonus Issue

₹ 140.63 × 40 lacs = ₹ 5,625.20 lacs i.e. ₹ 56.252 crore

Note: Since the information regarding the promoters' holding is missing in the question, above solution is based on assumption of promoter's holding as 80%. However, student can assume any % other than 80% and solve the question accordingly.

MERGER OF BANKS

Question - 22

Bank 'R' was established in 2005 and doing banking in India. The bank is facing DO OR DIE situation. There are problems of Gross NPA (Non Performing Assets) at 40% & CAR/CRAR (Capital Adequacy Ratio/ Capital Risk Weight Asset Ratio) at 4%. The net worth of the bank is not good. Shares are not traded regularly. Last week, it was traded @ ₹ 8 per share. RBI Audit suggested that bank has either to liquidate or to merge with other bank.

Bank 'P' is professionally managed bank with low gross NPA of 5%. It has Net NPA as 0% and CAR at 16%. Its share is quoted in the market @ ₹ 128 per share. The board of directors of bank 'P' has submitted a proposal to RBI for take over of bank 'R' on the basis of share exchange ratio.

The Balance Sheet details of both the banks are as follows:

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	Bank 'R' Amt. in ₹ lacs	Bank 'P' Amt. In ₹ lacs
Paid up share capital (F.V. ₹ 10 each)	140	500
Reserves & Surplus	70	5,500
Deposits	4,000	40,000
Other liabilities	890	2,500
Total Liabilities	5,100	48,500
Cash in hand & with RBI	400	2,500
Balance with other banks	-	2,000
Investments	1,100	15,000
Advances	3,500	27,000
Other Assets	100	2,000
Total Assets	5,100	48,500

It was decided to issue shares at Book Value of Bank 'P' to the shareholders of Bank 'R'. All assets and liabilities are to be taken over at Book Value.

For the swap ratio, weights assigned to different parameters are as follows:

Gross NPA	30%
CAR	20%
Market price	40%
Book value	10%

- (a) What is the swap ratio based on above weights?
- (b) How many shares are to be issued?
- (c) Prepare Balance Sheet after merger.
- (d) Calculate CAR & Gross NPA % of Bank 'P' after merger.

Solution:

(a) Swap Ratio

Gross NPA	5 : 40	i.e	$5/40 \times 30\% =$	0.0375
CAR	4 : 16	i.e	$4/16 \times 20\% =$	0.0500
Market Price	8 : 128	i.e	$8/128 \times 40\% =$	0.025
Book Value Per Share	15 : 120	i.e	$15/120 \times 10\% =$	0.0125

Thus, for every 1 share of Bank 'R' 0.125 share of Bank 'P' shall be issued.

(b) No. of Equity Shares to be Issued:

$$\frac{\text{₹ 140 lac}}{\text{₹ 10}} \times 0.125 = 1.75 \text{ lac shares}$$

(c) Balance Sheet after Merger

Calculation of Capital Reserve

Book Value of Shares	₹ 210.00 lac
Less: Value of Shares issued	₹ 17.50 lac
Capital Reserve	₹ 192.50 lac

Balance Sheet

	₹ lac		₹ lac
Paid up Share Capital	517.50	Cash in Hand & RBI	2,900.00
Reserves & Surplus	5,500.00	Balance with other banks	2,000.00
Capital Reserve	192.50	Investment	16,100.00
Deposits	44,000.00	Advances	30,500.00
Other Liabilities	3,390.00	Other Assets	2,100.00
	53,600.00		53,600.00

(d) Calculation CAR & Gross NPA % of Bank 'P' after Merger

$$\text{CAR/CRWAR} = \frac{\text{Total Capital}}{\text{Risky Weighted Assets}}$$

	Bank 'R'	Bank 'P'	Merged
CAR (Given)	4%	16%	
Total Capital	₹ 210 lacs	₹ 6000 lacs	₹ 6210 lacs
Risky Weighted Assets	₹ 5250 lacs	₹ 37500 lacs	₹ 42750 lacs

$$\text{Car} = \frac{\text{₹ 6,210 lacs}}{\text{₹ 42,750 lacs}} = 14.53\%$$

$$\text{GNPA Ratio} = \frac{\text{Gross NPA}}{\text{Gross Deposits}} \times 100$$

	Bank 'R'	Bank 'P'	Merged
GNPA (Given)	0.40	0.5	
	$0.40 = \frac{\text{GNPA}_R}{\text{₹ 3,500 lacs}}$	$0.05 = \frac{\text{GNPA}_S}{\text{₹ 27,000 lacs}}$	

MERGER ACQUISITION & CORPORATE RESTRUCTURING

Gross NPA	₹ 1400lac	₹ 1350 lac	₹ 2750 lacs
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MINIMUM & MAXIMUM EXCHANGE RATIO (Conn & Nielson Model)

Question – 23

ABC Ltd. is intending to acquire XYZ Ltd. by way of merger and the following information is available in respect of these companies:

	ABC Ltd.	XYZ Ltd.
Total Earnings (E) (in lakh)	₹ 1,200	₹400
Number of outstanding shares (S) (in lakh)	400	200
Price earnings ratio (P/E)	8	7

- (a) Determine the maximum exchange ratio acceptable to the shareholders of ABC Ltd., if the P/E ratio of the combined firm is expected to be 8?
- (b) Determine the minimum exchange ratio acceptable to the shareholders XYZ Ltd., if the P/E ratio of the combined firm is expected to be 10?

Note: Make calculation in lakh multiples and compute ratio upto 4 decimal points.

(RTP May – 2021)

Solution:

	ABC	XYZ
EAT	1,200 lacs	400 lacs
(÷) No.	400	200
EPS	₹ 3	₹ 2
(×) P/E ratio	8	7
MPS	₹ 24	₹ 14

(a) Maximum Exchange Ratio

Let assume maximum Exchange Ratio be x at which post merger MPS be ₹ 24

$$\left(\frac{1,200 + 400}{400 + 200x} \right) \times 8 = ₹ 24$$

$$12,800 = 9,600 + 4,800x$$