

PAPER – 1 : ADVANCED ACCOUNTING

Answer all questions.

Working notes should form part of the answer.

Question 1

The following are the Balance Sheets of Arun Ltd., Brown Ltd. and Crown Ltd. as at 31.12.2005:

<i>Liabilities:</i>	<i>Arun Ltd.</i>	<i>Brown Ltd.</i>	<i>Crown Ltd.</i>
	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>
Share Capital (Shares of Rs.100 each)	6,00,000	4,00,000	2,40,000
Reserves	80,000	40,000	30,000
Profit and Loss Account	2,00,000	1,20,000	1,00,000
Sundry Creditors	80,000	1,00,000	60,000
Arun Ltd.	--	40,000	32,000
Total	<u>9,60,000</u>	<u>7,00,000</u>	<u>4,62,000</u>

Assets:

	<i>Arun Ltd.</i>	<i>Brown Ltd.</i>	<i>Crown Ltd.</i>
	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>
Goodwill	80,000	60,000	40,000
Fixed Assets	2,80,000	2,00,000	2,40,000
Shares in:			
Brown Ltd. (3,000 Shares)	3,60,000	--	--
Crown Ltd. (400 Shares)	60,000	--	--
Crown Ltd. (1,400 Shares)	--	2,08,000	--
Due from: Brown Ltd.	48,000	--	--
Crown Ltd.	32,000	--	--
Current Assets	<u>1,00,000</u>	<u>2,32,000</u>	<u>1,82,000</u>
Total	<u>9,60,000</u>	<u>7,00,000</u>	<u>4,62,000</u>

(i) *All shares were acquired on 1.7.2005.*

(ii) *On 1.1.2005 the balances to the various accounts were as under:*

<i>Particulars</i>	<i>Arun Ltd.</i>	<i>Brown Ltd.</i>	<i>Crown Ltd.</i>
	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>
Reserves	40,000	40,000	20,000
Profit and Loss account	20,000	(Dr.) 20,000	12,000

(iii) *During 2005, Profits accrued evenly.*

- (iv) In August, 2005, each company paid interim dividend of 10%. Arun Ltd. and Brown Ltd. have credited their profit and loss account with the dividends received.
- (v) During 2005, Crown Ltd. sold an equipment costing Rs.40,000 to Brown Ltd. for Rs.48,000 and Brown Ltd. in turn sold the same to Arun Ltd. for Rs.52,000.

Prepare the consolidated Balance Sheet as at 31.12.2005 of Arun Ltd. and its subsidiaries.

(20 Marks)

Answer

Consolidated Balance Sheet of Arun Ltd. and its subsidiaries
as on 31.12.2005

Liabilities	Rs.	Assets	Rs.
Share Capital (Shares of Rs. 100 each)	6,00,000	Goodwill (W. N. 5)	1,81,000
Minority Interest (W. N. 4)	2,33,729	Fixed Assets	7,08,000
Reserves (W. N. 8)	83,021	Current Assets	5,14,000
Profit & Loss A/c (W. N. 8)	2,54,250	Cash in Transit (W. N. 7)	8,000
Sundry Creditors	<u>2,40,000</u>		
	<u>14,11,000</u>		<u>14,11,000</u>

Working Notes

1. Shareholding Pattern

In Brown Ltd.:	Number of Shares	%age of Holding
Arun Ltd.	3,000	75%
Minority Interest	1,000	25%
In Crown Ltd.:		
Arun Ltd.	400	16.667%
Brown Ltd.	1,400	58.333%
Minority Interest	600	25%

2. Analysis of apportionment of profit in Crown Ltd.

(a) Calculation of Unrealized Profit in Equipment

Crown Ltd sold equipment to Brown Ltd. at a profit of Rs. 8,000 and this would be apportioned to

	Rs.
Arun Ltd.	1,333
Brown Ltd.	4,667
Minority Interest	<u>2,000</u>
	<u>8,000</u>

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Brown Ltd sold the equipment to Arun Ltd. at a profit of Rs. 4,000. This would be apportioned to:

	Rs.
Arun Ltd.	3,000
Minority Interest	<u>1,000</u>
	<u>4,000</u>

The above amounts are to be deducted from the respective share of profits.

(b) *Reserves*

	Rs.	
Closing balance	30,000	
Opening balance	<u>20,000</u>	Capital Profit
Current year Appropriation	<u>10,000</u>	
Apportionment of Profit from 1.1.2005 to 30.6.2005	<u>5,000</u>	Capital Profit
Apportionment of Profit from 1.7.2005 to 31.12.2005	<u>5,000</u>	Revenue Reserve

(c) *Profit and Loss Account*

Closing balance	1,00,000	
Opening balance	<u>12,000</u>	Capital Profit
Current year profits before interim dividend	<u>1,12,000</u>	
Apportionment of Profit from 1.1.2005 to 30.6.2005	56,000	
Less: Interim Dividend	<u>24,000</u>	
	32,000	Capital Profit
From 1.7.2005 to 31.12.2005	<u>56,000</u>	Revenue Profit

(d) *Apportionment of profits of Crown Ltd.*

	Pre-Acquisition	Post Acquisition	
	<i>Capital Profit</i>	<i>Revenue Reserve</i>	<i>Revenue Profit</i>
	Rs.	Rs.	Rs.
Reserves	25,000	5,000	--
Profit & Loss Account	<u>44,000</u>	--	<u>56,000</u>
	<u>69,000</u>	<u>5,000</u>	<u>56,000</u>
Arun Ltd [16.667%]	11,500	833	9,333
Brown Ltd. [58.333%]	40,250	2,917	32,667
Minority Interest [25%]	17,250	1,250	14,000

3. Analysis of Profit of Brown Ltd

(a) *Reserves*

	Rs.	
Closing balance	40,000	
Opening balance	<u>40,000</u>	(Capital Profit)
Current year Appropriation	<u>Nil</u>	

(b) *Profit and Loss Account*

	Rs.
Closing balance	1,20,000
Opening balance (Dr.)	<u>20,000</u>
Current year Appropriation after interim dividend	1,40,000
Interim Dividend	<u>40,000</u>
Profit before Interim Dividend	1,80,000
Less: Dividend from Crown Ltd.	<u>14,000</u>
	<u>1,66,000</u>
Apportionment of Profit from 1.1.2005 to 30.6.2005	83,000
Less: Interim Dividend	<u>40,000</u>
Capital profit	<u>43,000</u>
Apportionment of Profit from 1.7.2005 to 31.12.2005 (Revenue profit)	<u>83,000</u>

(c) *Apportionment of Profit of Brown Ltd.*

	Pre-Acquisition Capital Profit	Post-Acquisition Revenue Reserve	Post-Acquisition Revenue Profit
	Rs.	Rs.	Rs.
Reserves	40,000	--	--
Profit & Loss Account			
(Opening balance (-) 20,000+43,000)	23,000		83,000
Less: Unrealised Profit of Equipment from Crown Ltd.			(4,667)
Share of Post-Acquisition Profit of Crown Ltd.	<u>--</u>	<u>2,917</u>	<u>32,667</u>
	<u>63,000</u>	<u>2,917</u>	<u>1,11,000</u>
Arun Ltd. 75%	47,250	2,188	83,250
Minority Interest 25%	15,750	729	27,750

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4. Minority Interest

	<i>Brown Ltd.</i>	<i>Crown Ltd.</i>
	<i>Rs.</i>	<i>Rs.</i>
Share Capital	1,00,000	60,000
Capital Profit	15,750	17,250
Revenue: Reserves	729	1,250
Profit & Loss Account	27,750	14,000
Unrealised Profit on Equipment	<u>(1,000)</u>	<u>(2,000)</u>
	<u>1,43,229</u>	<u>90,500</u>

Total Minority Interest: Rs.1,43,229+ Rs.90,500 = Rs.2,33,729

5. Cost of Control

	<i>Arun Ltd. in Brown Ltd.</i>	<i>Arun Ltd. in Crown Ltd.</i>	<i>Brown Ltd in Crown Ltd.</i>
	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>
Amount Invested	3,60,000	60,000	2,08,000
Less: Pre-acquisition dividend*	<u>30,000</u>	<u>4,000</u>	<u>14,000</u>
Adjusted Cost of Investment (A)	<u>3,30,000</u>	<u>56,000</u>	<u>1,94,000</u>
Share capital	3,00,000	40,000	1,40,000
Capital Profit	<u>47,250</u>	<u>11,500</u>	<u>40,250</u>
(B)	<u>3,47,250</u>	<u>51,500</u>	<u>1,80,250</u>
Capital Reserve/Goodwill (A)-(B)	(17,250)	4,500	13,750
Net Goodwill	Rs.1,000		

Goodwill on Consolidation Rs. (80,000+ 60,000+40,000+1,000) = Rs.1,81,000

6. Dividend declared

	<i>Brown Ltd.</i>	<i>Crown Ltd.</i>
	<i>Rs.</i>	<i>Rs.</i>
Dividend declared	<u>40,000</u>	<u>24,000</u>
Share of: Arun Ltd.	30,000	4,000
Brown Ltd.		14,000
Minority	10,000	6,000

* The entire amount of interim dividend of 10 % has been treated as pre-acquisition dividend.

7. Inter-Company Transactions

(a) Owings

	<i>Dr.</i>	<i>Cr.</i>	<i>Cr.</i>
	<i>Arun Ltd.</i>	<i>Brown Ltd.</i>	<i>Crown Ltd.</i>
	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>
Balance in books	80,000	40,000	32,000
Less: Inter- co. owings	<u>72,000</u>	<u>40,000</u>	<u>32,000</u>
Cash-in-transit	<u>8,000</u>	<u>NIL</u>	<u>NIL</u>

(b) Fixed Assets

	<i>Rs.</i>
Total Fixed Assets	7,20,000
Less: Unrealised Profit on sale of equipment	<u>12,000</u>
Amount to be taken to consolidated Balance Sheet	<u>7,08,000</u>

8. Reserves and Profit and Loss Account balances in the Consolidated Balance Sheet

	<i>Reserves</i>	<i>Profit and Loss A/c</i>
	<i>Rs.</i>	<i>Rs.</i>
Balance in Books	80,000	2,00,000
Add: Shares of Post Acquisition Profits:		
From Brown Ltd.	2,188	83,250
From Crown Ltd	833	9,333
Less: Pre-Acquisition dividend:		
From Brown Ltd.		(30,000)
From Crown Ltd		(4,000)
Less: Unrealised Profit on Equipment:		
From Brown Ltd.		(3,000)
From Crown Ltd.		<u>(1,333)</u>
	<u>83,021</u>	<u>2,54,250</u>

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Question 2

The following are the Balance Sheets of Big Ltd. and Small Ltd. as at 31.3.06:

(Rs. In lakhs)					
	Big Ltd.	Small Ltd.		Big Ltd.	Small Ltd.
	Rs.	Rs.		Rs.	Rs.
Share Capital	40	15	Sundry Assets	56	20
			(including cost of shares)		
Profit & Loss A/c	7.5	--	Goodwill	4	5
Sundry Creditors	<u>12.5</u>	<u>12.5</u>	Profit and Loss A/c	<u>--</u>	<u>2.5</u>
	<u>60.0</u>	<u>27.5</u>		<u>60.0</u>	<u>27.5</u>

Additional Information:

- The two companies agree to amalgamate and form a new company, Medium Ltd.
- Big Ltd. holds 10,000 shares in Small Ltd. acquired at a cost of Rs.2,50,000 and Small Ltd. holds 5,000 shares in Big Ltd. acquired at a cost of Rs.7,00,000.
- The shares of Big Ltd. are of Rs.100 and are fully paid and the shares of Small Ltd. are of Rs.50 each on which Rs.30 has been paid-up.
- It is agreed that the goodwill of Big Ltd. would be valued at Rs.1,50,000 and that of Small Ltd. at Rs.2,50,000.
- The shares which each company holds in the other are to be valued at book value having regard to the goodwill valuation decided as given in (iv).
- The new shares are to be of a nominal value of Rs.50 each credited as Rs.25 paid.

You are required to:

- Prepare the Balance Sheet of Medium Ltd., as at 31st March, 2006 after giving effect to the above transactions; and
- Prepare a statement showing the shareholdings in the new company attributable to the shareholders of the merged companies. (16 Marks)

Answer

- Balance Sheet of Medium Ltd. as on 31st March, 2006

Liabilities	Rs.	Assets	Rs.
1,82,000 shares of Rs.50/- each, Rs.25 paid up [Issued for consideration other than cash]	45,50,000	Goodwill (Rs.1,50,000+Rs.2,50,000)	4,00,000
Sundry Creditors	<u>25,00,000</u>	Sundry Assets (Rs. 53,50,000+ Rs.13,00,000)	<u>66,50,000</u>
	<u>70,50,000</u>		<u>70,50,000</u>

(ii) Statement of Shareholding in Medium Ltd.

	<i>Big Ltd.</i>	<i>Small Ltd.</i>
	<i>Rs.</i>	<i>Rs.</i>
Total value of Assets	44,20,513	8,52,564
Less: Pertaining to shares held by the other company	<u>5,52,564</u>	<u>1,70,513</u>
	<u>38,67,949</u>	<u>6,82,051</u>
Rounded off to	38,67,950	6,82,050
Shares of new company (at Rs. 25 per share)	<u>1,54,718</u>	<u>27,282</u>
Total purchase consideration to be paid to Big Ltd and Small Ltd. (Rs.38,67,950 + Rs.6,82,050)		Rs. 45,50,000
Number of shares in Big Ltd. (40,00,000/100)		40,000 shares
Number of shares in Small Ltd. (15,00,000/30)		50,000 shares
Holding of Small Ltd. in Big Ltd. (5,000/40,000)		1/8
Holding of Big Ltd. in Small Ltd. (10,000/50,000)		1/5
Number of shares held by outsiders in Big Ltd. (40,000 – 5,000) =		35,000
Number of shares held by outsiders in Small Ltd. (50,000 – 10,000)		40,000

Workings Note:

Calculation of Book Value of Shares

	<i>Big Ltd</i>	<i>Small Ltd.</i>
	<i>Rs.</i>	<i>Rs.</i>
Goodwill	1,50,000	2,50,000
Sundry Assets other than shares in other company (56,00,000 – 2,50,000)	<u>53,50,000</u>	
(20,00,000 – 7,00,000)		<u>13,00,000</u>
	55,00,000	15,50,000
Less: Sundry Creditors	<u>12,50,000</u>	<u>12,50,000</u>
	<u>42,50,000</u>	<u>3,00,000</u>

If “x” is the Book Value of Assets of Big Ltd and “y” of Small Ltd.

$$x = 42,50,000 + \frac{1}{5}y$$

$$y = 3,00,000 + \frac{1}{8}x$$

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$$x = 42,50,000 + \frac{1}{5}(3,00,000 + \frac{1}{8}x)$$

$$= 42,50,000 + 60,000 + \frac{1}{40}x$$

$$\frac{39}{40}x = 43,10,000$$

$$x = 43,10,000 \times \frac{40}{39}$$

$$x = 44,20,513 \text{ (approx.)}$$

$$y = 3,00,000 + \frac{1}{8}(44,20,513)$$

$$= 3,00,000 + 5,52,564$$

$$= \text{Rs. } 8,52,564 \text{ (approx.)}$$

$$\text{Book Value of one share of Big Ltd.} = \frac{44,20,513}{40,000} = \text{Rs. } 110.513 \text{ (approx.)}$$

$$\text{Book Value of one share of Small Ltd.} = \frac{8,52,564}{50,000} = \text{Rs. } 17.05 \text{ (approx.)}$$

Question 3

The directors of a public limited company are considering the acquisition of the entire share capital of an existing company X Ltd engaged in a line of business suited to them. The directors feel that acquisition of X will not create any further risk to their business interest.

The following is the Balance Sheet of X Ltd., as at 31st December, 2005:

Liabilities	Rs.	Assets	Rs.
Share Capital:		Fixed assets	6,00,000
4,000 equity shares of Rs.100 each fully paid-up	4,00,000	Current assets:	
General reserve	3,00,000	Stock	2,00,000
Bank overdraft	2,40,000	Sundry debtors	3,40,000
Sundry creditors	<u>3,00,000</u>	Cash and bank balances	1,00,000
	<u>12,40,000</u>		<u>12,40,000</u>

X's financial records for the past five years were as under:

	2005	2004	2003	2002	2001
	Rs.	Rs.	Rs.	Rs.	Rs.
Profits	80,000	74,000	70,000	60,000	62,000
Extra ordinary item(s)	<u>3,500</u>	<u>4,000</u>	<u>(6,000)</u>	<u>(8,000)</u>	<u>1,000</u>
	83,500	78,000	64,000	52,000	61,000
Dividends	<u>48,000</u>	<u>40,000</u>	<u>40,000</u>	<u>32,000</u>	<u>32,000</u>
	<u>35,500</u>	<u>38,000</u>	<u>24,000</u>	<u>20,000</u>	<u>29,000</u>

Additional information:

- (i) There were no changes in the issued capital of X during this period.
- (ii) The estimated values of X Ltd.'s assets on 31.12.2005 are:

	Replacement cost	Realisable value
	Rs.	Rs.
Fixed assets	8,00,000	5,40,000
Stock	3,00,000	3,20,000

- (iii) It is anticipated that 1% of the debtors may prove to be difficult to be realized.
- (iv) The cost of capital to the acquiring company is 10%.
- (v) The current return of an investment of the acquiring company is 10%. Quoted companies with similar businesses and activities as X have a P/E ratio approximating to 8, although these companies tend to be larger than X.

Required:

Estimate the value of the total equity capital of X Ltd., on 31.12.2005 using each of the following bases:

- (a) Balance sheet value
- (b) Replacement cost
- (c) Realisable value
- (d) Gordon's dividend growth model
- (e) P/E ratio model. (16 Marks)

Answer

	Rs.	Rs.
(a) Balance Sheet Value		
Capital	4,00,000	
Reserve	<u>3,00,000</u>	7,00,000

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(b) Replacement cost value

Capital		4,00,000	
Reserve		3,00,000	
Appreciation:			
Fixed assets	2,00,000		
Stock	<u>1,00,000</u>	<u>3,00,000</u>	10,00,000

(c) Realizable value

Capital	4,00,000	
Reserve	3,00,000	
Appreciation in stock	1,20,000	
Depreciation in fixed assets	(60,000)	
Book debts (Bad)*	<u>(3,400)</u>	7,56,600

(d) Gordon's dividend growth model

The formula to be used is $P = \frac{E(1-b)}{k-br}$

Where

- P Price of share
- E Earning per share
- b retention ratio
- k cost of capital
- br growth rate
- r rate of return on investment.

Profits retained: Rs.35,500 + 38,000 + 24,000 + 20,000 + 29,000 = Rs. 1,46,500

Profits earned: Rs.83,500 + 78,000 + 64,000 + 52,000 + 61,000 = Rs. 3,38,500

Retention ratio: $\frac{\text{Rs.1,46,500}}{\text{Rs.3,38,500}} = 0.43$

Return on investment for the year 2005 = $\frac{\text{Rs.80,000}}{4,00,000 + 3,00,000 + \frac{1}{2} \text{ of } 35,500} \times 100$

* It has been assumed that estimated bad debts would not be relevant for estimating values under bases (a) and (b).

$$= \frac{80,000}{7,17,750} \times 100 = 11.14$$

Growth rate = Return on investment x retention ratio

$$= 11.14 \times 0.43 = 4.79 \%$$

$$\text{Average profits} = \frac{\text{Rs. } 3,38,500}{5} = \text{Rs. } 67,700$$

$$\text{Market value} = \frac{\text{Rs. } 67,700(1 - .43)}{0.10 - 0.0479} = \frac{\text{Rs. } 67,700 \times 0.57}{.0521} = \text{Rs. } 7,40,672 (\text{approx.})$$

(e) P/E ratio model

Comparable quoted companies have a P/E ratio of 8. X Ltd. is prima facie small company.

If a P/E ratio of 6 is adopted, the valuation will be $80,000 \times 6 = \text{Rs. } 4,80,000$

If a P/E ratio of 7 were to be adopted, the valuation will be $80,000 \times 7 = \text{Rs. } 5,60,000$

Question 4

(a) Global Ltd. has initiated a lease for three years in respect of an equipment costing Rs.1,50,000 with expected useful life of 4 years. The asset would revert to Global Limited under the lease agreement. The other information available in respect of lease agreement is:

- (i) The unguaranteed residual value of the equipment after the expiry of the lease term is estimated at Rs.20,000.
- (ii) The implicit rate of interest is 10%.
- (iii) The annual payments have been determined in such a way that the present value of the lease payment plus the residual value is equal to the cost of asset.

Ascertain in the hands of Global Ltd.

- (i) The annual lease payment.
 - (ii) The unearned finance income.
 - (iii) The segregation of finance income, and also,
 - (iv) Show how necessary items will appear in its profit and loss account and balance sheet for the various years.
- (b) Briefly describe the method of valuation of human resources as suggested by Jaggi and Lau. Also point out the special merit and demerit of this method. (8+8= 16 Marks)

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Answer

(a) (i) Calculation of Annual Lease Payment*

	Rs.
Cost of the equipment	1,50,000
Unguaranteed Residual Value	20,000
PV of residual value for 3 years @ 10% (Rs.20,000 x 0.751)	15,020
Fair value to be recovered from Lease Payment (Rs.1,50,000 – Rs.15,020)	1,34,980
PV Factor for 3 years @ 10%	2.487
Annual Lease Payment (Rs. 1,34,980 / PV Factor for 3 years @ 10% i.e. 2.487)	<u>54,275</u>

(ii) Unearned Financial Income

Total lease payments [Rs. 54,275 x 3]	1,62,825
Add: Residual value	<u>20,000</u>
Gross Investments	1,82,825
Less: Present value of Investments (Rs.1,34,980 + Rs.15,020)	<u>1,50,000</u>
Unearned Financial Income	<u>32,825</u>

(iii) Segregation of Finance Income

Year	Lease Rentals	Finance Charges @ 10% on outstanding amount of the year	Repayment	Outstanding Amount
	Rs.	Rs.	Rs.	Rs.
0	-	-	-	1,50,000
I	54,275	15,000	39,275	1,10,725
II	54,275	11,073	43,202	67,523
III	<u>74,275**</u>	<u>6,752</u>	<u>67,523</u>	--
	<u>1,82,825</u>	<u>32,825</u>	<u>1,50,000</u>	

* Annual lease payments are considered to be made at the end of each accounting year.

** Rs. 74,275 includes unguaranteed residual value of equipment amounting Rs. 20,000.

(iv) Profit and Loss Account (Relevant Extracts)

<i>Credit side</i>		Rs.
I Year	By Finance Income	<u>15,000</u>
II year	By Finance Income	<u>11,073</u>
III year	By Finance Income	<u>6,752</u>

Balance Sheet (Relevant Extracts)

<i>Assets side</i>	Rs.	Rs.
I year Lease Receivable	1,50,000	
Less: Amount Received	<u>39,275</u>	<u>1,10,725</u>
II year Lease Receivable	1,10,725	
Less: Received	<u>43,202</u>	<u>67,523</u>
III year :Lease Amount Receivable	67,523	
Less: Amount received	47,523	
Residual value	<u>20,000</u>	<u>NIL</u>

Notes to Balance Sheet

<i>Year 1</i>	Rs.
Minimum Lease Payments (54,275 + 54,275)	1,08,550
Residual Value	<u>20,000</u>
	1,28,550
Unearned Finance Income(11,073+ 6,752)	<u>17,825</u>
Lease Receivables	<u>1,10,725</u>
<i>Classification:</i>	
Not later than 1 year	43,202
Later than 1 year but not more than 5 years	<u>67,523</u>
Total	<u>1,10,725</u>
<i>Year II:</i>	
Minimum Lease Payments	54,275
Residual Value (Estimated)	<u>20,000</u>
	74,275
Unearned Finance Income	<u>6,752</u>
Lease Receivables (not later than 1year)	67,523
<i>III Year:</i>	
Lease Receivables (including residual value)	67,523
Amount Received	<u>67,523</u>
	<u>NIL</u>

- (b) Jaggi and Lau suggested a model for valuation of human resources. According to them, proper valuation of human resources is not possible unless the contributions of individuals as a group are taken into consideration. A group refers to homogeneous employees whether working in the same department or division of the organization or not. An individual's expected service tenure in an organization is difficult to predict, but on a group basis, it is relatively easy to estimate the percentage of people in a group likely to leave the organization in future. This model attempts to calculate the present value of all existing employees in each rank. Such present value is measured with the help of the following steps:
- (i) Ascertain the number of employees in each rank.
 - (ii) Estimate the probability that an employee will be in his rank within the organization on terminated/promoted in the next period. This probability will be estimated for a specified time-period.
 - (iii) Ascertain the economic value of an employee in a specified rank during each time period.
 - (iv) The present value of existing employees in each rank is obtained by multiplying the above three factors and applying an appropriate discount rate.

Jaggi and Lau tried to simplify the process of measuring the value of human resources by considering a group of employees as basis of valuation. But in the process they ignored the exceptional qualities of certain skilled employees. The performance of a group may be seriously affected in the event of exit of a single individual.

Merit

Jaggi and Lau model approached the valuation of human resources on the basis of grouping of employees. Under this method, calculations get simplified and the chances of errors get reduced.

Demerit

This model ignores individual skills of the employees. The varied skills of the employees is not recognized in the valuation process under Jaggi and Lau model.

Question 5

- (a) *Swift Ltd. acquired a patent at a cost of Rs.80,00,000 for a period of 5 years and the product life-cycle is also 5 years. The company capitalized the cost and started amortizing the asset at Rs.10,00,000 per annum. After two years it was found that the product life-cycle may continue for another 5 years from then. The net cash flows from the product during these 5 years were expected to be Rs.36,00,000, Rs.46,00,000, Rs.44,00,000, Rs.40,00,000 and Rs.34,00,000. Find out the amortization cost of the patent for each of the years.*

- (b) The Chief Accountant of Sports Ltd. gives the following data regarding its six segments:

	Rs. In lakhs						
Particulars	M	N	O	P	Q	R	Total
Segment Assets	40	80	30	20	20	10	200
Segment Results	50	-190	10	10	-10	30	-100
Segment Revenue	300	620	80	60	80	60	1,200

The Chief accountant is of the opinion that segments "M" and "N" alone should be reported. Is he justified in his view? Discuss.

- (c) On 24th January, 2006 Chinnaswamy of Chennai sold goods to Watson of Washington, U.S.A. for an invoice price of \$40,000 when the spot market rate was Rs.44.20 per US \$. Payment was to be received after three months on 24th April, 2006. To mitigate the risk of loss from decline in the exchange-rate on the date of receipt of payment, Chinnaswamy immediately acquired a forward contract to sell on 24th April, 2006 US \$ 40,000 @ Rs.43.70. Chinnaswamy closed his books of account on 31st March, 2006 when the spot rate was Rs.43.20 per US \$. On 24th April, 2006, the date of receipt of money by Chinnaswamy, the spot rate was Rs.42.70 per US \$.

Pass journal entries in the books of Chinnaswamy to record the effect of all the above mentioned effects. (4+4+8= 16 Marks)

Answer

- (a) Swift Limited amortised Rs.10,00,000 per annum for the first two years i.e. Rs.20,00,000. The remaining carrying cost can be amortized during next 5 years on the basis of net cash flows arising from the sale of the product. The amortisation may be found as follows:

Year	Net cash flows	Amortization Ratio	Amortization Amount
	Rs		Rs.
I	-	0.125	10,00,000 ¹
II	-	<u>0.125</u>	10,00,000
III	36,00,000	0.180	10,80,000
IV	46,00,000	0.230	13,80,000
V	44,00,000	0.220	13,20,000
VI	40,00,000	0.200	12,00,000
VII	<u>34,00,000</u>	<u>0.170</u>	<u>10,20,000</u>
Total	<u>2,00,00,000</u>	<u>1.000</u>	<u>80,00,000</u>

¹ It has been assumed that the company had amortized the patent at Rs. 10,00,000 per annum in the first two years on the basis of economic benefits derived from the product manufactured under the patent.

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It may be seen from above that from third year onwards, the balance of carrying amount i.e., Rs.60,00,000 has been amortized in the ratio of net cash flows arising from the product of Swift Ltd.

Note: The answer has been given on the basis that the patent is renewable and Swift Ltd. got it renewed after expiry of five years.

- (b) As per para 27 of AS 17 'Segment Reporting', a business segment or geographical segment should be identified as a reportable segment if:
- (i) Its revenue from sales to external customers and from other transactions with other segments is 10% or more of the total revenue- external and internal of all segments; or
 - (ii) Its segment result whether profit or loss is 10% or more of:
 - (1) The combined result of all segments in profit; or
 - (2) The combined result of all segments in loss, whichever is greater in absolute amount; or
 - (iii) Its segment assets are 10% or more of the total assets of all segments.

If the total external revenue attributable to reportable segments constitutes less than 75% of total enterprise revenue, additional segments should be identified as reportable segments even if they do not meet the 10% thresholds until atleast 75% of total enterprise revenue is included in reportable segments.

- (a) On the basis of turnover criteria segments M and N are reportable segments.
- (b) On the basis of the result criteria, segments M, N and R are reportable segments (since their results in absolute amount is 10% or more of Rs.200 lakhs).
- (c) On the basis of asset criteria, all segments except R are reportable segments.

Since all the segments are covered in atleast one of the above criteria all segments have to be reported upon in accordance with Accounting Standard (AS) 17. Hence, the opinion of chief accountant is wrong.

- (c) **Journal Entries in the books of Chinnaswamy**

			Rs.	Rs.
2006				
Jan. 24	Watson	Dr.	17,68,000	
	To Sales Account			17,68,000
	(Credit sales made to Watson of Washington, USA for \$40,000 recorded at spot market rate of Rs.44.20 per US \$)			
" "	Forward (Rs.) Contract Receivable Account	Dr.	17,48,000	
	Deferred Discount Account	Dr.	20,000	
	To Forward (\$) Contract Payable			17,68,000
	(Forward contract acquired to sell on 24 th April, 2006 US \$40,000 @ Rs.43.70)			

March 31	Exchange Loss Account	Dr.	40,000	
	To Watson			40,000
	(Record of exchange loss @ Re.1 per \$ due to market rate becoming Rs.43.20 per US \$ rather than Rs.44.20 per US \$)			
" "	Forward (\$) Contract Payable	Dr.	40,000	
	To Exchange Gain Account			40,000
	(Decrease in liability on forward contract due to fall in exchange rate)			
" "	Discount Account	Dr.	14,667	
	To Deferred Discount Account			14,667
	(Record of proportionate discount expense for 66 days out of 90 days)			
April 24	Bank Account	Dr.	17,08,000	
	Exchange Loss Account	Dr.	20,000	
	To Watson			17,28,000
	(Receipt of \$40,000 from Watson, USA customer @ Rs.42.70 per US \$; exchange loss being Rs.20,000)			
" "	Forward (\$) Contract Payable Account	Dr.	17,28,000	
	To Exchange Gain Account			20,000
	To Bank Account			17,08,000
	(Settlement of forward contract by payment of \$40,000)			
" "	Bank Account	Dr.	17,48,000	
" "	To Forward (Rs.) Contract Receivable			17,48,000
	(Receipt of cash in settlement of forward contract receivable)			
" "	Discount Account	Dr.	5,333	
	To Deferred Discount Account			5,333
	(Recording of discount expense for 24 days:			
	$\text{Rs.20,000} \times \frac{24 \text{ days}}{90 \text{ days}} = \text{Rs.5,333}$			

Question 6

- (a) Narmada Ltd. sold goods for Rs.90 lakhs to Ganga Ltd. during financial year ended 31-3-2006. The Managing Director of Narmada Ltd. own 100% of Ganga Ltd. The sales were made to Ganga Ltd. at normal selling prices followed by Narmada Ltd. The Chief accountant of Narmada Ltd contends that these sales need not require a different

treatment from the other sales made by the company and hence no disclosure is necessary as per the accounting standard. Is the Chief Accountant correct?

- (b) *Milton Ltd. is a full tax free enterprise for the first 10 years of its existence and is in the second year of its operations. Depreciation timing difference resulting in a deferred tax liability in years 1 and 2 is Rs.200 lakhs and 400 lakhs respectively. From the 3rd year onwards, it is expected that the timing difference would reverse each year by Rs.10 lakhs. Assuming tax rate @35%, find out the deferred tax liability at the end of the second year and any charge to the profit and loss account.*
- (c) *Victory Ltd. purchased goods on credit from Lucky Ltd. for Rs.250 crores for export. The export order was cancelled. Victory Ltd. decided to sell the same goods in the local market with a price discount. Lucky Ltd. was requested to offer a price discount of 15%. The Chief Accountant of Lucky Ltd. wants to adjust the sales figure to the extent of the discount requested by Victory Ltd. Discuss whether this treatment is justified.*
- (d) *Accountants of Poornima Ltd. show a net profit of Rs.7,20,000 for the third quarter of 2005 after incorporating the following:*
 - (i) *Bad debts of Rs.40,000 incurred during the quarter. 50% of the bad debts have been deferred to the next quarter.*
 - (ii) *Extra ordinary loss of Rs.35,000 incurred during the quarter has been fully recognized in this quarter.*
 - (iii) *Additional depreciation of Rs.45,000 resulting from the change in the method of charge of depreciation.*

Ascertain the correct quarterly income.

(4x4=16 Marks)

Answer

- (a) *As per paragraph 13 of AS 18 'Related Party Disclosures', Enterprises over which a key management personnel is able to exercise significant influence are related parties. This includes enterprises owned by directors or major shareholders of the reporting enterprise that have a member of key management in common with the reporting enterprise.*

In the given case, Narmada Ltd. and Ganga Ltd are related parties and hence disclosure of transaction between them is required irrespective of whether the transaction was done at normal selling price.

Hence the contention of Chief Accountant of Narmada Ltd is wrong.

- (b) *In the case of tax free companies, no deferred tax liability is recognized, in respect of timing differences that originate and reverse in the tax holiday period. Deferred tax liability or asset is created in respect of timing differences that originate in a tax holiday period but are expected to reverse after the tax holiday period. For this purpose, adjustments are done in accordance with the FIFO method.*

Of Rs.200 lakhs, Rs.80 lakhs will reverse in the tax holiday period. Therefore, Deferred Tax Liability will be created on Rs.120 lakhs @ 35% (i.e.) Rs.42 lakhs.

In the second year, the entire Rs.400 lakhs will reverse only after the tax holiday period.

Therefore, deferred tax charge in the Profit and Loss Account will be $\text{Rs.}400 \times 35\% = 140$ lakhs and deferred tax liability in the Balance Sheet will be $(42+140) = \text{Rs.}182$ lakhs.

- (c) Lucky Ltd. had sold goods to Victory Ltd on credit worth for Rs.250 crores and the sale was completed in all respects. Victory Ltd's decision to sell the same in the domestic market at a discount does not affect the amount recorded as sales by Lucky Ltd. The price discount of 15% offered by Lucky Ltd. after request of Victory Ltd. was not in the nature of a discount given during the ordinary course of trade because otherwise the same would have been given at the time of sale itself. Now, as far Lucky Ltd is concerned, there appears to be an uncertainty relating to the collectability of the debt, which has arisen subsequent to the time of sale therefore, it would be appropriate to make a separate provision to reflect the uncertainty relating to collectability rather than to adjust the amount of revenue originally recorded. Therefore, such discount should be written off to the profit and loss account and not shown as deduction from the sales figure.

- (d) In the above case, the quarterly income has not been correctly stated. As per AS 25 "Interim Financial Reporting", the quarterly income should be adjusted and restated as follows:

Bad debts of Rs. 40,000 have been incurred during current quarter. Out of this, the company has deferred 50% (i.e.) Rs. 20,000 to the next quarter. Therefore, Rs. 20,000 should be deducted from Rs. 7,20,000. The treatment of extra-ordinary loss of Rs. 35,000/- being recognized in the same quarter is correct.

Recognising additional depreciation of Rs. 45,000 in the same quarter is in tune with AS 25 .Hence, no adjustments are required for these two items.

Poornima Ltd should report quarterly income as Rs.7,00,000 (Rs. 7,20,000–Rs. 20,000).