

Solution - 17.5:

	Segments			Inter Elimination	Segment	Consolidated Figures
	A	B	C			
<u>Segment Revenue</u>						
Sales (Domestic)	60	-----	-----			60
Sales (Export)	----	4290	180			4470
External Sales	60	4290	180			4530
Inter Segment Sales	3050	30	----		3080	-----
Total Revenue	3110	4320	180		3080	4530
Segment Expenses						
Inter Segment	2950	1250	158			4358
Purchase	-----	3050	30		3080	-----
Segment Expenses	2950	4300	188		3080	4358
Segment Result						
Head Office Expenses	160	20	(8)			172
Interest Expenses						(96)
Profit Before Tax						76
						(10)
						66
<u>Other Information</u>						
Fixed Assets	200	40	120			360
Net Current Assets	120	40	90			250
	320	80	210			610
Unallocated Assets						98
Segment Liabilities	20	10	120			150
Unallocated Liabilities						38

Sales Revenue Based On Location Of Customer

	<u>Africa</u>	<u>Others</u>	<u>Consolidated</u>
External Sale	4,090	440	4,530

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Answer - 7.4: Contract Revenue = Rs.(9,000 + 200) lakhs = Rs.9,200 lakhs
 Estimated Contract Costs = Rs.(9,150 + 150) lakhs =
 Rs.9,300 lakhs
 Estimated loss = Rs.(9300 - 9,200) lakhs = Rs.100 lakhs
 Such loss is to be recognized immediately i.e. in year-2

The Amounts Of Revenue , Expenses and Profit to be Recognized in the
statement of Profit and Loss in three years

<u>Particular</u>	<u>Up to Reporting Date</u>	<u>Recognized in Prior Years</u>	<u>Current Year Recognition</u>
YEAR - 1			
Revenue (9000X.26)	2340		2340
Expense (8050X.26)	2093		2093
Profit [Rev - Exp]	247		247

YEAR - 2			
Revenue (9200X.74)	6808	2340	4468
Expense (9300X.74)	6882	2093	4789
Profit (Rev-Exp)	(74)	247	(321)
Expected loss = Rs.100 lakhs. Loss considered up to year-2 as above = 321 - 247 = 74. Additional provision to be made for loss = 100 - 74 = 26.			

YEAR - 3			
Revenue (9200X1)	9200	6808	2392
Expense (8200X1)	9300	6882	2418
Profit (Rev-Exp)	(100)	(74)	(26)

In the current year the loss of Rs.26 lakhs should not have to be debited to P&L A/c since in year-2 the entire loss has been provided for. So , the provision already made is to be transferred to P & L A/c to set off the effect of loss of Rs.26 lakhs.

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Amalgamation Scanner Solution

Solution ~ May - 96

Statement Of NATO

	<u>ALtd.</u>	<u>BLtd.</u>
Land & Building	550	400
Plant & Machinery	350	250
Investment	150	50
Stock	350	250
Debtors	250	300
B/R	50	50
Cash & Bank	300	200
Less: Liability for Debentures	(40)	(20)
S/Creditors	(270)	(120)
Bills Payable	(150)	(70)
	-----	-----
	1540	1290
	-----	-----

Statement Of Purchase Consideration

	<u>ALtd.</u>	<u>BLtd.</u>
Preference Shares	450	300
Equity Shares	1200	900
	-----	-----
	1650	1200
	-----	-----

Goodwill = (1650 + 1200 - 1540 - 1290) = 20

Balance Sheet Of C Ltd.

Liabilities	Amount	Assets	Amount
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Equity Share Capital	700	Goodwill	20
Pref. Share Capital	500	Land & Buildings	950
Securities Premium	1650	Plant & Machinery	600
Inv't Allow Reserve	100	Investment	200
15% Debentures	60	Stock	600
Bills Payable	220	Debtors	550
S/Creditors	390	Cash	500
		Bills Receivables	100
		Amalgamation Adj A/c	100
	<u>3620</u>		<u>3620</u>



Solution ~ November ~ 96

Balance Sheet of Big Ltd. & Small Ltd. as on 30.09.05.

Liabilities	Big	Small	Assets	Big	Small
Eq. Sh. Cap.	8,00,000	3,00,000	Building	1,90,000	95,000
Pref. Sh. Cap.	—	2,00,000	Machinery	4,25,000	2,55,000
Gen. res.	3,00,000	1,00,000	Furniture	90,000	54,000
P & L A/c (WN-1)	1,91,500	1,09,000	6,000 Shares of Small	60,000	—
Creditors	1,80,000	2,10,000	Stock	1,20,000	85,000
			Debtors	3,80,000	1,50,000
			Cash (Bal. fig.)	1,56,500	2,50,000
				50,000	30,000
	<u>1471500</u>	<u>9,19,000</u>	Prelim. Exp.	<u>1471500</u>	<u>9,19,000</u>

Working Note ~ 1:

Balance as given

Big

2,00,000

Small

1,00,000

Add: Profit for half year	1,02,500	54,000
Less: Equity Dividend Paid	(1,20,000)	(45,000)
Add: Dividend Income	9,000	---
	-----	-----
	1,91,500	1,09,000
	-----	-----

Assumption:

- Preference Dividend has already been paid
- Profit for half year does not include dividend income
- Entire dividend income is post acquisition

Statement Of NATO

Goodwill	50,000
Land & Building	1,10,000
Machinery	3,30,000
Furniture	66,000
Stock	1,50,000
Debtors	2,50,000
Cash	85,000
Less: Creditors	(2,10,000)

	8,31,000

Statement Of Purchase Consideration

<u>Payment to</u>	<u>Form</u>	<u>Calculation</u>	<u>Amount</u>
Pref. Shareholders	Pref. Shares		2,00,000
Equity Shareholders	Equity Shares	8,31,000 - 2,00,000	6,31,000

Amount Payable w.r.t. all shareholders (X)			8,31,000
Less: Not to be paid due to inter company holding (6,31,000 X 20)			1,26,200

Amount payable to outside shareholders only (Y)	5,04,800
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Number of shares to be issued 33,653

Cash to be paid for fractional shares Rs.5

Statement Of Goodwill / (Capital Reserve)

Value of Inter company investment as calculated above	1,26,200
Less: Book Value of Inter company holding	(60,000)
Capital Reserve	66,200
Goodwill already considered in NATO	(50,000)
Resultant Capital Reserve	16,200

Balance Sheet of Big Ltd. as at 30.09.95.

Liabilities	Amount	Assets	Amount
Eq. Sh. Cap.	11,36,530	Building	3,00,000
Pref. Sh. Cap.	2,00,000	Machinery	7,55,000
Capital Reserve	16,200	Furniture	1,56,000
Security Premium	1,68,265	Stock	2,70,000
General Reserve	3,00,000	Debtors	6,30,000
Profit & Loss A/c	1,91,500	Cash [1,56,500 +	
Creditors	3,90,000	85,000 - 5]	2,41,495
		Preliminary Exp.	50,000
	24,02,495		24,02,495

Solution – November – 1997

Note: It has been assumed that valuation of Rs.130 crores includes current liabilities.

Statement Of NATO

Fixed Assets	40
Current Assets	300
Less: Current Liabilities	(200)
Liability for Debentures	(25)
	115

Statement Of Purchase Consideration

Amount Payable w.r.t. all shareholders [130 – 25]	105
Less: Not to be paid due to Inter co. holding [105 X 2/2.5]	(84)
Amount Payable to outside shareholders	21

Statement Of Goodwill / Capital Reserve

Difference between NATO & Purchase Consideration [115 – 105]	10 (CR)
Difference between Book Value & Calculated Value of inter company investment [84 – 32]	52 (CR)
Difference between Book Value and agreed value of Debentures [25 – 24]	1 (CR)
Resultant Capital Reserve	63

Journal Of S Ltd.

1. Business Purchase A/c	105	
To Liquidator of H Ltd. A/c		105
2. Fixed Assets A/c	40	
Current Assets A/c	300	
To Current Liabilities A/c		200
To Liability For Debentures A/c		25
To Capital Reserve A/c		10
To Business Purchase A/c		105
3. Liquidator of H Ltd. A/c	21	
To Equity Share Capital A/c		2.10
To Security Premium A/c		18.90
4. Liquidator of H Ltd. A/c	84	
To Investment in Shares of H Ltd. A/c		32
To Capital Reserve A/c		52
5. Liability for Debentures A/c	25	
To Debentures in H Ltd. A/c		24
To Capital Reserve A/c		1

Balance Sheet Of S Ltd. 01.07.97.

Liabilities	Amount	Assets	Amount
Equity Share Capital	82.10	Fixed Assets	140
Capital Reserve	63.00	Current Assets	1100
Security Premium	18.90		
Other Reserv & Surplus	400.00		
Current Liabilities	556.00		
Other Liabilities	120.00		
	<u>1240</u>		<u>1240</u>

Solution - May - 1998

a)

<u>Statement Of Intrinsic Value</u>		
<u>Particulars</u>	<u>Big Ltd.</u>	<u>Small Ltd.</u>
Fixed Assets	200	429
CA - CL	200	200
Goodwill	40	75
Less: Secured Loan	(100)	(100)
Preference Capital	—	(60)
	-----	-----
Intrinsic Value	340	544
	-----	-----

Intrinsic Value per share of Small Ltd. = $544 / 4 = \text{Rs. } 136$

No. of shares to be issued by Small Ltd. = $340 / 136 = 2.5$ crore

<u>Statement Of NATO</u>	
Fixed Assets	150
CA - CL	200
Less: Secured Loan	(100)

	250

Statement Of Purchase Consideration

Equity Shares = $2.5 \times 10 = \text{Rs. } 25$ crores

Statement Of Capital Reserve

$$\text{Capital reserve} = 250 - 25 = 225$$

Balance Sheet Of Small Ltd.

Liabilities	Amount	Assets	Amount
Eq. Sh. Cap.	65	Fixed Assets [150 +	300
10% Pref. Sh. cap.	60	150]	
Capital reserve	225	CA - CL [200 + 200]	400
Other R & S	150		
Secured Loans	200		
	<u>700</u>		<u>700</u>

b)

Verification

Net Asset as per B/S [700 - 200 - 60] 440

Goodwill not considered [40 + 75] 115

Increase in FA value [50 + 279] 329

Net Asset Available to Equity Share Holders 884

No. of Equity Shares 6.5

Intrinsic Value per share [884 / 6.5] Rs.136



Solution - November - 1998

a)

Balance Sheet Of H Ltd. as at 30.09.07.

Liabilities	Amount	Assets	Amount
Eq. Sh. Cap.	4,00,000	Block Assets	5,67,500
Pref. Sh. Cap.	3,00,000	Stock & Debtors	4,00,000

General Reserve	1,00,000	Cash & Bank (balancing figure)	1,63,000
P & L A/c (WN-1)	1,30,500		
Creditors	2,00,000		
	<u>11,30,500</u>		<u>11,30,500</u>

<u>Working Note – 1:</u> Profit as given	1,00,000
Add: Half year profit	70,500
Less: Equity Dividend	(40,000)
	<u>1,30,500</u>

It has been assumed that preference dividend has already been paid.

Working Note – 2:

Statement Of NATO

Goodwill	80,000
Other Fixed Assets	6,60,000
Stock & Debtors	4,00,000
Cash	1,63,000
Less: Creditors	(2,00,000)
	<u>11,03,000</u>

Working Note – 3:

Statement of PC

As Purchase Consideration is not given in the problem , it should be equals to NATO i.e. Rs.11,03,000

Amount payable to Preference Shareholders	<u>3,00,000</u>
Amount payable to All Equity Share holders (X)	8,03,000
[11,03,000 – 3,00,000]	
Less: Value of inter company investment [8,03,000 X 25%]	<u>(2,00,750)</u>

Amount Payable to Outside Equity Shareholders	6,02,250
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b) Statement of Goodwill / Capital Reserve

Value of inter company investment calculated as above	2,00,750
Less: Book Value of Investment	(1,00,000)
Less: Goodwill considered in NATO	(80,000)
Capital Reserve	20,750

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Solution ~ Nov ~ 1999

Profit & Loss A/c

Sales [WN-1]	4330
Less: Inventory Consumed [WN-2]	(2185)
Payment to Employees	(700)
Expenses [WN-4]	(520)
EBDIT	925
Less: Interest	(50)
Depreciation	(180)
Add: Profit on sale of Fixed Asset	2
PBT	697
Less: Tax [925 - 50 - 200] X 38.5%	(260)
PAT	437
Less: Dividend	(50)
Balance Carried Forward	387

Balance Sheet

Liabilities	Amount	Assets	Amount
Equity Share Capital (200+50+250]	500	Fixed Asset (1482 - 180)	1302
P & L A/c	387	Investment	100
Loan for Fixed Asset	750	Stock	15
Outstanding Expenses	30	Debtors	400
Creditors for Goods	260	Cash & Bank	50
Provision for Tax	260	Advance to Suppliers	40
		Prepaid Expenses	10
		Tax Payment	270
	<u>2187</u>		<u>2187</u>

Customer's Account [WN-1]

Particulars	Amount	Particulars	Amount
To Business Purchase	70	By Bank	4000
To Sales (bal. fig.)	4330	By Balance	400
	<u>4400</u>		<u>4400</u>

Inventory Consumed [WN-2]

Business Purchase	10
Add: Stock Purchase [WN-3]	2190
Less: Closing Stock	(15)
	<u>2185</u>

Suppliers Account (Goods) [WN-3]

Particulars	Amount	Particulars	Amount
To Bank (2000 - 40)	1960	By Business Purchase A/c	30

To Balance c/d	260	By Purchase A/c (bal. fig.)	2190
	<u>2220</u>		<u>2220</u>

Expense Account (WN-4)

Particulars	Amount	Particulars	Amount
To bank	500	By P & L A/c	520
To Balance c/d (outstanding)	30	By Bal c/d (prepaid)	10
	<u>530</u>		<u>530</u>

Suppliers Account (Fixed Asset)

Particulars	Amount	Particulars	Amount
To Bank	650	By Fixed Assets (bal. fig.)	1350
To Balance (as given)	750	By Interest A/c	50
	<u>1400</u>		<u>1400</u>

Fixed Assets Account

Particulars	Amount	Particulars	Amount
To Business Purchase A/c	150	By Bank (sale)	20
To P & L A/c	2	By Balance	1482
To Supplier's A/c	1350		
	<u>1502</u>		<u>1502</u>



Solution ~ Nov ~ 2000

Statement Of NATO

Fixed Assets	28,00,000
Current Assets	21,00,000

Less: Current Liabilities (9,60,000)

39,40,000

Statement Of Purchase Consideration

a) Amount Payable to Preference Shareholders:

Current Preference Dividend of P Ltd. 40,000

Add: 10% thereof 4,000

44,000

Value of Preference Shares to be issued = $44,000 / 8\% = \text{Rs. } 5,50,000$

b) Amount Payable to Equity Shareholders:

Earning per share of P Ltd. = Rs.2

P/E ratio of R Ltd. = 16

75% thereof = $16 \times 75\% = 12$

Value of Equity Shares of P Ltd. = $2 \times \text{Rs. } 12 = \text{Rs. } 24$

Value of total equity shares of P Ltd. = $\text{Rs. } 24 \times 1,20,000$

= **Rs.28,88,000**

No. of equity shares to be issued = $28,80,000 / 40 = 72,000$

Current Equity Dividend 1,92,000

Less: Expected Equity Dividend from R

$(2,88,000 / 2,40,000) \times 72,000$ (86,400)

1,05,600

8% Preference Shares to be issued = $\text{Rs. } 1,05,600 / 8\% = \text{Rs. } 13,20,000$

Purchase Consideration = $\text{Rs. } (5,50,000 + 28,88,000 + 13,20,000)$

$$= \text{Rs.}47,50,000$$

$$\text{Goodwill} = \text{Rs.}(47,50,000 - 39,40,000) = \text{Rs.}8,10,000$$

Balance Sheet

Liabilities	Amount	Assets	Amount
Equity Share Capital (24,00,000 + 7,20,000)	31,20,000	Goodwill	8,10,000
Preference Share Capital (8,00,000+5,50,000+13,20,000)	26,70,000	Other Fixed Assets	83,00,000
R & S (30,00,000 + 21,60,000)	51,60,000	Current Assets	46,00,000
Current Liabilities	27,60,000		
	<u>1,37,10,000</u>		<u>1,37,10,000</u>

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Solution ~ May ~ 2001

a)

Present Value Of Synergy Benefit

Year	PV Factor	CF	PV
02	0.833	50	41.65
03	0.694	75	52.05
04	0.579	90	52.11
05	0.482	100	48.20
06	0.402	105	42.21
07 onwards	0.402	$105 \times 1.02 / (0.20 - 0.02) = 595$	293.19
			<u>475.41</u>

The holder of each share of Kolkata Ltd. would receive $475.41 \times 50\% / 10 =$
Rs.23.77

Purchase Consideration

	<u>Amount(lakhs)</u>
Equity Shares [(25/50)X10,00,000 X Rs.50]	250.0
Cash	237.7
	487.7

b) Statement Of Amount to be adjusted in reserve

Amount of debentures Issued (60+72)	132
Value of Preference Share to be issued (400+300)	700
Value of Equity Shares to be issued (1500+800)	2300
Less: Existing Debentures	(176)
Existing Preference Share Capital	(700)
Existing Equity Share Capital	(1800)
Amount to be adjusted in reserve	456

Statement Of Adjustment In Reserve

Total Amount to be adjusted	456
Less: General reserve [200+150]	(350)
Less: P & L A/c	(106)
	NIL

Balance Sheet Of Gamma Ltd.

Liabilities	Amount	Assets	Amount
Equity Share Capital	2300	Fixed Assets	2200

Preference Share Cap.	700	Current Assets	1445
Revenue Reserve	180		
P & L A/c	34		
Debentures	132		
Current Liabilities	299		
	<u>3645</u>		<u>3645</u>

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Solution ~ Nov ~ 2001

Statement Of Intrinsic Value of O Ltd. & P Ltd.

	<u>O Ltd.</u>	<u>P Ltd.</u>
Fixed Assets	110	50
Investment [75/4]	18.75	30
Current Assets	40.25	3.25
Less: Creditors	(8)	(2.75)
12% Debentures	(11)	(5.50)
	<u>150</u>	<u>75</u>

Statement Of Number Of Shares to be allotted to P Ltd.

Value per share of O Ltd. = $150/2.5 = 60$
 Intrinsic Value of P Ltd. = Rs.75,00,000
Less: Value of shares held by O Ltd. = (Rs.18,75,000)

Value of shares held by outsiders Rs.56,25,000

Capital Reserve = $18,75,000 - 16,25,000 = 2,50,000$

Balance Sheet

Liabilities	Amount	Assets	Amount
Eq. Sh. Cap.	28.75	Fixed Assets	160
Security Premium	52.50	Investment	30
Reserve	131.00	Current Assets	43.50
Capital Reserve	2.50	Misc. Exp.	8.50
12% Debentures	16.50		
Creditors	10.75		
	<u>242</u>		<u>242</u>



Solution ~ May ~ 2002

Balance Sheet of A Ltd. and B Ltd. as at 01.10.01.

Liabilities	A Ltd.	B Ltd.	Assets	A Ltd.	B Ltd.
Eq. Sh. cap	15,00,000	10,00,000	F/Assets	11,87,500	8,31,250
Reserve	4,15,000	2,56,000	Stock	2,37,500	1,87,500
P&L A/c	3,60,000	1,89,000	Debtors	3,90,000	2,56,000
Creditors	93,750	75,000	Bank(bal.fig.)	5,28,750	2,32,750
			Pre. Exp.	25,000	12500
	<u>2368750</u>	<u>1520000</u>		<u>2368750</u>	<u>1520000</u>

Working Note-1:

Profit balance as given

Add: Profit for half year

Less: Equity Dividend

Less: Corporate Dividend Tax

A Ltd.

1,87,500

4,20,000

(2,25,000)

(22,500)

3,60,000

B Ltd.

1,50,000

2,04,000

(1,50,000)

(15,000)

1,89,000

Net Asset Available to Equity Shareholders

	<u>A Ltd.</u>	<u>B Ltd.</u>
Goodwill	---	1,20,000
Fixed Assets	11,87,500	8,31,250
Stock	2,37,500	2,25,000
Debtors	3,90,000	2,56,000
Bank	5,28,750	2,32,750
Less: Creditors	(93,750)	(75,000)
	<u>22,50,000</u>	<u>15,90,000</u>

Value per share of A Ltd. = $22,50,000 / 1,50,000 = \text{Rs. } 15$

No. of shares to be issued = $15,90,000 / 15 = 1,06,000$

Equity Share Capital = $1,06,000 \times 10 = 10,60,000$

Security Premium = $1,06,000 \times 5 = 5,30,000$

Liabilities	Amount	Assets	Amount
Eq. Sh. Cap.	25,60,000	Goodwill	1,20,000
Security Premium	5,30,000	Other Fixed Asset	20,18,750
Reserve	4,15,000	Stock	4,62,500
P & L A/c	3,60,000	Debtors	6,46,000
Creditors	1,68,750	Bank	7,61,500
		Preliminary Exp.	25,000
	<u>40,33,750</u>		<u>40,33,750</u>

Solution ~ November ~ 2002

Statement Of NATO

Fixed Assets [$2,50,000 \times 115\%$]

2,87,500

Stock [3,20,000 X 95%]	3,04,000
Debtors	1,90,000
Bills Receivables	20,000
Cash & Bank [40,000 – 30,000 + 5,000]	15,000
Less: Provision for Doubtful Debts	(9,500)
Bills Payable	(25,000)
Sundry Creditors	(1,25,000)
Liability for Debentures	(1,62,000)
	4,95,000

Statement Of Purchase Consideration

Preference Shares [1,00,000 X 90]	90,000
Add: Equity Shares [30,000 X 8/6 X Rs.10]	4,00,000
	4,90,000
Less: Equity Shares held by B Ltd. in A Ltd.	(50,000)
	4,40,000
Less: Value of shares held by A Ltd. in B Ltd. [6,000 X 8/6 X Rs.10]	(80,000)
	3,60,000

Statement Of Goodwill/ Capital Reserve

NATO	4,95,000
Less: Amount Payable for such NATO	(4,40,000)
Capital reserve	55,000
Value of Investment of A in B	80,000

Less: Book Value of Investment of A in B	(80,000)
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Goodwill / Capital reserve	<u>NIL</u>
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Resultant Capital Reserve = 55,000

Journal Of A Ltd.

Fixed Asset A/c	1,05,000	
To Revaluation Reserve A/c		1,05,000
[revaluation of Fixed Asset]		

Bank A/c	6,000	
To Reserve & Surplus A/c		6,000
[Dividend received from B Ltd.)		

Reserve & Surplus A/c	60,000	
To Bank A/c		60,000
[Payment of dividend]		

Business Purchase A/c	4,40,000	
To Liquidator of B Ltd. A/c		4,40,000

Fixed Asset A/c	2,87,500	
Stock A/c	3,04,000	
Debtors A/c	1,90,000	
Receivables A/c	20,000	
Bank A/c	15,000	
To Provision for Doubtful Debts		9,500
To Bills Payable		25,000

To S/ Creditors		1,25,000
To Liability for Debentures		1,62,000
To Business Purchase A/c		4,40,000
To Capital Reserve A/c		55,000
Liquidators A/c	3,60,000	
To Preference Share Capital A/c		90,000
To Equity Share Capital A/c		2,70,000
Liquidators A/c	80,000	
To Investment A/c		80,000
Capital Reserve A/c	30,000	
To Bank A/c		30,000
Liability for Debentures A/c	1,62,000	
Discount on Issue of Debentures A/c	18,000	
To 12% Debentures A/c		1,80,000
Sundry Creditors A/c	10,000	
To Sundry Debtors A/c		10,000

Scanner Valuation Of Shares

MAY- 89

PAST EXAMINATION QUESTIONS

NOTE-1: It has been assumed that valuation of machinery Rs. 520000, does not include the machinery already sold in 2002.

Calculation of Capital Employed

	Rs.
Land & Building	6,00,000
Machinery	5,20,000
Motor Car	25,000
Furniture	25,000
Stock	7,25,000
Debtors	2,00,000
Cash	1,05,000
Less: Creditors	(5,00,000)

Calculation of Future Maintainable Profit

	2002	2003	2004
Profit After Tax as given	3,80,000	4,20,000	5,00,000
Less: Sale value of machinery wrongly credited to P&L A/c (after tax)	(10,000)	-----	-----
Less: Dividend on non trade investment (net of tax)	(5,000)	(5,000)	(5,000)
Add: Depn. on old machine sold (net of tax)	1,000	900	810
Adjusted Profit	3,66,000	4,15,900	4,95,810

Future Maintainable Profit = Rs. (3,66,000 + 4,15,900 + 4,95,810) / 3 = Rs. 4,25,900 (you can take weighted average also)

Calculation of Goodwill

Super Profit = Rs. (4,25,900 – 1,70,000 X 20%) Rs. 85,900

Goodwill = Rs. 85,900 X 3 = Rs. 2,57,700

Valuation of Shares

	Rs.
Closing Capital Employed (as Calculated above)	17,00,000
Add: Goodwill	2,57,700
Add: Non Trade Investment (Rs. 50,000 X 120%)	60,000
Add: Notional call on arrears	1,00,000
	<u>21,17,700</u>
No. of Equity Shares	<u>10,000</u>
Value of Fully Paid Eq. Sh.	211.77
Value of Partly Paid Eq. Sh.	191.77

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Calculation For Capital Employed

	Rs.
Machinery [Rs. 6,00,000 X 130%]	7,80,000

Factory Shed [Rs. 5,00,000 X 130%]	6,50,000
Addition to Factory Shed Rs. [20,000 – 2,000 – 1,800 – 1620] X 130%	18,954
Vehicles	2,00,000
Furniture	50,000
Stock	5,00,000
Debtors	6,70,000
Bank	50,000
Less: Bank O/D	(3,00,000)
Creditors	<u>(7,00,000)</u>
Capital Employed	<u>19,18,954</u>

Calculation of Future Maintainable Profit

	01 – 02	02 – 03	03 – 04
Profit as given	3,60,000	4,70,000	3,70,000
Add: Cost of additional factory shed wrongly debited to P & L A/c (net of tax)	10,000	----	----
Less: Depn. on such factory shed (net of tax)	(1,000)	(900)	(810)
Adjusted Profit	3,69,000	4,69,100	3,69,190

Future Maintainable Profit = Rs (3,69,000 + 4,69,100 + 3,69,190) / 3 = Rs. 4,02,430

Valuation of Goodwill

Super Profit = Rs. [4,02,430 – 19,18,954 X 15%] = Rs. 1,14, 587

Goodwill = Rs. 1,14,587 X 4 = Rs. 4,58,348

Share Valuation

Closing Cap. Emp. As calculated above	19,18,954
Add: Goodwill	4,58,348
Add: Calls- in- arrear	<u>1,00,000</u>
	<u>24,77,302</u>
No. of Eq. Sh.	10,000
Value of Fully Paip Eq. Sh.	247.73
Value of Partly Paid Eq. Sh.	227.73

NOV – 91

Calculation of Capital Employed

	Rs.
Land and Building	2,50,000
Plant and Machinery	1,50,000
Stock	3,50,000
Sundry Debtors	1,55,000
Less: Bank o/D	(20,000)
Creditors	(77,000)
Provn. for Tax	<u>(45,000)</u>
Capital Employed	<u>7,63,000</u>

Calculation of Super Profit

Future Maintainable Profit = Rs. (85,000 + 96,000 +90,000 +1,00,000 +95,000)/5 – NP

$$\begin{aligned}
 &= \text{Rs. } 93,200 - \text{NP} \\
 &= \text{Rs. } (93,200 - 7,63,000 \times 10\%) \\
 &= \text{Rs. } 16,900
 \end{aligned}$$

Valuation of Share

Capital Employed as calculated above	Rs.
Add: Goodwill	7,63,000
	<u>84,500</u>
	8,47,500
No. of Equity Shares	<u>5,000</u>
Value per Share = Rs. 8,47,500 / 5,000 = Rs. 169.50	

MAY- 93

Calculation of Capital Employed

	Rs.
Land & Building [3,20,000 + 4,00,000 – 2,00,000]	5,20,000
Plant & Machinery	5,40,000
Book Debts	3,80,000
Stock – in – trade (at MP)	5,00,000
Cash & Bank	80,000
Less: Provn. For Tax	(2,40,000)
Trade Creditors	<u>(2,10,000)</u>
Capital Employed	<u>15,70,000</u>

Calculation of Future Maintainable Profit

<u>Year</u>	<u>Profit</u>	<u>Weight</u>	<u>Product</u>
01 – 02	1,40,000	1	1,40,000
02 – 03	1,90,000	2	3,80,000
03 – 04	2,40,000	<u>3</u>	<u>7,20,000</u>
		<u>6</u>	<u>12,40,000</u>

$$\begin{aligned}
 \text{Weighted Avg. Profit} &= \text{Rs. } 12,40,000 / 6 = \text{Rs. } 2,06,667 \\
 \text{Less: Non Trade Income (net of tax)} &= \text{Rs. } 6,000 \\
 \text{(Rs. } 2,00,000 \times 6\% \times 50\% \text{)} &\text{-----} \\
 &\text{Rs. } 2,00,667
 \end{aligned}$$

Calculation of Goodwill

Super Profit = Rs. (2,00,667 – 15,70,000 X 15%) = Rs. 34,883
 As super profit is negative, there is no goodwill.

Valuation of Shares on Net Asset Basis

Capital Employed as calculated above	15,70,000
Inv't. in 6% Govt. securities	1,60,000
Less: 12% cumulative Pref. Sh. Cap.	<u>(3,00,000)</u>
	<u>14,30,000</u>
No. of Eq. Shares	<u>5,000</u>
Value per Share	<u>Rs. 286</u>

Valuation of Shares on Yield Basis

Rs.

Future Maintainable Trading Profit	2,00,667
Less: Pref. dividend	(36,000)
Add: Income from on – trade invt. (net of tax)	<u>6,000</u>
	<u>1,70,667</u>
EPS	<u>Rs. 34.1334</u>
Normal yield per share	<u>Rs.15</u>
Value per share = (34.1334 / 15) X 100 = <u>Rs. 227.56</u>	
For Value = (286 + 227.56) / 2 = <u>Rs. 256.78</u>	

NOV- 93

EBIT	Rs. 4,00,000
Less: Deb. Int.	<u>(48,000)</u>
EBT	3,52,000
Less: Tax @ 45%	<u>(1,58,400)</u>
EAT	1,93,600
Add: I	<u>48,000</u>
EAT +I	<u>2,41,600</u>

Fixed Int. and Fix Div. Coverage Ratio = 2,41,600 / (48,000 + 33,000) = 2.98 (less than 4)

Eq. Sh. Cap. + Pes. = Rs. 8,00,000
 Pref. Sh. Cap. + Deb = Rs 7,00,000
 Ratio = 8,00,000 / 7,00,000 X 100 = 114% (less than 150%)

Yield on Share = Rs.5,00,000 X 18 % X 60% + Rs. (1,93,600 – 33,000 – 90,000) X 5%
 =Rs. 57,530

Actual yield per share = Rs. 57,530 / 5,000 = Rs. 11.506

Expected yield per share = (15 + 0.5 + 0.5) = 16

Value per equity share = 100 / 16% X 11.506 = 71.91

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Value on Net Asset Basis

Fixed Assets	600
Net Current Assets	750
Less: Loan	<u>(400)</u>
	<u>950</u>
No. of Eq. Sh.	<u>50</u>
Value of Each Eq.Sh.	<u>19</u>

Value on Yield Basis

PBT	120
Add: P/Expenses w/o	<u>10</u>
Less: Tax @ 40%	130
	<u>(52)</u>
EA to ESH	<u>78</u>
No. of Eq. Sh.	<u>50</u>

EPS

1.56

Value per equity shares = $1.56/1.50 \times \text{Rs. } 10 = \text{Rs. } \underline{10.40}$

Fair Value = Rs. $[19.00 + 10.40] / 2 = \text{Rs. } \underline{14.70}$

Note: To determine yield, profits of 01 – 02 and 02 – 03 are not necessary, as the expansion has been undertaken in 03 – 04.

MAY- 97

Computation of Correction Profit

Year	Corrected PBI	PBI	PAT & Weight	Product
99-00	4,00,000 + 1,00,000 – 1,25,000 - 1,00,000	3,75,000	2,25,000 1	2,25,000
00-01	3,50,000 + 2,50,000 + 1,50,000 – 1,75,000	4,75,000	2,85,000 2	5,70,000
01 -02	6,50,000 – 1,50,000	5,00,000	3,00,000 3	9,00,000
02 -03	5,50,000 + 1, 75,000 + 25,000	7,50,000	4,50,000 4	18,00,000
03 - 04	6,00,000 + 1,00,000 – 25,000	6,75,000	4,05,000 <u>5</u>	<u>20,25,000</u>
			<u>15</u>	<u>55,20,000</u>

Weighted Avg. Profit = $55,20,000 / 15 = \text{Rs. } 3,68,000$

Value of Business = $\text{Rs. } 3,68,000 / 0.20 = \text{Rs. } 18,40,000$

Value of Eq. Sh. = $\text{Rs. } 18,40,000 / 10,000 = \text{Rs. } 184$

Value of Share on Net Asset Basis

Year – 99 – 00

Opening Net Worth as given

6,00,000

Adj. made during -----

99 – 00

1,00,000

00 – 01

1,25,000

2,25,000

Less: Tax @ 40%

(90,000)

1,35,000

(1,35,000)

4,65,000

Add: After tax revised profit

2,25,000

6,90,000

Value per share

Rs. 69

Year – 00 – 01

Net Asset Value = $\text{Rs. } (6,90,000 + 2,85,000) = \text{Rs. } 9,75,000$

Value per Share = Rs. 97.50

Year – 01 -02

Net Asset Value = Rs. (9,75,000 + 3,00,000) = Rs. 1,27,50,000
 Value per share = Rs. 127.50

Year – 02 – 03

Net Asset Value = Rs. (1,27,50,) = Rs. 17,25,000
 Value per share = Rs. 172.50

Year – 03 – 04

Net Asset Value = Rs. (17,25,000 + 4,05,000) = Rs. 21,30,000
 Value per Sh. = Rs. 213

Return on Net Worth

99 – 00 $2,25,000 \times 100 / 4,65,000 = 48.39\%$
 00 – 01 $2,85,000 \times 100 / 6,90,000 = 41.30\%$
 01 – 02 = 30.77%
 02 – 03 = 35.29%
 03 – 04 = 23.48%

RoI is decreasing, may be due to the fact that the co. has not sufficient reinvestment opportunities. Unless the company has profitable investment opportunities may not be advisable to invest in the company.

MAY – 01

Calculation of Capital Employed

Note – 1: Since goodwill has been paid for, it is to be taken as part of capital employed.

	Rs. In lakh
Goodwill	5
Fixed Assets (excluding goodwill)	24
Other Tangible Assets	3
Intangible Assets	3
Less: Liabilities	(10)
Bones	(1)
<u>Capital Employed</u>	<u>24</u>

Calculation of Super Profit

FMP $[(3 + 3.5 + 4 + 4.1 - 1) / 4]$ 3.4
Less: Normal Profit $[24 \times 10\%]$ (2.4)
 Super Profit 1.0

Goodwill = $1 \times 3 = 3$

Increase in Value of Goodwill = $(5 + 3) / 2 = 4$

Net Assets available to ESH = $24 + 4 = 28$

Break – up value of Re.1 share cap = $28 / 16 = 1.75$

Break – up value of Rs. 10 „ „ = Rs.17.50

„ „ „ „ Rs. 6 „ „ = Rs. 10.50

Average dividend = 12.5%

DPS = 1.25

Normal Return = Rs. 1 per share

MV of Rs. 10 sh. = $1.25 / 1 \times 10 = 12.50$

MV of Rs. 6 sh. = 7.50

For controlling interest Break – up value would remain same.

Market value would be based on EPS.

EPS (Re. 1 paid up value sh.) = $3.4 / 16 = 0.2125$

Normal Return per sh. (Re. 1 paid up value) = 0.1

MPS (Rs. 6) = $0.2125 / 0.1 \times 6 = \text{Rs. } 12.75$

FV (Rs. 10) = $(21.25 + 17.50) / 2 = \text{Rs. } 19.375$

FV (Rs. 6) = $(12.75 + 10.50) / 2 = \text{Rs. } 11.625$