Branch Account (in the books of head office)

	Rs.	Rs.		Rs.	Rs.
To Balance b/d: (Assets in the beginning)			By Balance b/d (Opening balance of liabilities accounts if any)		
Stock	xxx		Creditors	xxx	
Debtors	xxx		Outstanding expenses	xxx	xxx
Petty Cash	xxx		By Bank:		
Furniture	xxx		Cash sales	xxx	
Prepaid expenses	xxx	xxx	Cash collected from debtors	xxx	xxx
To Goods sent to branch A/c		xxx	By Goods sent to Branch A/c (returns to H.O.)		xxx
To Bank (expenses paid by H.O.)		xxx	By Balance c/d (closing balance of Assets)		
To balance c/d (closing balance of liabilities accounts if any)			Stock	xxx	
Creditors	xxx		Debtors	xxx	
Outstanding expenses	xxx	xxx	Petty Cash	xxx	
To General P & L A/c (Branch profit) (bal. fig)		xxx	Furniture (at depreciated value)		
			Prepaid expenses	xxx	xxx
*(Branch Profit) (bal.fig)			By General P & L A/c (Branch Loss)* (bal.fig)		xxx

* Balancing figure is either profit or loss.

The following Journal entries are passed in the books of head office to record branch transactions:

i) *When goods are sent to branch*

Branch Account Dr.

To goods sent to branch account.

Note: Reverse entry for goods returned to head office.

ii) *When cheque or draft is sent for branch expenses*

Branch Account Dr.

To Bank Account

iii) *When cheque or draft is received as remittance from branch:*

Bank Account Dr.

To Branch Account

iv) *For closing balances of assets:*

Branch Assets Account Dr.

To Branch Account

v) *For opening balances of assets*

Branch Account Dr.

To Branch Assets Account.

(*vi*) *For closing balances of liabilities:*

Branch Account Dr.

To Branch liabilities Account

(*vii*) *For opening balances of liabilities*

Branch liabilities Account Dr.

To Branch Account

(*viii*) *For transferring the balance of goods sent to branch account:*

Goods sent to branch account Dr.

To Purchase Account (trading concern)

or Trading Account (manufacturing concern)

(*ix*) *For branch profit:*

Branch Account Dr.

To General Profit and Loss Account

Note: Reverse entry for loss.

ILLUSTRATIONS

DEPENDENT BRANCHES

DEBTORS SYSTEM

(a) When goods are sent to branch at cost price

Illustration 1

Layal shoe company opened a branch at Madras on 1.1.89. From the following particulars, the Madras Branch account for the years 1989 and 1990.

	1989 Rs.	1990 Rs.
Goods sent to Madras Branch	15,000	45,000
Cash sent to Branch for		
Rent	1,800	1,800
Salaries	3,000	5,000
Other expenses	1,200	1,600
Cash received from the branch	24,000	60,000
Stock on 31st December	2,300	5,800
Petty cash in hand on 31st December	40	30

[Madras, B.Com., Oct. 1995; Periyar, BBA May 2004, B.Com. April 2001 (3 times); [Pondicherry, B.Com. Dec. 1999 (3 times)]

Solution:

In the Books of Head Office

Madras Branch A/c for 1989

			Rs.			Rs.
Jan. 1	To Balance b/d		NIL		By Cash	24,000
	To Goods sent to Branch		15,000	31 Dec.	By Balance c/d	
	To Cash:				Stock	2,300
	Rent	1,800			Petty cash	40
	Salaries	3,000				
	Other expenses	1,200	6,000			
	To General P&L A/c (Profit)		5,340			
			26,340			26,340

Madras Branch A/c for 1990

			Rs.			Rs.
Jan. 1	To Balance b/d				By Cash	60,000
	Stock		2,300	Dec. 31	By Balance c/d	
	Petty cash		40		Stock	5,800
	To Goods sent to branch		45,000		Petty Cash	30
	To Cash:–					
	Rent	1,800				
	Salaries	5,000				
	Other expenses	1,600	8,400			
	To General P & L A/c (Profit)		10,090			
			65,830			65,830

Illustration 2

From the following particulars relating to Hyderabad branch for the year ended 31.12.90, Prepare Branch A/c in the head office books:

	Rs.	Rs.
Stock at the Branch on 1.1.90		15,000
Debtors at the Branch on 1.1.90		30,000
Petty cash at the Branch on 1.1.90		300
Goods sent to Branch during 1990		2,52,000
Cash Sales 1990		60,000
Received from Debtors 1990		2,10,000
Credit Sales during 1990		2,28,000
Cheques sent to branch during 1990:		
for Salaries	9,000	
for Rent & Rates	1,500	
for Petty Cash	1,100	11,600
Stock at the branch on 31.12.90		25,000
Petty Cash 31.12.90		200
Goods returned by the branch		2,000
Debtors on 31.12.90		48,000

[Madras, B.Com., April 2005; March 1993]

Solution:

In the Books of Head Office

Hyderabad Branch A/c

Dr.			Rs.		Cr.		Rs.
Jan. 1	To Balance b/d			Dec. 31	By Bank		
	Stock		15,000		Cash Sales	60,000	
	Debtors		30,000		Cash received from		
	Petty cash		300		Debtors	2,10,000	2,70,000
Dec. 31	To Goods sent to branch A/c		2,52,000	Dec. 31	By Goods Sent to branch [Returns to H.O.]		2,000
"	To Bank:			"	By Balance c/d:		
	Salaries	9,000			Stock		25,000
	Rent & Rates	1,500			Debtors		48,000
	Petty Cash	1,100	11,600		Petty cash		200
	To General P&L A/c (Profit)		36,300				
			3,45,200				3,45,200

Illustration 3

The following information relates to Madurai branch

	Rs.	Rs.
Stock on 1.1.94		11,200
Branch debtors on 1.1.94		6,300
Goods sent to Branch		51,000
Cash sent to Branch for:–		
Rent	1,500	
Salaries	3,000	
Petty Cash	500	5,000
Sales at branch:		
Cash	25,000	
Credit	39,000	64,000
Cash received from Debtors		41,200
Stock on 31.12.94		13,600

Prepare Branch account for the year 1994

[Madras, B.Com., B.C.S. etc. (Sem) Nov. 2006; B.Com.(Sem) Nov. 2003; Mar. 1995, May 1996]

Solution:

In the books of Head Office

Madurai Branch A/C

			Rs.				Rs.
Jan. 1	To Balance b/d			Dec. 31	By Bank:		
	Stock		11,200		Cash Sales	25,000	
	Debtors		6,300		Cash collec –ted from debtors	41,200	66,200
Dec. 31	To Goods sent to Branch		51,000	"	By Balance c/d		
"	To Bank:				Stock		13,600
	Rent	1,500			Debtors		4,100
	Salaries	3,000					
	Petty Cash	500	5,000				
"	To General P&L A/c (Profit)		10,400				
			83,900				83,900

Working Note:

Calculation of Closing Debtors

Branch Debtors A/c

		Rs.			Rs.
1.1.94	To Balance b/d	6,300		By Cash	41,200
	To Sales (credit)	39,000	31.12.92	By Balance c/d (bal.fig)	4,100
		45,300			45,300

alculation of Closing Stock and Manager's commission

llustration 4

From the following particulars prepare a branch account showing the profit r loss at the branch.

	Rs.
Opening Stock at the branch	15,000
Goods sent to the branch	45,000
Sales	60,000
Salaries	5,000
Other expenses	2,000

Closing stock could not be ascertained but it is known that the branch usually sells at cost plus 20%. The branch manager is entitled to a commission of 5% on the profit of the branch before charging such commission.

[Madras, BBA, Nov. 2004; B.Sc., Oct. 2001 (Double Fig.) B.Com., Nov. 1994; April 1981; Periyar BBA Nov. 2004]

Solution:

Working Note

Computation of Closing Stock

	Rs.
Opening Stock	15,000
Add: Goods sent to branch	45,000
	60,000
Less: Cost of goods sold $\left[\text{Sales} \times \frac{100}{120} = \left(60{,}000 \times \frac{100}{120}\right)\right]$	50,000
Cost of Closing Stock	10,000

In the books of Head Office

Branch A/c

	Rs.		Rs.
To Opening Stock	15,000	By Cash (sales)	60,000
To Goods Sent to branch	45,000	By Closing stock	10,000
To Cash (Salaries)	5,000		
To Cash (Other expenses)	2,000		
To Manager's commission (3,000 × 5%)	150		
To Net Profit - transferred to General P & L A/c	2,850		
	70,000		70,000

Maintaining Petty Cash balance Under Imprest System

Illustration 5

A Head office invoices goods to its branch at cost price. The branch is permitted to incur petty expenses and maintain petty cash balance of Rs. 1,000 on the imprest system. It is also permitted to buy furniture of the value of Rs. 2,000.

	Rs.		Rs.
Stock 1.1.93	41,000	Cash Purchase by the branch (with H.O. permission)	12,500
Debtors 1.1.93	12,500	Payment to Creditors	45,000
Petty Cash 1.1.93	1,000	Closing balance of Creditors A/c	27,500
Creditors 1.1.93	10,000	*Payment by H.O.*	
Rent upto 31.3.93	250	Rent for one year (Paid on 1.4.93)	1,200
Goods sent to branch	75,000	Salaries	6,000
Credit Sales	40,000	Insurance (paid upto 31.3.94)	750
Cash Sales	75,000	*Payment by Branch*	
Cash received from debtors	45,000	Furniture	2,000
Allowances	50	Petty expenses	250
Discount	100	Stock on 31.12.93	1,00,000
Bad debt	150		

Prepare Branch A/c in the Books of Head Office.

Solution:

In the Books of H.O.

Branch A/c

1993			Rs.	1993		Rs.
Jan. 1	To Balance b/d			Jan 1	By Balance b/d	
	Stock		41,000		Creditors	10,000
	Debtors		12,500		By Bank:	
	Petty Cash		1,000		Cash remitted to H.O.	60,250
	Rent Prepaid		250			
	To Goods sent to Branch		75,000	Dec.31	By Balance c/d	
	To Bank:				Stock	1,00,000
	Rent	1,200			Debtors	7,200
	Salaries	6,000			Petty Cash	1,000
	Insurance	750	7,950		Furniture	2,000
	To Petty expenses		250		Rent Prepaid $\left(1200 \times \frac{3}{12}\right)$	300
Dec.31	To Balance c/d					
	Creditors		27,500		Insurance prepaid $\left(750 \times \frac{3}{12}\right)$	187.50
	To General P&L A/c (Profit)		15,487.50			
			1,80,937.50			1,80,937.50

Note: Petty cash spent by branch is adjusted from branch cash and H.O. has not sent money for it.

Working Note:

Branch Debtors A/c

	Rs.		Rs.
To Balance b/d	12,500	By Cash	45,000
To Sales (Credit)	40,000	By Allowances	50
		By Discount	100
		By Bad debt	150
		By Balance c/d (Bal. fig)	7,200
	52,500		52,500

Branch Cash A/c

	Rs.		Rs.
To Sales (Cash)	75,000	By Petty Cash	250
To Debtors	45,000	By Cash Purchases	12,500
		By Creditors	45,000
		By Furniture	2,000
		By Remittance to H.O. (Bal.fig)	60,250
	1,20,000		1,20,000

Branch Petty Cash A/c

	Rs.		Rs.
To Balance b/d	1,000	By Expenses	250
To Cash (Bal.fig)	250	By Balance c/d	1,000
	1,250		1,250

B. When goods are sent to branch at invoice price

Illustration 6

A Madras head office has a branch at Salem to which goods are invoiced at cost plus 20%. From the following particulars, prepare Branch A/c in the head office books:

	Rs.
Goods sent to branch	2,11,872
Total sales	2,06,400
Cash sales	1,10,400
Cash received from Branch debtors	88,000
Branch debtors on 1-1-96	24,000
Branch stock on 1-1-96	7,680
Branch stock on 31-12-96	13,440

Solution:

In the books of head office

Salem Branch A/c for the year ended 31-12-96

	Rs.		Rs.
To Balance b/d:		By Bank:	
Stock	7,680	Cash sales 1,10,400	
Debtors	24,000	Cash received	
To Goods sent to branch	2,11,872	from debtors 88,000	1,98,400
To Stock reserve	2,240	By Stock reserve	1,280
$(13{,}440 \times 20/120)$		$(7{,}680 \times 20/120)$	
		By Goods sent to branch:	
		Loading $(2{,}11{,}872 \times 20/120)$	35,312
To Profit - transferred to		By Balance c/d	
general P & L A/c	34,640	Stock	13,440
		Debtors	32,000
	2,80,432		2,80,432

Working Note: Calculation of closing debtors

Branch Debtors A/c

	Rs.		Rs.
To Balance b/d	24,000	By Cash	88,000
To Sales - credit	96,000	By Balance c/d (bal.fig)	32,000
(2,06,400 – 1,10,400)			
	1,20,000		1,20,000

Illustration 7

Manian Ltd., of Calcutta has a branch at Patna. Goods are invoiced to the Patna branch, the selling price being cost plus 25%

The Patna branch keeps its own sales ledger and transmits all cash received to Calcutta. All expenses are paid from Calcutta. From the following details prepare the Patna branch A/c for the year 1989.

	Rs.
Stock (1.1.89) (invoice price)	1,250
Stock (31.12.89) (invoice price)	1,500
Debtors (1.1.89)	700
Debtors (31.12.89)	900
Cash sales for the year	5,400
Credit sales for the year	3,500
Goods Invoiced from Calcutta	9,100
Rent	400
Wages	340
Sundry expenses	80

[Madras, B.Com., Dec. 1982, Sep. 1990]

Books of Manian Ltd., Calcutta (H.O.)

Patna Branch A/c

1989			Rs.	1989			Rs.
Jan. 1	To Balance b/d				By Bank:		
	Stock		1,250		Cash Sales	5,400	
	Debtors		700		Cash received from debtors	3,300	8,700
	To Goods sent to branch		9,100	Dec.31	By Stock Reserve $(1{,}250 \times 25/125)$		250
	To Bank:			Dec.31	By Goods sent to Branch – loading $(9{,}100 \times 25/125)$		1,820
	Rent	400		Dec.31	By Balance c/d		
	Wages	340			Stock		1,500
	Sundry expenses	80	820		Debtors		900
Dec.31	To Stock Reserve $(1{,}500 \times 25/125)$		300				
	To General P&L A/c (Profit)		1,000				
			13,170				13,170

Working Note:

Calculation of Cash received from Debtors

Branch Debtors A/c

		Rs.			Rs.
1.1.89	To Balance b/d	700		By Cash (Bal. fig)	3,300
	To Sales (Credit)	3,500	31.12.89	By Balance c/d	900
		4,200			4,200

Illustration 8

Naga of Trichy has a branch at Madras. Goods are sent by head office at invoice price which is at the profit of 20% on cost price. All expenses of the branch are paid by head office. From the following particulars, prepare branch account in the H.O. books, showing goods at invoice price.

	Rs.
Opening Balances:	
Stock at invoice price:	11,000
Debtors	1,700
Petty Cash	100
Goods sent to branch at invoice price	20,000
Expenses paid by H.O.	
Rent	600
Wages	200
Salary	900

Remittance made to H.O.	
Cash Sales	2,650
Cash collected from debtors	21,000
Goods returned by branch at invoice price	400
Balances at the end	
Stock at invoice price	13,000
Debtors	2,000
Petty Cash	25

[Madras, B.Com., May 1982, Nov. 1984, Sep, 1995]

Solution:

In the Books of Naga, Trichy (H.O.)
Madras Branch A/c

		Rs.			Rs.
To Balance b/d			By Bank:		
Stock		11,000	Cash Sales	2,650	
Debtors		1,700	Cash collected		
Petty Cash		100	from debtors	21,000	23,650
To Goods sent to branch		20,000	By Goods sent to branch (Returns to H.O.)		400
To Bank:			By Stock Reserve		
Rent:	600		$(11,000 \times 20/120)$		1,833
Wages	200		By Goods sent to branch – Loading (net)		3,267
Salary	900	1,700	$(19,600 \times 20/120)$		
To Stock Reserve		2,167	By Balance c/d		
$(13,000 \times 20/120)$			Stock		13,000
To General P&L A/c (Profit)		7,508	Debtors		2,000
			Petty Cash		25
		44,175			44,175

FINAL ACCOUNTS SYSTEM

Illustration 9

A Madras merchant has a branch at Pudukkottai to which goods are sent at cost plus 25%. The branch keeps its own sales ledger and remits all cash received to the head office every day. All expenses are paid from the head office. The transactions for the branch were as follows:

	Rs.		Rs.
Stock (1.1.94) at I. P.	11,000	Cheques sent to branch:	
Debtors (1.1.94)	100	Rent	600
Petty Cash (1.1.94)	100	Wages	200
Cash Sales	2,650	Salary	900

Credit Sales	23,950	Stock (31.12.94) at I.P.	13,000
Goods sent to branch at I.P.	20,000	Debtors (31.12.94)	2,000
Goods returned to head office	300	Petty Cash (31.12.94)	125
Bad debts	300	(Including miscellaneous income	
Allowances to Customers	250	Rs. 25 not remitted)	
Return Inwards	500	Collection from debtors	21,000

Prepare the Branch Trading and Profit and Loss A/c and Branch A/c for the year 1994.

[Madras, B.Com., Nov. 2005; B.C.S. April 2004; B.Com., May 1995; Bharathiar B.Com., Nov. 2004]

Solution:

Branch Trading and Profit & Loss A/c for the year ending 31.12.94

		Rs.			Rs.
To Opening Stock (at cost) (11,000 – 2,200)		8,800	By Sales		
To Goods sent to Branch (at cost)	16,000		Cash	2,650	
			Credit	23,950	
				26,600	
Less: Returns to H.O. (300 – 60)	240	15,760	*Less:* Returns	500	26,100
			By Closing Stock (at cost) (13,000 – 2,600)		10,400
To Wages		200			
To Gross profit c/d (bal.fig)		11,740			
		36,500			36,500
To Bad debts		300	By Gross Profit b/d		11,740
To Allowances		250	By Miscellaneous income		25
To Rent		600			
To Salaries		900			
To Net Profit c/d		9,715			
		11,765			11,765

Branch A/c (Personal A/c)

	Rs.			Rs.
To Balance b/d		By Bank:		
Stock	8,800	Cash Sales	2,650	
Debtors	100	Cash received		
Petty Cash	100	from debtors	21,000	23,650
To Goods sent to branch at cost	16,000	By Goods sent to branch at cost (return)		240
To Bank (expenses)	1,700	By Balance c/d (10,400 + 2,000 + 125) (Bal. fig)		12,525
To Profit	9,715			
	36,415			36,415

Illustration 10

Goods are invoiced by head office to its branch at Jaipur at cost plus 25%. All the expenses of the branch are paid by head office. Branch keeps only debtors ledger and sales ledger. Prepare Jaipur branch account and its trading and profit and loss account for the year ended 31.12.91 from the following particulars of the branch given below:-

	Rs.
Closing Stock (invoice price)	13,500
Credit Sales	30,750
Cash received from debtors	28,425
Opening Stock (invoice price)	18,000
Cash Sales	13,125
Expenses of branch paid by head office	7,800
Goods received from head office	22,500
Debtors on 31.12.91	6,870
Goods in transit from head office on 31.12.91	1,350

Solution:

Branch Trading and Profit & Loss A/c for the year ended 31.12.91

		Rs.			Rs.
To Opening Stock (18,000 – 3,600)		14,400	By Sales: Cash:	13,125	
To Goods from H.O. (23,850 – 4,770)	19,080		Credit	30,750	43,875
Less: Cost of goods in transit (1,350 – 270)	1,080	18,000	By Closing Stock (13,500 – 2,700)		10,800
To Gross Profit c/d		22,275			
		54,675			54,675
To Expenses		7,800	By Gross Profit b/d		22,275
To Net Profit c/d		14,475			
		22,275			22,275

Jaipur Branch A/c (Personal A/c)

	Rs.			Rs.
To Balance b/d		By Bank:		
Stock (18,000 – 3,600)	14,400	Cash Sales	13,125	
Debtors	4,545	Cash received from debtors	28,425	41,550
To Goods sent to branch (22,500 + 1,350) – 4,770	19,080	By Goods in transit (1350 – 270)		1,080
To Bank (Expenses)	7,800	By Balance c/d (13,500–2,700) + 6,870		17,670
To Profit	14,475			
	60,300			60,300

Working Note: 1

Calculation of Opening Debtors

Branch Debtors A/c

	Rs.		Rs.
To balance b/d (bal.fig)	4,545	By Cash	28,425
To Sales (Credit)	30,750	By Balance c/d	6,870
	35,295		35,295

2. Goods from Head Office = Goods received from H.O. + Goods in transit

23,850 = 22,500 + 1,350

WHOLESALE BRANCH SYSTEM

Distinction between wholesale and retail profit at Branch

Illustration 11

A Head office sends goods to its branch at 20% less than the list price. Goods are sold to customers at cost plus 100%. From the following particulars ascertain the profit made at the head office and the branch on wholesale basis.

	Head office Rs.	*Branch* Rs.
Purchases	2,00,000	–
Goods sent to branch (invoice price)	80,000	–
Sales	1,70,000	80,000

[Madras, B.Com., Nov. 1983, Sep. 1993; Periyar, B.Com. April/May 2001 (10 times); Bangalore, B.Com. 1993; Bharathiar, B.Com. April 1997]

Solution:

Trading and Profit & Loss A/c

	H.O. Rs.	Branch Rs.		H.O. Rs.	Branch Rs.
To Purchases	2,00,000	–	By Sales	1,70,000	80,000
To Goods received from H.O.	–	80,000	By Goods sent to branch	80,000	–
To Gross Profit c/d	1,15,000	16,000	By Closing stock	65,000	16,000
	3,15,000	96,000		3,15,000	96,000
To Stock Reserve (Closing stock) $\left(16{,}000 \times \frac{60}{160}\right)$	6,000	–	By Gross Profit b/d	1,15,000	16,000
To Net Profit c/d	1,09,000	16,000			
	1,15,000	16,000		1,15,000	16,000

Working Note:

Calculation of Closing Stock

		Rs.	Rs.
	Value of Closing Stock at H.O.		
	Purchase		2,00,000
Less:	Cost of goods sold $\left(\frac{1,70,000}{200} \times 100\right)$	85,000	
Less:	Cost of Goods sent to Branch $\left(\frac{80,000}{160} \times 100\right)$	50,000	1,35,000
	Closing Stock		65,000
	Value of closing Stock at Branch:		
	Goods received from H.O.		80,000
Less:	Cost of goods sold $\left(\frac{80,000}{200} \times 160\right)$		64,000
	Closing Stock		16,000

Note:

H.O. Cost Price	Whole sale Rate i.e., Rate at which Goods supplied to branch	List Price
100	$160(200 - 200 \times 20\%)$	200 (100+100)

Illustration 12

A Head Office sends goods to its branch at 25% less than the list price. Goods are sold to customers at Cost plus 60%. From the following particulars ascertain the profit made by the head office and by the branch.

	Head Office Rs.	*Branch* Rs.
Opening Stock at Cost (at invoice price in case of branch)	50,000	30,000
Purchases	1,50,000	–
Goods sent to branch	1,08,000	–
Sales	1,60,000	80,000
Expenses	10,000	6,000

[Madras, B.Com., Sep. 1990]

Solution:

Trading and Profit & Loss A/c

	H.O. Rs.	*Branch* Rs.		*H.O.* Rs.	*Branch* Rs.
To Opening Stock	50,000	30,000	By Sales	1,60,000	80,000
To Purchases	1,50,000	–	By Goods sent to Branch	1,08,000	–
To Goods received from H.O.	–	1,08,000	By Closing Stock	10,000	78,000
To Gross Profit c/d	78,000	20,000			
	2,78,000	1,58,000		2,78,000	1,58,000
To Expenses	10,000	6,000	By Gross Profit b/d	78,000	20,000
To Stock reserve (Closing Stock) $\left(78{,}000 \times \frac{20}{120}\right)$	13,000		By Stock Reserve (Opening Stock) $\left(30{,}000 \times \frac{20}{120}\right)$	5,000	–
To Net Profit c/d	60,000	14,000			
	83,000	20,000		83,000	20,000

Working Note:

H.O. (cost price)	Supplied to branch (wholesale rate)	List Price
100	$120(160 - 160 \times 25\%)$	160 (100+60)

	Rs.	Rs.
Calculation of value of closing stock of H.O.		
Opening Stock		50,000
Purchases		1,50,000
		2,00,000
Less: Cost of goods sold $\left(\frac{1{,}60{,}000}{160} \times 100\right)$	1,00,00	
Less: Cost of goods sent to branch $\left(1{,}08{,}000 \times \frac{100}{120}\right)$	90,000	1,90,000
Closing Stock		10,000
Calculation of value of closing stock at Branch		
Opening Stock	30,000	
Goods received from head office	1,08,000	1,38,000
Less: Cost of goods sold $\left(\frac{80{,}000}{160} \times 120\right)$		60,000
Closing stock		78,000

Stock Reserve on Stock of Branch

On Opening stock:	$\frac{30,000}{120} \times 20$	5,000
On Closing stock:	$\frac{78,000}{120} \times 20$	13,000

STOCK AND DEBTOR SYSTEM

(a) When goods are sent at cost price

Illustration 13

The Calcutta Commercial Company invoiced goods to its Jamshedpur Branch at cost. The Head office paid all the branch expenses from its bank except petty cash expenses which were paid by the branch. From the following details relating to the Branch, prepare,

(1) Branch Stock A/c
(2) Branch Debtors A/c
(3) Branch Expenses A/c
(4) Branch P & L A/c

	Rs.		Rs.
Stock (Opening)	21,000	Discount to customers	4,200
Debtors (Opening)	37,800	Bad debts	1,800
Petty Cash (Opening)	600	Goods returned by customers to branch	1,500
Goods sent from H.O.	78,000	Salaries & Wages	18,600
Goods returned to H.O.	3,000	Rent & Rates	3,600
Cash Sales	52,500	Debtors (Closing)	29,400
Advertisement	2,400	Petty Cash (Closing)	300
Cash received from debtors	85,500	Credit Sales	85,200
Stock (Closing)	19,500		
Allowances to customers	600		

[Madras, B.Com., March 1989]

Solution:

Branch Stock A/c

	Rs.		Rs.
To Balance b/d	21,000	By Cash	52,500
To Goods sent to branch	78,000	By Goods sent to Branch	3,000
To Branch Debtors	1,500	By Branch Debtors	85,200
To Branch Profit & Loss A/c (Transfer)	59,700	By Balance c/d	19,500
	1,60,200		1,60,200

	Rs.		Rs.
To Balance b/d	37,800	By Cash	85,500
To Branch Stock A/c (Credit sales)	85,200	By Branch expenses [bad debts, allowances, discount]	6,600
		By Branch Stock (Returns)	1,500
		By Balance c/d	29,400
	1,23,000		1,23,000

Branch Expenses A/c

	Rs.		Rs.
To Branch Debtors A/c	6,600	By Branch P&L A/c (transfer)	31,500
To Bank (Advt., Salaries & Wages, Rent & Rates)	24,600		
To Petty expenses (600–300)	300		
	31,500		31,500

Branch Profit & Loss A/c

	Rs.		Rs.
To Branch Expenses A/c	31,500	By Branch Stock A/c	59,700
To General P&L A/c (Profit) (Bal. fig)	28,200		
	59,700		59,700

Illustration 14

A head office at Bhopal invoices goods to its branch at Indoor at cost, and the branch sells the goods not only for cash but on credit also. The expenses of the branch are paid by the head office. From the following particulars relating to the branch opened on 1-1-1996, prepare the necessary accounts under stock and debtors system in the head office books.

	Rs.		Rs.
Goods sent to branch at cost	5,000	Credit sales	5,200
Goods returned by the branch at cost	300	Discount allowed to customers	180
		Cash sales	250
Expenses paid by the head office	1,000	Branch stock (31-12-96)	1,700
Remittance from branch	4,200	Branch debtors (31-12-96)	770
Receipts from debtors not paid in by branch	300		

[Madras, B.Com. Nov. 2004; Periyar B.Com., May 2006 $\frac{1}{5}$ Figs]

Solution:

Branch Stock A/c

	Rs.		Rs.
To Goods sent to branch	5,000	By Goods returned to H.O	300
To Branch Profit & Loss A/c (Surplus) (Bal. fig)	2,450	By Cash – cash sales	250
		By Branch debtors - Credit sales	5,200
		By balance c/d	1,700
	7,450		7,450

Branch Debtors A/c

	Rs.		Rs.
To Branch stock A/c	5,200	By Cash (bal.fig)	4,250
		By Discount	180
		By Balance c/d	770
	5,200		5,200

Branch Expenses A/c

	Rs.		Rs.
To Bank- expenses	1,000	By Branch P & L.A/c (transfer)	1,180
To Branch debtors - discount	180		
	1,180		1,180

Branch Profit & Loss A/c

	Rs.		Rs.
To Branch Expenses A/c	1,180	By Branch Stock A/c	2,450
To General P & L A/c (Profit) (Bal. fig)	1,270		
	2,450		2,450

Branch Cash A/c

	Rs.		Rs.
To Branch stock A/c	250	By Bank A/c - remittence	4,200
To Branch debtors A/c	4,250	By Balance c/d (bal.fig)	300
	4,500		4,500

Goods sent to branch A/c

	Rs.		Rs.
To Purchase A/c - transfer	5,000	By Branch Stock A/c	5,000
	5,000		5,000

(b) When goods are sent at invoice price.

Illustration 15

A head office invoices goods to its branch at cost plus 50%. Branch remits all cash received to the head office and all expenses are met by the H.O. From the following particulars, prepare the necessary accounts on the stock & debtors system to show the profit or loss at the branch.

	Rs.		Rs.
Stock on 1.1.89 (invoice price)	27,900	Goods returned by debtors	3,600
Debtors on 1.1.89	20,400	Goods returned to H.O. by branch	4,500
Goods invoiced to the branch (invoice price)	1,53,000	Shortage of stock	1,350
		Discount allowed	600
Cash Sales	75,000	Expenses at the branch	16,200
Credit Sales	93,000	Bad debts	600
Cash collected from debtors	91,200		

[Madras, B.Com., Sept. 1992]

Solution:

Branch Stock A/c

	Rs.		Rs.
To Balance b/d	27,900	By Cash A/c	75,000
To Goods sent to branch	1,53,000	By Branch Debtors	93,000
To Branch Debtors	3,600	By Goods sent to Branch (Returns to H.O.)	4,500
		By Branch Adjustment A/c (loading on shortage)	450
		By Branch P & L A/c. (Cost of shortage of stock)	900
		By Balance c/d	10,650
	1,84,500		1,84,500

Branch Debtors A/c

	Rs.		Rs.
To Balance b/d	20,400	By Cash	91,200
To Branch Stock A/c	93,000	By Branch Stock A/c	3,600
		By Branch expenses (Discount + Bad debts)	1,200
		By Balance c/d (Bal.fig)	17,400
	1,13,400		1,13,400

Branch Expenses A/c

	Rs.		Rs.
To Bank	16,200	By Branch P & L A/c (transfer)	17,400
To Branch Debtors	1,200		
	17,400		17,400

Branch Adjustment A/c

	Rs.		Rs.
To Stock Reserve $\left(10{,}650 \times \frac{50}{150}\right)$	3,550	By Stock Reserve $\left(27{,}900 \times \frac{50}{150}\right)$	9,300
To Branch stock A/c (loading on shortage) $\left(1{,}350 \times \frac{50}{150}\right)$	450	By Goods sent to Branch (Net)– loading $\left(1{,}48{,}500 \times \frac{50}{150}\right)$	49,500
To Branch P&L A/c (Gross Profit)	54,800		
	58,800		58,800

Branch Profit & Loss A/c

	Rs.		Rs.
To Branch Expenses A/c	17,400	By Branch Adjustment A/c (Gross Profit)	54,800
To Branch Stock A/c (cost of shortage of stock)	900		
To General P&L A/c (Net Profit)	36,500		
	54,800		54,800

Goods sent to Branch A/c

	Rs.		Rs.
To Branch Stock A/c	4,500	By Branch Stock A/c	1,53,000
To Branch Adjustment A/c	49,500		
To Purchases A/c (Bal.fig)	99,000		
	1,53,000		1,53,000

Illustration 16

UNIT - I
CHAPTER - II

Departmental Accounting

Meaning of Departments and Departmental Accounting

An organisation may produce or buy and sell several products or perform different services under the same roof or from the same premises. The modern practice is to divide the organisation into independent departments, each of which may deal in a particular class of goods or render a specialised type of service. For example, a readymade garments firm may be divided into tailoring and selling departments; a departmental store may be divided into textiles, provisions, durable goods departments etc.

When accounts are finalised at the end of the year, the usual method of trading and profit and loss account is not suitable for such organisations. The owners or the management may desire to ascertain the trading results of each department and the overall result of the organisation.

The method of accounting which is followed to obtain such results is known as *Departmental Accounting.*

Need for Departmental Accounting

Accounts which reveal expenses, incomes, sales, stocks, gross profit and net profit separately for each department are needed:

(i) To compare the results of each department with the results of previous years and ascertain the trend.

(ii) To know the comparative results of different departments in the same year.

(iii) To assess the position of stocks in each department.

(iv) To identify areas of weakness for cost control and improvement of efficiency.

(v) To decide upon expansion, discontinuation and investment policies.

Advantages of Departmental Accounting

The following are the benefits derived by business firms through departmental accounting.

(i) *Ascertainment of profit:* Gross profit and net profit can be ascertained for each department separately on a reliable basis.

(ii) *Comparative performance:* The results of different departments can be compared in terms of profit, expenses, inventories, percentage of growth, return on investment etc.

(iii) *Appraisal of personnel:* Individuals responsible for improved results or decline in performance can be identified. This is useful in implementing incentive systems.

(iv) *Remedial measures:* Areas of poor performance can be identified for implementing remedial measures. If situation warrants, decisions to discontinue some products or closing a department may be taken accurately.

(v) *Expansion and Diversification:* Decisions to expand and diversify profitable lines of business become easier.

(vi) *Policy formulation:* Management policies towards inventories, extending credit, additional investment etc., are facilitated.

Distinction between departments and branches

1. Location: All the departments are located within a single premises. Branches are located in different geographical areas, physically separated from the head office and one another.

2. Growth: Departments are confined to local business and can grow vertically within the same roof.

Branches cater to a wider market and can expand and grow geographically.

3. Accounting: All the accounting records are centralised and maintained within the same premises for all the departments.

Branches keep records of their operations separately. The head office consolidates the accounts of all the branches.

4. International operations: Departments are confined to a single place unless similar organisations are opened elsewhere.

Branches can be started anywhere in the world. So, there can be local and foreign branches.

Methods and Techniques of Departmental Accounting

(i) When accounts are finalised, departmental trading and profit and loss account is prepared in columnar form to find gross profit and net profit of each department.

A general profit and loss account is also prepared to find the overall profit or loss of the firm. The balance sheet is common and shows the position of the business as a whole.

(ii) Maintenance of Records

Firms with huge turnover and large number of transactions can maintain separate subsidiary books for each department. Medium and small sized firms can maintain purchases book, sales book and the returns books with appropriate columns for each department. Even the cash book can be similarly bifurcated. In the ledger separate accounts are opened for sales, purchases, wages etc. of each department. Closing stock can be separately ascertained at the time of stock taking. The following is the model sales book with columns for different departments.

Illustration 1

Following is the Trial Balance of Mr. Rajan as on 31-12-92

		Dr. Rs.	Cr. Rs.
Capital A/c		-	40,000
Drawings A/c		1,500	-
Opening Stock	Dept. A	8,500	-
	Dept. B	5,700	-
	Dept. C	1,200	-
Purchases	Dept. A	22,000	-
	Dept. B	17,000	-
	Dept. C	8,000	-
Sales	Dept. A	-	54,000
	Dept. B	-	33,000
	Dept. C	-	21,000
Sales Returns	Dept. A	4,000	-
	Dept. B	3,000	-
	Dept. C	1,000	-
Freight and Carriage	Dept. A	1,400	-
	Dept. B	800	-
	Dept. C	200	-
Wages	Dept. A	800	
	Dept. B	550	
	Dept. C	150	
Furniture & fixtures		4,600	-
Plant and Machinery		20,000	-
Bills Receivable		4,200	-
Bills payable		-	8,000
Motor vehicles		40,000	-
Sundry Debtors		8,000	-
Sundry Creditors		-	7,000
Salaries		4,500	
Power and Water		1,200	-
Telephone charges		2,100	-
Bad debts		750	-
Rent and Taxes		6,000	-
Insurance		1,500	-
Printing and Stationery		2,000	-
Advertising		3,500	-
Bank overdraft		-	12,000
Cash in hand		850	-
		1,75,000	1,75,000

Prepare Departmental Trading and Profit and Loss A/c and the Balance Sheet taking into account the following adjustments:

a) Outstanding Wages Dept. B = Rs.150
Dept. C = Rs. 50

b) Salaries payable = Rs. 500

c) Depreciate plant & machinery and motor vehicles @ 10%

d) Create a Reserve of 5% for bad and doubtful debts.

e) Each Department shall share the expenses in proportion to their sales.

f) Closing stock: Dept. A = Rs. 3,500
Dept. B = Rs. 2,000
Dept. C = Rs. 1,500

[Madras, B.Com., March 1994; Manonmaniyam, B.Com., Nov. 1994]

Solution:

Departmental Trading A/c of Mr. Rajan for the year ending 31-12-92

	A Rs.	B Rs.	C Rs.		A Rs.	B Rs.	C Rs.
To Opening stock	8,500	5,700	1,200	By Sales	54,000	33,000	21,000
To Purchases	22,000	17,000	8,000	*Less:* Sales			
To Freight				Returns	4,000	3,000	1,000
& Carriage	1,400	800	200	Net Sales	50,000	30,000	20,000
To Wages							
Add: Wages due	800	700	200	By Closing			
				stock	3,500	2,000	1,500
To power & water							
[sales ratio= 5:3:2]	600	360	240				
To Gross profit c/d	20,200	7,440	11,660				
	53,500	32,000	21,500		53,500	32,000	21,500

Departmental Profit & Loss A/c of Mr. Rajan for the year ending 31-12-92

	A Rs.	B Rs.	C Rs.		A Rs.	B Rs.	C Rs.
To Salaries (5,000)				By Gross			
(including due)	2,500	1,500	1,000	profit	20,200	7,440	11,660
To Telephone charges	1,050	630	420				
To Bad debts	375	225	150				
To Rent & taxes	3,000	1,800	1,200				
To Insurance	750	450	300				
To Printing &							
stationery	1,000	600	400				
To Advertising	1,750	1,050	700				
To Depreciation:							
On Plant & Machinery	1,000	600	400				
On Motor vehicles	2,000	1,200	800				
To Provision for Debtors	200	120	80				
To Net profit	6,575		6,210	By Net loss	-	735	-
	20,200	8,175	11,660		20,200	8,175	11,660

Note: All expenses are divided in Sales Ratio, as per instruction given.

Sales Ratio = A – Rs. 50,000, B – Rs. 30,000, C – Rs. 20,000 or 5 : 3 : 2.

Balance Sheet of Mr. Rajan as on 31-12-92

Liabilities		Rs.	*Assets*		Rs.
Capital	40,000		Fixture & Furniture		4,600
Less: Drawings	1,500 38,500		Plant & Machinery	20,000	
			Less: 10% Depreciation	2,000	18,000
Add: Net profit (6,575+6,210)	12,785		Motor vehicle	40,000	
	51,285		*Less:* 10% Depreciation	4,000	36,000
Less: Net loss (Dept. B)	735	50,550	Bills receivable		4,200
Salary due		500	Sundry Debtors	8,000	
Outstanding wages			*Less:* 5% provision	400	7,600
Dept. B	150		Cash in hand		850
Dept. C	50	200	Stock:		
Bills payable		8,000	Dept. A	3,500	
Sundry creditors		7,000	Dept. B	2,000	
Bank overdraft		12,000	Dept. C	1,500	7,000
		78,250			78,250

Illustration 2

The proprietor of a large retail store wished to ascertain approximately the net profit of the X, Y and Z departments separately for the three months ended 31st March 1996. It is found impracticable actually to take stock on that date, but an adequate system of departmental accounting is in use, and the normal rates of gross profit for the three departments concerned are respectively 40%, 30% and 20% on turnover before charging the direct expenses. The indirect expenses are charged in proportion to departmental turnover.

The following are the figures for the departments:

	X	Y	Z
	Rs.	Rs.	Rs.
Opening stock (1-1-96)	10,000	14,000	7,000
Purchases	12,000	13,500	9,700
Sales	20,000	18,000	16,000
Direct expenses	2,000	1,500	700

The total indirect expenses for the period (including those relating to other departments) were Rs. 5,400 on the total turnover of Rs. 1,08,000.

Prepare a statement showing the approximate net profit, making a stock reserve of 10% for each department on the estimated value on 31-3-96.

[Madras, B.Com., April 2005]

Solution:

Departmental Trading & Profit & Loss A/c for three months ended 31-3-96

	X Rs.	Y Rs.	Z Rs.		X Rs.	Y Rs.	Z Rs.
To Opening stock	10,000	14,000	7,000	By Sales	20,000	18,000	16,000
To Purchases	12,000	13,500	9,700	By Closing stock (bal.fig)	10,000	14,900	3,900
To Gross profit c/d	8,000	5,400	3,200				
	30,000	32,900	19,900		30,000	32,900	19,900
To Direct expenses	2,000	1,500	700	By Gross profit	8,000	5,400	3,200
To Indirect expenses	1,000	900	800				
To Stock reserve @ 10%	1,000	1,490	390				
To Net profit (bal.fig)	4,000	1,510	1,310				
	8,000	5,400	3,200		8,000	5,400	3,200

Note: (1) Indirect expenses applicable to the three departments:

$$\frac{54,000}{1,08,000} \times 5,400 = \text{Rs. } 2,700 \text{ to be apportioned in the ratio of } 10:9:8$$

(2) Direct expenses are not shown in Trading A/c because rates of gross profit given are before charging the direct expenses.

Illustration 3

Trading and profit & loss account of Janaki Radio and Gramophone Equipment Co., for the six months ended 31-3-93 is presented to you in the following form.

Purchases	Rs.	Sales	Rs.
Radios (A)	1,40,700	Radios (A)	1,50,000
Gramophones (B)	90,600	Gramaphones (B)	1,00,000
Spare parts (C)	64,400	Spare parts (C)	25,000
Salaries and wages	48,000	Stock as on 31-3-93	
Rent	10,800	Radios (A)	60,100
Sundry Expenses	11,000	Gramophones (B)	20,300
Profit	34,500	Spare parts (C)	44,600
	4,00,000		4,00,000

Prepare Departmental Accounts for each of the three departments, A; B and C mentioned above after taking into account the following:

(i) Radios and Gramophones are sold at the show room and spare parts at work shop.

(ii) Salaries and wages comprise as follows:

Show rooms $\frac{3}{4}$ and work shop $\frac{1}{4}$

It was decided to allocate the show room salaries and wages in the ratio of 1 : 2 between the departments A and B.

(iii) The work shop rent is Rs. 500 per month. The rent of show room is to be divided equally between the departments A and B.

(iv) Sundry expenses are to be allocated on the basis of the turnover of each department.

[Madras, B.C.A./B.Sc. Oct. 2003; B.Com., Oct. 2002; April 2001, Oct. 1998; May 1996]

Solution:

Working Notes:

(i) Salaries and wages are to be allocated first between show room 3/4 *i.e.*, Rs. 36,000; workshop 1/4 *i.e.*, Rs.12,000. Work shop salaries are to be charged to Dept. 'C'.

(ii) Since Radio and Gramophones are sold at show room, salaries are to be allocated to Dept. 'A' and Dept. 'B' respectively in the ratio of 1 : 2

$$= 36{,}000 \times \frac{1}{3} = 12{,}000, \; 36{,}000 \times \frac{2}{3} = 24{,}000$$

(iii) Rent of workshop at Rs. 500 p.m. for six months, Rs.3,000 is to be charged to Dept. 'C' first and the balance Rs.7,800 is to be divided equally between Dept. 'A' and 'B'.

(iv) Turnover Ratio = 1,50,000 : 1,00,000 : 25,000 = 6 : 4 : 1

Departmental Trading and P & L A/c for the six months ending 31-3-93

	A Rs.	B Rs.	C Rs.		A Rs.	B Rs.	C Rs.
To Purchases	1,40,700	90,600	64,400	By Sales	1,50,000	1,00,000	25,000
To Gross profit c/d	69,400	29,700	5,200	By Closing stock	60,100	20,300	44,600
	2,10,100	1,20,300	69,600		2,10,100	1,20,300	69,600
To Salaries & wages	12,000	24,000	12,000	By Gross profit b/d	69,400	29,700	5,200
To Rent	3,900	3,900	3,000	By Net loss (Departmental)	-	2,200	10,800
To Sundry exp. (6:4:1)	6,000	4,000	1,000				
To Net profit (Departmental)	47,500	-	-				
	69,400	31,900	16,000		69,400	31,900	16,000

General Profit & Loss A/c for the six months ending 31-3-93

	Rs.		Rs.
To P & L A/c (Dept. 'B')	2,200	By P & L A/c (Dept. 'A')	47,500
To P & L A/c (Dept. 'C')	10,800		
To Profit (to be transferred to Balance Sheet)	34,500		
	47,500		47,500

Illustration 4

The following purchases were made by a business house having three departments.

$$\left.\begin{array}{lll} \text{Dept. A} & - & 1{,}000 \text{ units} \\ \text{Dept. B} & - & 2{,}000 \text{ units} \\ \text{Dept. C} & - & 2{,}400 \text{ units} \end{array}\right\} \text{at a total cost of Rs. } 1{,}00{,}000$$

Stocks on 1st January were:

Dept. A – 120 units
Dept. B – 80 units
Dept. C – 152 units

Sales were:

Dept. A – 1020 units at Rs. 20 each
Dept. B – 1920 units at Rs.22.50 each
Dept. C – 2496 units at Rs.25 each

The rate of gross profit is same in each case. Prepare Departmental trading account.

[Madras, B.Com., B.Com.(CS)(ICE) Oct. 2008; B.Com., April 2007; B.Com. (PZ1A) Nov. 2006; (PZA) Nov. 2006; BCA/B.Sc. Nov. 2006; B.Com., BBA etc. Ap 2007; Thiruvalluvar, B.C.A. April 2005; Madras, B.Com., April 2006; Nov. 2005; B.B.M. Oct. 2004]

Solution:

Departmental Trading A/c

Particulars	A	B	C	Particulars	A	B	C
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
To Opening Stock	1,920	1,440	3,040	By Sales	20,400	43,200	62,400
To Purchases	16,000	36,000	48,000	By Closing stock	1,600	2,880	1,120
To Gross profit (Bal. fig)	4,080	8,640	12,480				
	22,000	46,080	63,520		22,000	46,080	63,520

Working Notes:

(1) *Calculation of closing stock (in units)*

Opening stock + Purchase – sales = closing stock
Dept. A : 120 + 1,000 – 1,020 = 100 units
Dept. B : 80 + 2,000 – 1,920 = 160 units
Dept. C : 152 + 2,400 – 2,496 = 56 units

(2) *Calculation of rate of gross profit.*

In order to determine the rate of gross profit, it is assumed that all the units purchase have been sold away. Then the sale proceeds would be:

Dept. A = 1,000 units × 20	= 20,000	
Dept. B = 2,000 units × 22.50	= 45,000	
Dept. C = 2,400 units × 25	= 60,000	1,25,000
Less: Total cost of goods purchased		1,00,000
Gross profit		25,000

Rate of gross profit on selling price $= \frac{25,000}{1,25,000} \times 100 = 20\%$

($\therefore$ cost = 80% of selling price)

(3) *Cost price of each unit:*

Dept. A $= 20 \times \frac{80}{100} = 16$

Dept. B $= 22.50 \times \frac{80}{100} = 18$

Dept. C $= 25 \times \frac{80}{100} = 20$

(4) *Purchase of each department:*

Dept. A = 1,000 units × 16 = 16,000

Dept. B = 2,000 units × 18 = 36,000

Dept. C = 2,400 units × 20 = 48,000

(5) *Sale proceeds of each department:*

Dept. A = 1,020 units × 20 = 20,400

Dept. B = 1,920 units × 22.50 = 43,200

Dept. C = 2,496 units × 25 = 62,400

(6) *Value of opening stock at cost:*

Dept. A = 120 units × 16 = 1,920

Dept. B = 80 units × 18 = 1,440

Dept. C = 152 units × 20 = 3,040

(7) *Value of closing stock at cost*

Dept. A = 100 units × 16 = 1,600

Dept. B = 160 units × 18 = 2,880

Dept. C = 56 units × 20 = 1,120

Inter-departmental transfer at cost price

Illustration 5

A hotel proprietor has two departments *viz.*, Apartment Department and Meals Department. Following is the trial balance of his business.

Debit	Rs.	Credit	Rs.
Provisions	15,500	Income from apartment & attendence department	46,000
Stocks of provisions in the beginning	1,020	Income from meals department	32,000
Cash in hand and at bank	10,000	Capital	2,20,000
Customers' debit balance	800	Suppliers A/c	9,800
Buildings (1/10 th used for meals department)	2,10,000	Provision for depreciation on building	24,000
Furniture and equipment	60,000	Interest	1,130
General expenses	27,410		
Interest accrued	200		
Life Insurance	1,600		
Income tax	400		
Wages	6,000		
	3,32,930		3,32,930

Additional Information:

(a) The servants in the Apartment Dept. had occupied a room worth Rs.120 and took meals worth Rs.60. Similarly, servants in the Meals Dept. had occupied a room worth Rs.150 and took meals worth Rs.90.

(b) Wages are charged in the proportion of 1/2 to the Apartment Dept. 1/4 th to the Provision Dept. and remaining to the general P & L A/c.

(c) Increase provision for depreciation of buildings to Rs.30,000.

(d) A sum of Rs.800 representing accommodation Rs.240 and meals Rs.560 to be charged to proprietor of the hotel.

You are required to prepare profit & loss A/c and Balance Sheet as on 31.3.92.

[Madras, BCA / BCS, April 2001, April 2000; B.Com., Sep. 1986]

Solution:

Departmental Profit & Loss A/c for the year ending 31-3-92

	Apartment Rs.	*Meals* Rs.		*Apartment* Rs.	*Meals* Rs.
To Stock	–	1,020	By Income	46,000	32,000
To Provisions	–	15,500	By Proprietor's A/c (Drawings)	240	560
To Depreciation on buildings	5,400	600	By Inter-dept. adjustment	270	150
To Wages	3,000	1,500			
To Inter-dept. adjustment	180	240			
To Net Profit c/d (Departmental)	37,930	13,850			
	46,510	32,710		46,510	32,710

General P & L A/c

	Rs.		Rs.
To Wages	1,500	By Net profit b/d	
To General Expenses	27,410	Apartment	37,930
To Net profit c/d	24,000	Meals	13,850
		By Interest	1,130
	52,910		52,910

Balance Sheet as on 31-3-92

Liabilities			Rs.	*Assets*	Rs.
Capital		2,20,000		Buildings	2,10,000
Less: Drawings:					
Income tax	400			Furniture & Equipment	60,000
Premium	1,600			Customers A/c	800
Meals	560			Interest accrued	200
Apartment	240	2,800		Cash in hand & at bank	10,000
		2,17,200			
Add: Net profit		24,000	2,41,200		
Suppliers A/c			9,800		
Provision for Depreciation			30,000		
			2,81,000		2,81,000

Note: Provision for depreciation can also be reduced from buildings.

Working Notes:

	Apartment Dept.	*Meals Dept.*	*Total expenses*	
(i) Expenses on Servants in apartment dept.	120	60	180	(for apartment dept.)
(ii) Expenses on Servants in Meals dept.	150	90	240	(for meals dept.)
Total income	270	150		

Illustration 6

From the following information, prepare departmental trading and profit & loss A/c in a columnar form of the three departments of Sharma Dry Cleaners Ltd.

	Dry cleaning Rs.	*Darning* Rs.	*Dyeing* Rs.
Stock 1st Jan. 1996	4,00,000	3,40,000	9,40,000
Stock 31st Dec. 1996	3,30,000	4,38,000	8,17,000
Purchases	19,59,000	6,97,000	13,73,000
Sales	40,00,000	20,00,000	40,00,000
Wages	7,28,000	3,00,000	2,46,000

Goods were transferred from one department to another at cost price as follows:

(i) Darning to dry cleaning Rs. 2,400 and to dyeing Rs. 40,200.

(ii) Dyeing to dry cleaning Rs. 25,800 and to darning Rs. 18,000.

(iii) Dry cleaning to darning Rs. 3,000 and to dyeing Rs. 24,000.

Apportion equally:

Stationery	Rs. 5,418
Postage	Rs. 4,050
General expenses	Rs. 2,37,618
Insurance	Rs. 10,080
Depreciation	Rs. 32, 598

Rent & taxes Rs. 1,80,000 is to be split in proportion to space occupied, i.e., dry cleaning 4, darning 2, dyeing 2 and other space 2.

[Bharathidasan, B.Com., Nov. 2002; S.V. Univ. B.Com., adapted]

Solution:

Sharma Dry Cleaners Ltd.

Departmental Trading & P & L A/c for the year ended 31-12-1996

	Dry Cleaning Rs.	*Darning* Rs.	*Dyeing* Rs.		*Dry Cleaning* Rs.	*Darning* Rs.	*Dyeing* Rs.
To Opening Stock	4,00,000	3,40,000	9,40,000	By Sales	40,00,000	20,00,000	40,00,000
To Purchases	19,59,000	6,97,000	13,73,000	By Inter-dept-transfers	27,000	42,600	43,800
To Inter-dept transfers	28,200	21,000	64,200				
To Wages	7,28,000	3,00,000	2,46,000	By Closing stock	3,30,000	4,38,000	8,17,000
To Gross profit c/d	12,41,800	11,22,600	22,37,600				
	43,57,000	24,80,600	48,60,800		43,57,000	24,80,600	48,60,800
To Stationery	1,806	1,806	1,806	By Gross profit b/d	12,41,800	11,22,600	22,37,600
To Postage	1,350	1,350	1,350				
To General exp.	79,206	79,206	79,206				
To Insurance	3,360	3,360	3,360				
To Depreciation	10,866	10,866	10,866				
To Rent & taxes	72,000	36,000	36,000				
To Net profit	10,73,212	9,90,012	21,05,012				
	12,41,800	11,22,600	22,37,600		12,41,800	11,22,600	22,37,600

Inter-Departmental transfers at Selling Price

Illustration 7

A firm had two departments, cloth and readymade garments. The garments were made by the firm itself out of cloth supplied by the cloth department at its usual selling price. From the following figures, prepare departmental trading and profit and loss account for the year ended 31-3-94.

	Cloth dept. Rs.	*Readymade dept.* Rs.
Opening stock on 1-4-93	3,00,000	50,000
Purchases	20,00,000	15,000
Sales	22,00,000	4,50,000
Transfer to readymade garments dept.	3,00,000	–
Expenses – manufacturing	–	60,000
– selling	20,000	6,000
Stock 31-3-94	2,00,000	60,000

The stock in the readymade garments department may be considered as consisting of 75% cloth and 25% other expenses. The cloth department earned gross profit @ 15% in 1992-93. General expenses of the business as a whole came to Rs.1,10,000. opening stock

[Madras, B.Com., B.Com.(CS) etc. April 2008; B.Com., B.B.A. etc. Nov. 2006; B.Com., Ap 2005; Nov. 2003; April 2002; BCA/B.Sc. Oct. 2001; May 2001 (ICE)]

Solution:

Departmental Trading and Profit & Loss A/c for the year ending 31-3-94

	Cloth Rs.	*Readymade* Rs.		*Cloth* Rs.	*Readymade* Rs.
To Opening stock	3,00,000	50,000	By Sales	22,00,000	4,50,000
To Purchases	20,00,000	15,000	By Transfer to readymade dept.	3,00,000	–
To Transfer from Cloth dept.	–	3,00,000	By Closing stock	2,00,000	60,000
To Manufacturing expenses	–	60,000			
To Gross profit c/d [Departmental]	4,00,000	85,000			
	27,00,000	5,10,000		27,00,000	5,10,000
To Selling expenses	20,000	6,000	By Gross profit b/d	4,00,000	85,000
To Net profit c/d [Departmental]	3,80,000	79,000			
	4,00,000	85,000		4,00,000	85,000

General P & L A/c for the year ending 31-3-94

	Rs.		Rs.
To General expenses	1,10,000	By Net profit b/d (3,80,000+79,000)	4,59,000
To Stock reserve (closing) (60,000 × 75% × 16%)	7,200	By Stock Reserve (opening) (50,000 × 75% × 15%)	5,625
To Net profit (bal.fig)	3,47,425		
	4,64,625		4,64,625

Working Notes:

Stock Reserve has been calculated as follows:

Rate of Gross profit on sales of cloth department $= \dfrac{4,00,000}{25,00,000} \times 100 = 16\%$

Element of cloth in closing stock of readymade garments

$= 60,000 \times 75\% = 45,000$

Reserve required for unrealised profit in closing stock

$= 45,000 \times 16\% = \text{Rs. } 7,200$

Reserve already existing in opening stock $= 50,000 \times 75\% \times 15\% = 5,625$

Illustration 8

Modern Company has two departments X and Y. Department X sells goods to Y department at normal market price. From the following particulars, prepare departmental trading and profit & loss account for the year ended 31-12-1996.

	Department X Rs.	*Department Y* Rs.	*General total* Rs.
Stock on 1-1-96	15,000	–	–
Purchases	2,50,000	40,000	–
Goods from department X	–	40,000	–
Wages	15,000	20,000	–
Salaries (departmental)	7,000	5,000	–
Closing stock at cost to the department	80,000	20,000	–
Sales	2,60,000	1,45,000	–
Printing & Stationery	2,500	1,500	–
Machinery	–	15,000	–
Advertisement	–	–	12,000
Salaries (general)	–	–	18,000

Depreciate machinery by 10%. The general unallocated expenses are to be apportioned in the ratio of 2:1 to the departments X and Y. Half of the closing stock of department Y represents goods received from department X.

[Madras, B.Com.(AF5C) Nov. 2008, B.Com.(PZA) Nov. 2007]
[I.C.W.A. Inter]

Solution:

Departmental Trading & P & L A/c for the year ended 31-12-96

	X Rs.	Y Rs.	Total Rs.		X Rs.	Y Rs.	Total Rs.
To Opening Stock	15,000	–	15,000	By Sales	2,60,000	1,45,000	4,05,000
To Purchases	2,50,000	40,000	2,90,000	By Transfer to Y dept.	40,000	–	–
To Transfer from department X	–	40,000		By Closing stock	80,000	20,000	1,00,000
To Wages	15,000	20,000	35,000				
To Gross profit c/d	1,00,000	65,000	1,65,000				
	3,80,000	1,65,000	5,05,000		3,80,000	1,65,000	5,05,000
To Salaries	19,000	11,000	30,000	By Gross profit b/d	1,00,000	65,000	1,65,000
To Printing & Stationery	2,500	1,500	4,000				
To Advertisement	8,000	4,000	12,000				
To Depreciation on machinery	–	1,500	1,500				
To Net profit [Departmental]	70,500	47,000	1,17,500				
	1,00,000	65,000	1,65,000		1,00,000	65,000	1,65,000

General P & L A/c

	Rs.			Rs.
To Stock reserve	3,333	By Departmental net profit		
To Net profit (bal.fig)	1,14,167	X	70,500	
		Y	47,000	1,17,500
	1,17,500			1,17,500

Working Notes:

(i) Salaries:

	Department X Rs.	Department Y Rs.
Departmental	7,000	5,000
General (2 : 1)	12,000	6,000
	19,000	11,000

(ii) ***Calculation of provision for unrealised profit on closing stock (i.e., stock reserve)***

Rate of gross profit in X department $= \frac{1,00,000}{3,00,000} \times 100 = 33\frac{1}{3}\%$

Goods from X department in the stock of department Y

$= 20,000 \times \frac{1}{2} = \text{Rs. } 10,000$

Stock reserve $= 10,000 \times 33\frac{1}{3}\% = \text{Rs. } 3,333$

Chapter 18

UNIT- II

Hire Purchase and Instalment Purchase Systems

Hire purchase and instalment systems are responsible for bringing high value durable goods like cars, Televisions into the reach of middle class and lower middle class people. These systems have revolutionised the world of commerce.

Hire Purchase System

Definition:

According to the Hire Purchase Act 1972 Section 2 (c) " Hire purchase agreement is an agreement under which goods are let on hire and under which the hirer has an option to purchase them in accordance with the terms of the agreement and includes an agreement under which

(i) Possession of goods is delivered by the owner thereof to a person on condition that such person pays the agreed amount in periodical instalments.

(ii) The property in the goods is to pass to such person on the payment of the last of such instalments.

(iii) Such person has a right to terminate the agreement at any time before the property so passes.

As Per Section 4 of the Hire Purchase Act 1972, every hire purchase agreement must state:

(a) The hire purchase price of the goods to which the agreement relates.

(b) The cash price of the goods, that is to say, the price at which the goods may be purchased by the hirer for cash.

(c) The date on which the agreement shall be deemed to have commenced.

(d) The number of instalments by which the hire purchase price is to be paid, the amount of each of those instalments and the date or the mode of determining the date, upon which it is payable and the person to whom and the place where it is payable.

(e) The goods to which the agreement relates, the manner sufficient to identify them.

Some important terms in the hire purchase system

1. Cash price: This is the retail price of the articles at which they can be purchased immediately for cash.

Hire purchase price: This is the total amount payable by the buyer, in agreed stalments for the goods purchased. This price includes cash price and interest.

Interest: This is the additional amount apart from the cash price payable by e buyer as compensation for postponed payments.

Hire or Instalment: This is the amount payable by the buyer periodically. The stalments may be equal or different, depending on agreement.

Down payment: This is the advance payable by the buyer while signing the ire purchase agreement. It is also a part of the hire purchase price.

Hirer: The buyer of the goods on hire purchase basis.

7. **Hire vendor or owner:** The seller of the goods on hire purchase basis.

Main features of Hire purchase system.

1. The hirer or buyer gets possession of the goods on signing the hire purchase agreement and he has the right to use them.
2. The ownership of the goods continues to be with the seller or hire vendor. The buyer gets ownership of the goods on payment of the last instalment.
3. The hirer has the duty to keep the goods in good condition and take reasonable precautions for their safety till the last instalment is paid.
4. Each instalment is treated as hire charges.
5. The hirer has the option to return the goods before the last instalment is paid.
6. The hire vendor can repossess the goods if the buyer fails to pay any instalment on the due date. However, permission of the court is needed for repossession, depending on the value of the goods and number of instalments paid.
7. If goods are repossessed, the value of goods on that date and the instalments paid are added and the total hire purchase price is reduced. The balance is payable by the hire vendor to the hirer.

Instalment purchase system or deferred instalment system:

In instalment purchase system also, an agreement is entered into by the seller and buyer. An advance or down payment is paid and *possession as well as ownership* in the goods is transferred to the buyer. The buyer agrees to pay the balance of amount due in a specified number of instalments along with agreed rate of interest. If buyer fails to pay any instalment, the seller cannot repossess the goods. He can sue the buyer in a court for recovery of the dues.

Distinction between Hire purchase and Instalment Systems

S.No.	Basis	*Hire purchase System*	*Instalment System*
1.	Nature of agreement	It is an agreement of hiring with option to buy.	It is an agreement of sale.
2.	Transfer of ownership	Ownership is transferred on payment of final instalment.	Ownership is transferred on signing of the agreement.
3.	Names of the parties	The buyer is called *Hirer* and seller as *Owner* or *Hire vendor*.	The parties involved are called *buyer* and *seller*.
4.	Relationship	The relationship of hirer and hire vendor is that of *Bailor* and *Bailee*.	The relationship between the buyer and seller is that of a *debtor* and *creditor* till last instalment is paid.
5.	Risk of loss	The Hirer is not responsible for any loss of the goods if he has taken reasonable precautions.	The buyer is responsible for loss goods because he is the owner.
6.	Right of sale	The Hirer cannot sell the goods till he gets ownership.	The buyer has the right to sell the Goods even before instalments are paid.
7.	Repossession of goods	The Hire vendor can repossess the goods if instalment is not paid.	Seller cannot repossess the goods. He can sue the buyer for dues.
8.	Termination of agreement	The Hirer can terminate the agreement by returning the goods.	The agreement cannot be terminated.
9.	Instalment	Each instalment includes hire charges and part payment of the cash price.	Each instalment includes interest and part payment of cash price.
10.	Governing	Hire purchase Act 1972 governs the Hire Purchase Agreement	Instalment purchase is governed by Sale of Goods Act.

Accounting Treatment for Hire purchase system:

The method of recording hire purchase transactions in the books of the Hire vendor depends on the value of the goods involved. The method of recording the transactions in the books of the Hirer is the same irrespective of the value of the goods.

1. Accounting Treatment of High value goods:

High value goods like trucks, costly machinery, etc., can be placed under this category.

Books of Hire Purchaser or Hirer

There are two methods of recording the hire purchase transactions in Hirer's books.

Asset Accrual Method and

Credit purchase with Interest Method.

In the asset accrual method, the asset is deemed to be acquired gradually on the basis of cash price paid.

In the credit purchase with interest method, the asset is deemed to be acquired as soon as it is received into possession.

The following are the entries to record different transactions under both the methods.

Date or year	*Entry in asset accrual method*	*Entry in credit purchase with interest method*
On the date of purchase	***1. For down payment payable***	***1. For cash price of asset purchased***
	Asset A/c Dr. To Hire vendor's A/c [Being down payment payable]	Asset A/c Dr. To Hire Vendor's A/c [Being cash price of asset purchased on hire purchase agreement]
	2. For paying down payment	***2. For paying down payment***
	Hire vendor's A/c Dr. To Cash A/c [Being payment of down payment]	Hire Vendor's A/c Dr. To Cash A/c [Being payment of down payment]
On the date of 1st instalment	***3. For the amount of first instalment***	***3. For interest included in first instalment***
	Asset A/c (Cash price in the instalment) Dr. Interest A/c (Interest in 1st instalment) Dr. To Hire Vendor's A/c [Being 1st instalment payable]	Interest A/c Dr. To Hire Vendor's A/c [Being interest payable with 1st instalment]
	4. For payment of 1st instalment	***4. For payment of 1st instalment***
	Hire Vendor's A/c Dr. To Cash A/c [Being payment of instalment]	Hire Vendor's A/c Dr. To Cash A/c [Being payment of instalment]
	For 2nd, 3rd etc., instalments also, entries 3 and 4 are repeated.	For 2nd, 3rd instalments etc., also, entries 3 and 4 are repeated.
At the end of the Accounting year	***5. For Depreciation of the asset***	***5. For Depreciation of the asset***
	Depreciation A/c Dr. To Asset A/c [Being depreciation on the asset]	Depreciation A/c Dr. To Asset A/c [Being depreciation on the asset]
	6. For closing depreciation and interest accounts	***6. For closing depreciation and interest accounts.***
	Profit and loss A/c Dr. To Depreciation A/c To Interest A/c [Being transfer of depreciation and interest]	Profit & loss A/c Dr. To Depreciation A/c To Interest A/c [Being transfer of depreciation and interest]

Note:

- Entries 3 and 4 are repeated for every instalment till the last instalment is paid.
- Entries for depreciation and transfer to profit and loss account are repeated at the end of every accounting year.
- Credit purchase with interest method is more popular and is usually used in problems if no method is specifically mentioned.

Books of Hire vendor:

The following are the journal entries in hire vendor's books for goods of high value sold.

1. When goods are sold on hire purchase agreement

Hire purchaser's A/c Dr. (Cash price)

To Hire sales A/c

[Being cash price of goods sold on hire purchase]

2. When down payment is received:

Cash A/c Dr.

To Hire purchaser's A/c

[Being receipt of down payment]

3. On the date of 1st instalment for interest receivable

Hire purchaser's A/c Dr.

To interest A/c

[Being interest receivable with 1st instalment]

4. For receiving the amount of 1st instalment

Cash A/c Dr.

To Hire purchaser's A/c

[Being receipt of 1st instalment]

Note: Entries 3 and 4 are repeated for every instalment.

5. At the end of the accounting year

For transfer of interest to Profit and Loss A/c

Interest A/c Dr.

To Profit and Loss A/c

[Being transfer of interest to P & L A/c]

Depreciation is not recorded by the hire vendor, though legally the goods sold belong to him because he is not using them.

ILLUSTRATIONS

Methods of Calculation of Interest

When rate of interest, total cash price and instalments are given :

Illustration 1

On 1-1-86, X purchased machinery on hire purchase system. The payment is to be made Rs. 4,000 down (on signing of the contract) and Rs. 4,000 annually for three years. The cash price of the machinery is Rs. 14,900 and the rate of interest is 5%. Calculate the interest in each year's instalment.

[Madras, B.Com.(PZ2A) Ap 2007; B.Com., March 1989, Sep. 1997]

Solution : **Table showing calculation of Interest**

Particulars (1)	*Total Cash Price* (2) Rs.	*Instalment Paid* (3) Rs.	*Interest Paid* (4) Rs.	*Cash Price Paid* 5 (3–4) Rs.
Cash price	14,900.00			
Down Payment	4,000.00	4,000	–	4,000.00
	10,900.00			
1st instalment	3,455.00	4,000	545	3,455.00
	7,445.00		(10,900 × 5%)	
2nd instalment	3,627.75	4,000	372.25	3,627.75
	3,817.25		(7,445 × 5%)	
3rd instalment	3,817.25	4,000	182.75	3,817.25
			(4,000 – 3,817.25)	
	Nil	16,000	1,100	14,900.00

When rate of interest is not given:

Illustration 2

Mr. X Purchased a machine on hire purchase system Rs. 3,000 being paid on delivery and the balance in five instalments of Rs. 6,000 each, payable annually on 31st December. The cash price of the machine was Rs. 30,000. Calculate the amount of interest for each year.

Solution :

		Rs.
1st year	= Amount outstanding for interest after down payment	30,000
2nd year	= Amount outstanding for interest after 1st instalment	24,000
3rd year	= Amount outstanding for interest after 2nd instalment	18,000
4th year	= Amount outstanding for interest after 3rd instalment	12,000
5th year	= Amount outstanding for interest after 4th instalment	6,000

Ratio of outstanding amounts = 5 : 4 : 3 : 2 : 1

Hire purchase price = Total of all instalments

Total interest = Hire purchase price – Cash price

= 33,000 – 30,000 = 3,000

Instalment outstanding Ratio = 30,000 : 24,000 : 18,000 : 12,000 : 6,000

= 5 : 4 : 3 : 2 : 1

Instalments	No.of outstanding Instalments	Ratio of Interest	Interest Rs.
1st instalment	5	$\frac{5}{15}$	$3,000 \times \frac{5}{15} = 1,000$
2nd instalment	4	$\frac{4}{15}$	$3,000 \times \frac{4}{15} = 800$
3rd Instalment	3	$\frac{3}{15}$	$3,000 \times \frac{3}{15} = 600$
4th Instalment	2	$\frac{2}{15}$	$3,000 \times \frac{2}{15} = 400$
5th Instalment	1	$\frac{1}{15}$	$3,000 \times \frac{1}{15} = 200$
	15		

When cash price is not given

Illustration 3

X purchased a typewriter on hire-purchase system. As per terms, he is required to pay Rs. 800 down, Rs. 400 at the end of the first year Rs. 300 at the end of the second year and Rs. 700 at the end of the third year. Interest is charged at 5% p.a. Calculate the total cash price of the typewriter and the amount of interest payable on each instalment.

[Madras, B.Com. (PZ2A) Nov. 2006 B.Com., April 2006; B.Com.(CS) Nov. 2005; Periyar, B.Com., April 2004]

Solution :

Each instalment paid includes interest for the period. The rate of interest on cash price must be converted to rate of interest on instalment.

We assume the Cash price as Rs.100

Interest @ 5% on Rs.100 for one year 5

Instalment paid at the end of the year 105

∴ Interest on instalment price 5/105 as a ratio.

The following table is used to arrive at the cash price of the typewriter.

Year (1)	Instalment (2)	Interest paid (3)	Cash price paid 4 (2–3) (Rs.)
Third Year	700	$700 \times \frac{5}{105} = 33$	667
Second Year	300	$(300 + 667) \times \frac{5}{105} = 46$	254
First Year	400	$(400 + 254 + 667) \times \frac{5}{105} = 63$	337
Down Payment	800	Nil	800
	2,200	142	2,058

∴ Interest : I Year Rs. 63 ;II Year Rs. 46 III Year Rs. 33

∴ The Total Cash Price : Rs. 2,058

When instalment amounts are not given but cash price and rate of interest are given :

Illustration 4

X Purchased a machine under hire purchase system. According to the terms of the agreement Rs.40,000 was to be paid on signing of the contract. The balance was to be paid in four annual instalments of Rs.25,000 each plus interest. The cash price was Rs. 1,40,000. Interest is chargeable on outstanding balance at 20% per annum. Calculate interest for each year and the instalment amount.

Solution :

Table Showing Calculation of Interest

Date of Payment (1)	*Total Cash Price* Rs. (2)	*Instal. Paid* Rs. (3) = (4+5)	*Interest Paid* Rs. (4)	*Cash Price Paid* Rs. (5)
	1,40,000		–	
Down Payment	40,000	40,000		40,000
	1,00,000	45,000	(1,00,000 × 20%)	
1st instalment	25,000		= 20,000	25,000
	75,000	40,000	(75,000 × 20%)	
2nd instalment	25,000		= 15,000	25,000
	50,000		(50,000 × 20%)	
3rd instalment	25,000	35,000	= 10,000	25,000
	25,000		(25,000 × 20%)	
4th instalment	25,000	30,000	= 5,000	25,000
	Nil	1,90,000	50,000	1,40,000

Calculation of Cash Price by annuity method:

Illustration 5

On 1-1-90 X bought some trucks under hire- purchase system for Rs.51,000 payable by three equal instalments combining principal and interest, the latter being a normal rate of 5% per annum. Calculate the cash price . (The present value of an annuity of one rupee for three years at 5% is Rs. 2.72325).

Solution :

Calculation of Cash Price

The present value of annuity of Re. 1 paid for three years @ 5% = 2.72325 (annuity factor)

$$\text{Instalment} = \frac{51,000}{3} = 17,000$$

The present value of annuity = Instalment × Annuity factor

= 17,000 × 2,72325 = 46,295.25

Cash price is Rs. 46,295.25

Journal & Ledger in the books of Buyer & Seller

Illustration 6

Mr. P purchased 4 cars for Rs. 14,000 each on 1-1-92 under the hire purchase system. The hire purchase price for all the 4 cars was Rs.60,000 to be paid as Rs. 15,000 down payment and 3 equal instalments of Rs. 15,000 each at the end of each year. Interest is charged at 5% p.a. The buyer depreciates the car at 10% p.a on straight line method.

From the above particulars give journal entries and relevant A/cs in the books of Mr.P and in the books of hire-vendor. **[Madras, B.Com. April 2006; Mar.'91 & May 96]**

Solution :

Table showing Calculation of interest

Date of Payment (1)	*Total Cash price* (2)	*Inst. paid* (3)	*Interest paid* (4)	*Cash price paid* (3) – (4) = 5
	56,000 (14,000 × 4)			
Down Payment	15,000	15,000	–	15,000
	41,000			12,950
I instalment	12,950	15,000	(41,000 × 5%)=2,050	
	28,050			13,597
II instalment 14,453	13,597	15,000	(28,050 × 5%)=1,403	
	14,453	15,000	(15,000–14,453)=547	14,453
III instalment	14,453			
	Nil	60,000	4,000	56,000

Journal Entries in the books of Mr. P

		1992 Dr. Rs.	1992 Cr. Rs.	1993 Dr. Rs.	1993 Cr. Rs.	1994 Dr. Rs.	1994 Cr. Rs.
Jan.1	Cars A/c Dr.	56,000		–	–	–	–
	To Hire Vendor A/c		56,000				
	[Being Purchase of cars on H.P]						
Jan.1	Hire Vendor A/c Dr.	15,000		–	–	–	–
	To Bank A/c		15,000				
	[Being cash down payment]						
Dec.31	Interest A/c Dr.	2,050		1,403		547	
	To Hire Vendor A/c		2,050		1,403		547
	[Being int. credited to vendor]						
Dec.31	Hire Vendor A/c Dr.	15,000		15,000		15,000	
	To Bank A/c		15,000		15,000		15,000
	[Being payment of instalment]						
Dec.31	Depreciation A/c Dr.	5,600		5,600		5,600	
	To Cars A/c		5,600		5,600		5,600
	[Being dep. charged on cars]						
Dec31	Profit & Loss A/c Dr.	7,650		7,003		6,147	
	To Interest A/c		2,050		1,403		547
	To Depreciation A/c		5,600		5,600		5,600
	[Being int.A/c transferred]						

Journal Entries in the books of Hire Vendor

		1992 Dr. Rs.	1992 Cr. Rs.	1993 Dr. Rs.	1993 Cr. Rs.	1994 Dr. Rs.	1994 Cr. Rs.
Jan.1	P's A/c Dr. To Hire Sales A/c [Being Cars sold on H.P]	56,000	56,000	–	–	–	–
Jan.1	Bank A/c Dr. To P's A/c [Being down payment received]	15,000	15,000	–	–	–	–
Dec.31	P's A/c Dr. To Interest A/c [Being int. charged to Mr. P A/c]	2,050	2,050	1,403	1,403	547	547
Dec.31	Bank A/c Dr. To P's A/c [Being instalment received]	15,000	15,000	15,000	15,000	15,000	15,000
Dec.31	Interest A/c Dr. To P & L A/c [Being interest transferred]	2,050	2,050	1,403	1,403	547	547

Ledger Accounts in the books of P (Hirer)

Cars A/c

Dr. Cr.

		Rs.			Rs.
1.1.92	To Vendor A/c	56,000	31.12.92	By Depreciation	5,600
				By Balance c/d	50,400
		56,000			56,000
1-1-93	To Balance b/d	50,400	31.12.93	By Depreciation	5,600
				By Balance c/d	44,800
		50,400			50,400
1-1-94	To Balance b/d	44,800	31.12.94	By Depreciation	5,600
				By Balance c/d	39,200
		44,800			44,800
1-1-95	To Balance b/d	39,200			

Hire Vendor's A/c

Dr. Cr.

		Rs.			Rs.
1.1.92	To Bank A/c	15,000	1.1.92	By Cars A/c	56,000
31.12.92	To Bank A/c	15,000	31.12.92	By Interest A/c	2,050
,,	To Balance c/d	28,050			
		58,050			58,050
31.12.93	To Bank A/c	15,000	31.12.93	By Balance b/d	28,050
,,	To Balance c/d	14,453		By Interest	1,403
		29,453			29,453
31-12-94	To Bank A/c	15,000	1.1.94	By Balance b/d	14,453
			31.12.94	By Interest	547
		15,000			15,000

Interest A/c

Dr.		Rs.			Cr. Rs.
31.12.92	To Vendor A/c	2,050	31.12.92	By P & L A/c	2,050
31.12.93	To Vendor A/c	1,403	31.12.93	By P & L A/c	1,403
31.12.94	To Vendor A/c	547	31.12.94	By P & L A/c	547

Depreciation A/c

Dr.		Rs.			Cr. Rs.
31.12.92	To Cars A/c	5,600	31.12.92	By P & L A/c	5,600
31.12.93	To Cars A/c	5,600	31.12.93	By P & L A/c	5,600
31.12.94	To Cars A/c	5,600	31.12.94	By P & L A/c	5,600

Ledger Accounts in the Books of Hire Vendor

Interest A/c

Dr.		Rs.			Cr. Rs.
31.12.92	To P & L A/c	2,050	31.12.92	By Mr. P's A/c	2,050
31.12.93	To P & L A/c	1,403	31.12.93	By Mr. P's A/c	1,403
31.12.94	To P & L A/c	547	31.12.94	By Mr. P's A/c	547

Mr. P's A/c

Dr.		Rs.			Cr. Rs.
1.1.92	To Hire Sale A/c	56,000	1.1.92	By Bank A/c	15,000
31.12.92	To Interest A/c	2,050	31.12.92	By Bank A/c	15,000
			"	By Balance c/d	28,050
		58,050			58,050
1.1.93	To Balance c/d	28,050	31.12.93	By Bank A/c	15,000
31.12.93	To Interest	1,403	"	Balance c/d	14,453
		29,453			29,453
1.1.94	To Balance b/d	14,453	31.12.94	By Bank	15,000
31.12.94	To Interest	547			
		15,000			15,000

Calculation of Depreciation

Since depreciation is charged under straight line method, the same amount (56,000 × 10% = 5,600) is to be charged for all three uears.

Illustration 7

On 1st January 1996 Baba & Co. purchased a machine on hire purchase basis, the total amount payable being Rs. 42,700. Payment was to be made Rs. 12,000 on that date and balance in three half-yearly instalments of Rs. 11,400, Rs. 10,900, and Rs. 8,400 commencing from 30th June 1996. The vendor charged interest @ 10 p.a., calculated on half -yearly rests.

Baba & Co. close their books annually on 30th June and provide depreciation @ 10% p.a. on reducing balance method.

Determine the cash price of the machine and show the relevant accounts in the books of Baba & Co. *[Madras, B.Com., April 2005; Periyar, B.B.A. Nov. 2004]*

Solution :

Calculation of Cash price

No. of instalment	*Inst. amount*	*Interest*		*Net cash price*
3rd	8,400	$8{,}400 \times \frac{5}{105}$	$= 400$	8,000
2nd	10,900	$(10{,}900 + 8{,}000) \times \frac{5}{105}$	$= 900$	10,000
1st	11,400	$(11{,}400 + 10{,}000 + 8{,}000) \times \frac{5}{105}$	$= 1{,}400$	10,000
Down	12,000		Nil	12,000
	42,700		2,700	40,000

Ledger Accounts in the Books of Baba & Co. (Hire-Purchaser)

Machinery A/c

		Rs.			Rs.
1-1-96	To Hire vendor	40,000	30-6-96	By Depreciation	2,000
				By Balance c/d	38,000
		40,000			40,000
1-7-96	To Balance b/d	38,000	30-6-97	By Depreciation	3,800
				By Balance c/d	34,200
		38,000			38,000
1-7-97	To Balance b/d	34,200			

Hire Vendor A/c

		Rs.			Rs.
1-1-96	To Bank	12,000	1-1-96	By Machinery A/c	40,000
30-6-96	To Bank (1st)	11,400	30-6-96	By Interest	1,400
"	To Balance c/d	18,000			
		41,400			41,400
31-12-96	To Bank (2nd)	10,900	1-7-96	By Balance b/d	18,000
30-6-97	To Bank (3rd)	8,400	31-12-96	By Interest	900
			30-6-97	By Interest	400
		19,300			19,300

Interest A/c

		Rs.			Rs.
30-6-96	To Hire vendor	1,400	30-6-96	By P & L A/c	1,400
		1,400			1,400
30-12-96	To Hire Vendor	900	30-6-97	By P & L A/c	1,300
30-6-97	To Hire Vendor	400			
		1,300			1,300

Default and Repossession

A. Complete Repossession

Illustration 8

Knight purchased a truck for Rs. 1,60,000 from S. Waugh on 1-1-93 payment to be made Rs. 40,000 down and Rs. 46,000 at the end of first year, Rs. 44,000 at the end of second year and Rs. 42,000 at the end of third year. Interest was charged at 5%. Knight depreciates the truck at 10% per annum on written down value method.

Knight, after having paid down payment and first instalment at the end of the first year, could not pay second instalment. The seller took possession of the truck, and after spending Rs. 4,000 on repairs of the asset, sold it away for Rs. 91,500.

Give journal entries and ledger accounts in the books of both the parties.

[Madras, B.Com., Nov. 2004; B.C.S. April 2004; Bharathidasan, B.Com., Nov. 2002; April 2002]

Calculation of interest

No. of instalment	*Total Cash price paid* Rs.	*Inst. paid* Rs.	*Interest paid* Rs.		*Net Cash price paid* Rs.
	1,60,000				
Down	40,000	40,000		–	40,000
	1,20,000				
1st Instalment	40,000	46,000	(1,20,000 × 5%)	6,000	40,000
	80,000				
2nd Instalment	40,000	44,000	(80,000 × 5%)	4,000	40,000
	40,000				
3rd Instalment	40,000	42,000	(42,000–40,000)	2,000	40,000
	Nil	1,72,000		12,000	1,60,000

Journal entries in the books of Knight (Hire Purchaser)

Date		1993 Dr. Rs.	1993 Cr. Rs.	1994 Dr. Rs.	1994 Cr. Rs.
Jan. 1	Truck A/c Dr.	1,60,000		–	
	To S. Waugh A/c		1,60,000		–
	[Being purchase of truck on H.P]				
Jan. 1	S. Waugh A/c Dr.	40,000		–	
	To Bank A/c		40,000		–
	[Being cash down payment]				
Dec. 31	Interest A/c Dr.	6,000		4,000	
	To S. Waugh A/c		6,000		4,000
	[Interest credited to Hire Vendor A/c]				
Dec. 31	S. Waugh A/c Dr.	46,000		–	
	To Bank A/c		46,000		–
	[Being 1st instalment paid]				
Dec. 31	Depreciation A/c Dr.	16,000		14,400	
	To Truck A/c		16,000		14,400
	[Being depreciation charged]				
Dec. 31	P & L A/c Dr.	22,000		18,400	
	To Interest A/c		6,000		4,000
	To Depreciation A/c		16,000		14,400
	[Being charge of interest & depreciation to P & L A/c]				
Dec. 31	S. Waugh A/c Dr.	–		84,000	
	To Truck A/c		–		84,000
	[Being truck taken over by vendor on default]				
Dec. 31	P & L A/c Dr.	–		45,600	
	To Truck A/c		–		45,600
	[Loss on Surrender]				

Ledger Accounts in the Books of S. Waugh

Knight A/c

		Rs.			Rs.
1-1-93	To Hire Sale	1,60,000	1-1-93	By Bank (Down payment)	40,000
31-12-93	To Interest	6,000	31-12-93	By Bank (1st)	46,000
				By Balance c/d	80,000
		1,66,000			1,66,000
1-1-94	To Balance b/d	80,000	31-12-94	By Repossessed Stock A/c (Bal.fig) (transfer)	84,000
31-12-94	To Interest	4,000			
		84,000			84,000

Repossessed Stock A/c

		Rs.			Rs.
31-12-94	To Cash A/c	4,000	31-12-94	By Cash	91,500
31-12-94	To Knight A/c	84,000			
	To P & L A/c (Bal.fig)	3,500			
	(Profit on sale)				
		91,500			91,500

Ledger A/c's in the books of Knight

Truck A/c

		Rs.			Rs.
1-1-93	To Hire Vendor A/c	1,60,000	31-12-93	By Depreciation A/c	16,000
				By Balance c/d	1,44,000
		1,60,000			1,60,000
1-1-94	To Balance b/d	1,44,000	31-12-93	By Depreciation A/c	14,400
				By S. Waugh A/c	84,000
				By P & L A/c (Bal.fig)	45,600
		1,44,000			1,44,000

S. Waugh A/c

		Rs.			Rs.
1-1-93	To Bank A/c	40,000	1-1-93	By Truck A/c	1,60,000
31-12-93	To Bank A/c (1st)	46,000	31-12-93	By Interest A/c	6,000
"	To Balance c/d	80,000			
		1,66,000			1,66,000
31-12-94	To Truck A/c (Bal.fig)	84,000	1-1-94	By Balance b/d	80,000
	(transfer)		31-12-94	By Interest A/c	4,000
		84,000			84,000

Journal entries in the books of S. Waugh (Hire Vendor)

Date			1993 Dr. Rs.	1993 Cr. Rs.	1994 Dr. Rs.	1994 Cr. Rs.
Jan. 1	Knight A/c To Hire sale A/c [Being truck sold on H.P]	Dr.	1,60,000	1,60,000	–	–
Jan. 1	Bank A/c To Knight A/c [Being down payment received]	Dr.	40,000	40,000	–	–
Dec. 31	Knight A/c To Interest A/c [Being interest charged to knight]	Dr.	6,000	6,000	4,000	4,000
Dec. 31	Bank A/c To Knight A/c [Being 1st instalment received]	Dr.	46,000	46,000	–	–
Dec. 31	Interest A/c To P & L A/c [Being interest transferred to P & L A/c]	Dr.	6,000	6,000	4,000	4,000
Dec. 31	Repossessed Stock A/c To Knight A/c [Truck seized from buyer on default]	Dr.	–	–	84,000	84,000
Dec. 31	Repossessed stock A/c To Cash A/c [Being amount spent on repair]	Dr.	–	–	4,000	4,000
Dec. 31	Cash A/c To Repossessed stock A/c [Being repossessed truck sold away]	Dr.	–	–	91,500	91,500
Dec. 31	Repossessed stock A/c To P & L A/c [Profit on sale of repossessed truck]	Dr.	–	–	3,500	3,500

Illustration 9

Malan purchased a machine on hire purchase system on 1st January 1993. The terms of payment are four annual instalments of Rs. 12,690 at the end of each year. Interest is charged @ 5% and is included in the annual payment of Rs. 12,690.

Show Machinery account and Hire vendor account in the books of Malan who defaulted in the payment of the third yearly payment whereupon the vendor repossessed the Machinery. Malan provides depreciation on the machinery @ 10% p.a., on the reducing balance.

[Madras, B.Com., B.Com.(CS) Nov. 2007]
[Periyar, B.Com., April 2002]

Solution:

Calculation of cash price and interest

No. of instalment	*Amount of inst. (Rs.)*	*Interest*		*Net cash Price (Rs.)*
4th	12,690	$12{,}690 \times \frac{5}{105} =$	604	12,086
3rd	12,690	$(12{,}690 + 12{,}086) \times \frac{5}{105} =$	1,180	11,510
2nd	12,690	$(12{,}690 + 11{,}510 + 12{,}086) \times \frac{5}{105} =$	1,728	10,962
1st	12,690	$(12{,}690 + 10{,}962 + 11{,}510 + 12{,}086) \times \frac{5}{105} =$	2,250	10,440
	50,760		5,762	44,998

In the books of Malan (Buyer)

Machinery A/c

		Rs.			Rs.
1-1-93	To Hire Vendor A/c	44,998	31-12-93	By Depreciation	4,500
			"	By Balance c/d	40,498
		44,998			44,998
1-1-94	To Balance b/d	40,498	31-12-94	By Depreciation	4,050
			"	By Balance c/d	36,448
		40,498			40,498
1-1-95	To Balance b/d	36,448	31-12-95	By Depreciation	3,645
			"	By Hire Vendor	24,776
			"	By P & L A/c – Loss surrender (Bal.fig)	8,027
		36,448			36,448

Hire Vendor A/c

		Rs.			Rs.
31-12-93	To Bank (1st)	12,690	1-1-93	By Machinery	44,998
"	To Balance c/d	34,558	31-12-93	By Interest	2,250
		47,248			47,248
31-12-94	To Bank (2nd)	12,690	1-1-94	By Balance b/d	34,558
"	To Balance c/d	23,596	31-12-94	By Interest	1,728
		36,286			36,286
31-12-95	To Machinery A/c - transfer due to surrender	24,776	1-1-95	By Balance c/d	23,596
			31-12-95	By Interest	1,180
		24,776			24,776

B. Partial Repossession:

Illustration 10

On 1.1.90 National Transport Company purchased from Metro Motors five trucks costing Rs. 40,000 each on the hire purchase system. It was agreed that Rs. 50,000 should be paid immediately and the balance in three instalments of Rs. 60,000 each at the end of each year. The Metro Motors charges interest @ 10% p.a. The buyer depreciates trucks at 20% p.a. on the diminishing balance Method. The buyer paid cash down and two instalments but failed to pay the last instalment. Consequently, the Metro Motors repossessed three trucks leaving two trucks with the buyer and adjusting the value of 3 trucks against the amount due. The trucks repossessed were valued on the basis of 30% depreciation p.a. on the written down value. The trucks repossessed were sold by Metro Motors for Rs. 60,000 after necessary repairs amounting to Rs. 10,000. Open the necessary ledger accounts in the books of both the parties.

(Madras B.Com., Oct. 1998 (old) $\frac{1}{2}$ figures)

Solution: Working Notes: W.N.1:

Table Showing Calculation of Interest

Payment	*Total Cash Price* Rs.	*Instalment* Rs.	*Interest* Rs.	*Net cash Price* Rs.
	2,00,000			
Down payment	50,000	50,000	–	50,000
	1,50,000			
1st Instalment	45,000	60,000	(1,50,000 × 10%)=15,000	45,000
	1,05,000			
2nd Instalment	49,500	60,000	(1,05,000 × 10%)=10,500	49,500
	55,500			
3rd Instalment	55,500	60,000	(60,000–55,500) = 4,500	55,500
	Nil	2,30,000	30,000	2,00,000

W.N.2:

Calculation of value of 3 trucks Repossessed

	Rs.
Cost: Rs. 40,000 × 3 truks :	120000
Less: 1st Year Depreciation (i.e.,1990) 1,20,000 × 30%	36,000
	84,000
Less: Depreciation for 1991 84,000 × 30%	25,200
	58,800
Less: Depreciation for 1992 58,800 × 30%	17,640
Value of 3 trucks taken away	41,160

W.N.3:

Calculation of value of 2 trucks left with buyer

	Rs.
Cost: Rs.	80,000
Less: Depreciation for 1990 80,000 × 20%	16,000
	64,000
Less: Depreciation for 1991 64,000 × 20%	12,800
	51,200
Less: Depreciation for 1992 51,200 × 20%	10,240
Value of 2 trucks left with the buyer	40,960

In the books of National Transport Company (buyer)

Trucks A/c

Date	Particulars	Rs.	Date	Particulars	Rs.
1.1.90	To Metro Motors	2,00,000	31.12.90	By Depreciation	40,000
			"	By Balance c/d	1,60,000
		2,00,000			2,00,000
1.1.91	To Balance b/d	1,60,000	31.12.91	By Depreciation	32,000
			"	By Balance c/d	1,28,000
		1,60,000			1,60,000
1.1.92	To Balance b/d	1,28,000	31.12.92	By Depreciation	25,600
				By Metro Motors (3 trucks repossessed)	41,160
				By P & L A/c (Loss on repossession) (Bal. fig)	20,280
				By Balance c/d (Book value of 2 trucks left)	40,960
		1,28,000			1,28,000

Metro Motors A/c

Date	Particulars	Rs.	Date	Particulars	Rs.
1.1.90	To Bank (down payment)	50,000	1.1.90	By Trucks A/c	2,00,000
31.12.90	To Bank (1st Instalment)	60,000	31.12.90	By Interest A/c	15,000
	To Balance c/d	1,05,000			
		2,15,000			2,15,000
31.12.91	To Bank (2nd Instalment)	60,000	1.1.91	By Balance b/d	1,05,000
	To Balance c/d	55,500	31.12.91	By Interest A/c	10,500
		1,15,500			1,15,500
31.12.92	To Trucks A/c (3 trucks repossessed) (W.N. 2)	41,160	1.1.92	By Balance b/d	55,500
			31.12.92	By Interest A/c	4,500
	To Balance c/d	18,840			
		60,000			60,000

In the Books of Metro Motors

National Transport Company A/c

		Rs.			Rs.
1.1.90	To Hire Sales	2,00,000	1.1.90	By Bank (Down Payment)	50,000
31.12.90	To Interest	15,000	31.12.90	By Bank (1st Instalment)	60,000
			31.12.90	By Balance c/d	1,05,000
		2,15,000			2,15,000
1.1.91	To Balance b/d	1,05,000	31.12.91	By Bank (2nd Instalment)	60,000
31.12.91	To Interest	10,500	"	By Balance c/d	55,500
		1,15,500			1,15,500
1.1.92	To Balance b/d	55,500	31.12.92	By Repossessed Stock A/c (3 trucks seized)	41,160
31.12.92	To Interest	4,500	"	By Balance c/d	18,840
		60,000			60,000

Repossessed Stock A/c

		Rs.			Rs.
31.12.92	To National Transport Company A/c	41,160	1.1.93	By Bank (Sales)	60,000
1.1.93	To Bank (repairs)	10,000			
"	To P & L A/c (Profit on Sale)	8,840			
		60,000			60,000

Instalment - Purchase system

Illustration 17

On 1.1.93, a firm purchased a Truck on instalment system. The cash price of the Truck was Rs. 11,175 and payment was to be made as follows:

Rs. 3,000 was to be paid on signing of the agreement and the balance in three instalments of Rs. 3,000 each at the end of each year. Interest at 5% is charged by the vendor. The firm has decided to write off 10% annually on the diminishing balance of the cash price.

Give journal entries and ledger Accounts in the books of the purchaser and Hire vendor.

[Madras, BCA/B.Sc., Oct. 2000; B.Com., March 1994]

Solution:

Table showing calculation of Interest

Date of payment 1	*Total cash price* 2	*Inst.paid* 3	*Interest paid* 4	*Cash price paid* 5 (3–4)
	11,175			
Down payment	3000	3,000	–	3,000
	8,175			
1st Instalment	2,591	3,000	(8,175 × 5%) 409	2,591
	5,584			
2nd Instalment	2,721	3,000	(5,584 × 5%) 279	2,721
	2,863			
3rd Instalment	2,863	3,000	(3,000–2,863) 137	2,863
	Nil	12,000	825	11,175

Journal Entries in the books of buyer

		1993 Dr. Rs.	1993 Cr. Rs.	1994 Dr. Rs.	1994 Cr. Rs.	1995 Dr. Rs.	1995 Cr. Rs.
Jan 1	Truck A/c Dr.	11,175		–		–	
	Interest Suspense A/c Dr.	825					
	To Seller A/c		12,000		–		–
	(purchase of truck under instalment System)						
Jan 1	Seller A/c Dr.	3,000					
	To Bank A/c		3,000	–		–	
	(Cash paid on delivery)						
Dec31	Interest A/c Dr.	409		279		137	
	To Int. Suspense A/c		409		279		137
	(Adjustment of interest)						
Dec 31	Seller A/c Dr.	3,000		3,000		3,000	
	To Bank		3,000		3,000		3,000
	(Amount of instalment paid)						
Dec 31	Depreciation A/c Dr.	1,118		1,006		905	
	To Truck A/c		1,118		1,006		905
	(Depreciation charged at 10%)						
Dec 31	P & L A/c Dr.	1,527		1,285		1,042	
	To Interest A/c		409		279		137
	To Depreciation A/c		1,118		1,006		905
	(Interest & Depreciation transferred)						

Journal entries in the books of seller

		1993 Dr. Rs.	1993 Cr. Rs.	1994 Dr. Rs.	1994 Cr. Rs.	1995 Dr. Rs.	1995 Cr. Rs.
Jan. 1	Buyer A/c Dr.	12,000		–		–	
	To Sales A/c		11,175		–		
	To interest suspense A/c		825				–
	(Truck sold on instalment system)						
Jan. 1	Bank A/c Dr.	3,000		–		–	
	To Buyer A/c		3,000		–		
	(Cash received on delivery)						–
Dec.31	Int. suspense A/c	409		279		137	
	To Interest A/c		409		279		137
	(Amount of interest due)						
Dec.31	Bank A/c Dr.	3,000		3,000		3,000	
	To Buyer A/c		3,000		3,000		3,000
	(Amount of instalment received)						
Dec.31	Interest A/c Dr.	409		279		137	
	To P & L A/c		409		279		137
	(Interest transferred)						

Ledger Accounts in the books of the buyer

Interest Suspense A/c

		Rs.			Rs.
1.1.93	To Seller A/c	825	31.12.93	By Interest	409
			"	By Balance c/d	416
		825			825
1.1.94	To Balance b/d	416	31.12.94	By Interest A/c	279
			"	By Balance c/d	137
		416			416
1.1.95	To Balance b/d	137	31.12.95	By Interest A/c	137
		137			137

Truck A/c

		Rs.			Rs.
1.1.93	To Seller A/c	11,175	31.12.93	By Depreciation	1,118
			"	By Balance c/d	10,057
		11,175			11,175
1.1.94	To Balance b/d	10,057	31.12.94	By Depreciation	1,006
				By Balance c/d	9,051
		10057			10,057
1.1.95	To Balance b/d	9,051	31.12.95	By Depreciation	905
			"	By Balance c/d	8,146
		9,051			9,051

Seller A/c

		Rs.			Rs.
1.1.93	To Bank	3,000	1.1.93	By Truck A/c	11,175
31.12.93	To Bank	3,000	31.12.93	By Int. Suspense A/c	825
"	To Balance c/d	6,000			
		12,000			12,000
31.12.94	To Bank	3,000	1.1.94	By Balance b/d	6,000
"	To Balance c/d	3,000			
		6,000			6,000
31.12.95	To Bank	3,000	1.1.95	By Balance b/d	3,000
		3,000			3,000

Interest A/c

		Rs.			Rs.
31.12.93	To Int. Suspense A/c	409	31.12.93	By P & L A/c	409
31.12.94	To Int. Suspense A/c	279	31.12.94	" P & L A/c	279
31.12.95	To Int. Suspense A/c	137	31.12.95	" P & L A/c	137

Ledger Accounts in the books of Seller

Buyer A/c

		Rs.			Rs.
1.1.93	To Sales	11,175	1.1.93	By Bank	3,000
31.12.93	To Int. Sus. A/c	825	31.12.93	By Bank	3,000
			"	By Balance c/d	6,000
		12,000			12,000
1.1.94	To Balance b/d	6,000	31.12.94	By Bank	3,000
				By Balance c/d	3,000
		6,000			6,000
1.1.95	To Balance b/d	3,000	31.12.95	By Bank	3,000
		3,000			3,000

Interest Suspense A/c

		Rs.			Rs.
31.12.93	To Interest	409	1.1.93	By Buyer A/c	825
"	To Balance c/d	416			
		825			825
31.12.94	To Interest A/c	279	1.1.94	By Balance c/d	416
"	To Balance c/d	137			
		416			416
31.12.95	To Interest A/c	137	1.1.95	By Balance b/d	137
		137			137

Interest A/c

		Rs.			Rs.
31.12.93	To P & L A/c	409	31.12.93	By Int. Suspense A/c	409
31.12.94	To P & L A/c	279	31.12.94	By Int. Suspense A/c	279
31.12.95	To P & L A/c	137	31.12.95	By Int. Suspense A/c	137

Chapter 14

UNIT – III

Self Balancing Ledgers and Sectional Balancing

Introduction

Like journal is subdivided into subsidiary books, the larger enterprises divide their ledger into several ledgers to accommodate large number of accounts. A small business can do with only one ledger. However, in case of big businesses, the number of personal accounts may be quite large and therefore, it may not be convenient to keep all the accounts in one ledger. Moreover, in case of non-agreement of trial balance, it is a time consuming and laborious task to locate the difference in accounts if tranactions are recorded in one ledger. In order to reduce the trouble to a minimum and time involved in locating the errors, the system of self balancing has been evolved.

Under the self balancing system, posting of transactions is not done in one ledger but the accounts are opened in more than one ledger. Under this system, the ledger is subdivided into the following three ledgers:

(i) Debtors or Sales Ledger

(ii) Creditors or Purchase Ledger and

(iii) General or Impersonal or Nominal Ledger.

(i) Debtors Ledger:- This ledger contains the personal accounts of the debtors to whom credit sales are effected. The ledger is also known as *sales ledger* or *sold ledger*. It should be noted that it is only trade debtors accounts which are opened in this ledger and not any other debtors accounts. If for example, old furniture is sold to Krishna, then Krishna is a debtor but not a trade debtor and his account will not be opened in debtors ledger. It will be opened in the general ledger. Trade debtors are the persons to whom goods are sold on credit.

(ii) Creditors Ledger:- The ledger contains the personal accounts of the creditors who supply goods on credit. The ledger is also known as *purchase ledger* or *bought ledger*. It should be remembered that it is only trade creditors accounts which are opened in this ledger and not any other creditors account. Trade creditors are the persons from whom goods are purchased on credit. The other creditors are the persons from whom some asset has been purchased on credit or from whom some services have been received. These creditors are not to be recorded in this ledger.

(iii) General Ledger:- All nominal and real accounts and the remaining personal accounts are opened in the general ledger. In other words, all nominal accounts such as wages, salaries, lighting, rent & rates and taxes, insurance, advertisement, salesman commission, interest received, dividend received etc., all real accounts such as land & buildings, plant & machinery, furniture, cash, sundry debtors, bills receivable, purchases, sales, returns etc., and all the remaining personal accounts such as capital, drawings, loan, creditors, bank overdraft etc. are opened in this ledger. This ledger is also called nominal ledger or main ledger or impersonal ledger.

There are two different methods based on the three ledgers mentioned above.

I. Self Balancing Ledgers system

II. Sectional Balancing system.

I. Self Balancing Ledger System

Procedure of Self-Balancing

After the process of posting as indicated above is over, it becomes necessary to prove the equality between total debits and total credits. This is done by preparing trial balance for each ledger. It is interesting to note, in this context, that no trial balance can be prepared when ledger is subdivided, unless debits and credits are brought together. This is because none of the ledgers contains in itself all the information, required for preparation of trial balance. For example, when the goods are sold to the customers on credit, the items from the 'sales day book' are posted to the debit side of the customer's accounts in debtors's ledger whereas the periodical total of the sales day book is posted to the credit side of sales account in general ledger. The debtors' ledger contains the debit aspect of the transaction, whereas the corresponding credit aspect is in general ledger, thus neither of the ledgers is complete in itself for the preparation of the trial balance. Similarly, when the goods are bought on credit, the items from the 'purchase day book' are posted to the credit side of the creditors' account in creditors' ledger and the periodical total of the purchase day book is posted to the debit side of purchases account in general ledger. As the general ledger contains the debit aspect, whereas creditors' ledger contains credit aspect, neither of the ledgers is complete in itself for preparation of trial balance.

From the above discussion, it is clear that none of the three ledgers contains in itself all the data for the preparation of trial balance. Under the self balancing system, it is possible to construct a complete trial balance from each ledger separately without any reference to the accounts in the other ledgers. As a result of each ledger being thus balanced separately, the error or errors would be easily localised, for in case of disagreement of the trial balance of any one ledger, only the entries recorded in that particular ledger will have to be re-checked, and it would not be necessary to go over the transactions entered in those ledgers whose trial balances agree.

Adjustment Accounts

In order to prepare a trial balance for each ledger separately, it is essential to provide the missing information in each of such ledgers. Thus, the ledger which contains the debit entries (e.g. debtors ledger) should be provided with the corresponding credit entries. Similarly, the ledger which contains the credit entries (e.g. creditors ledger) should be provided with the corresponding debit entries. This is accomplished by opening the "adjustment accounts" at the end of each ledger.

Debtors ledger contains the personal accounts of all trade debtors but the corresponding items of "credit sales, sales returns, cash collected from customers, bills received, bad debts, etc." are missing in this ledger as these items are recorded in general ledger. Therefore, to self balance the debtors ledger, an "adjustment account" accomplishing the above missing information is to be opened at the end of the debtors' ledger. The name of such an adjustment account is 'general ledger adjustment account' due to the fact that these missing items were posted in general ledger.

Similarly, an adjustment account by the name 'general ledger adjustment account, ' is to be opened in creditors' ledger to provide with the missing items of credit purchase, returns outwards, discount received, cash paid to suppliers, bills payable accepted etc., which have been posted in general ledger.

The general ledger contains all the real and nominal accounts as well as such personal accounts except trade debtors and trade creditors accounts as these have been recorded through separate ledger. To self-balance the general ledger, adjustment in respect of trade debtors and trade creditors must be made by opening two adjustment accounts at the end of general ledger. They are 'debtors ledger adjustment account' and 'creditors ledger adjustment account'.

It is obvious that if the debtors ledger and creditors ledger are made self-balancing in the ways stated above, The general ledger will also become self-balancing.

These adjustment accounts are nothing but a summary of record of transactions already posted in a particular ledger. However, this summary is posted to the contra side of adjustment accounts to complete the double entry. In other words, an adjustment account is an extra account to record the transactions, already posted, in a summarised form. However, the debits and credits are transposed. The balance of the adjustment account must be equal to the total of the other balances in the same ledger but on the opposite side, so that debits and credits will be equal at the time of preparing trial balance.

Journal Entries For Self-Balancing of Debtors Ledger

In order to self-balance the debtors ledger, a general ledger adjustment account will be opened at the end of the debtors ledger and all entries in totals appearing on the debit side of various debtors accounts will be shown on the credit side of this account and credit entries of various debtors accounts on the debit side of this account.

In order to self-balance the general ledger, a debtor ledger adjustment account will be opened at the end of the general ledger. It will contain all entries of general ledger adjustment account (in debtors ledger) but on reverse side i.e., all entries appearing on the debit side of various debtors accounts are debited to debtor ledger adjustment account (in general ledger) and all credit entries in the various debtors accounts are credited to debtors ledger adjustment account (in general ledger).

Thus, the following trial balances may be extracted for all three ledgers:

(i) From general ledger with the help of D.L.A. and C.L.A.

(ii) From general ledger with the help of G.L.A.

(iii) From creditors ledger with the help of G.L.A.

The following journal entries are passed to make the debtors ledger self-balancing :

1. For credit sales, bills receivable dishonoured, interests expenses charged to debtors during the period.

   Debtors ledger adjustment A/c Dr.
   (in general ledger)
   To general ledger adjustment A/c
   (in debtors ledger)

2. For total of cash collected from debtors, discount allowed to them, bills received, sales returns and bad debts written off:

   General ledger adjustment A/c Dr.
   (in debtors ledger)
   To debtors ledger adjustment A/c
   (in general ledger)

Journal Entries for self-Balancing of Creditors Ledger

For the purpose of self-balancing the creditors ledger, an extra account called the 'general ledger adjustment account' will be opened at the end of the bought ledger. All entries in totals appearing on the credit side of the various creditors will be shown on the debit side of this account and all debit entries of various creditors accounts are shown on the credit side of this account.

For the purpose of self-balancing the general ledger, a 'creditors ledger adjustment account' will be opened at the end of the general ledger. It will contain all entries of general ledger adjustment account (in creditors ledger) but on the reverse side i.e., all entries appearing on the credit side of various creditors accounts are credited to creditors ledger adjustment account (in general ledger) and all debit entries in the various creditors account are debited to creditors ledger adjustment account (in general ledger).

The following journal entries are passed to make the creditors ledger self-balancing:

(1) For total cash paid to creditors, discount received, bills accepted and purchase returns etc.

Creditors Ledger Adjustment A/c Dr.
(in general ledger)
To General Ledger Adjustment A/c
(in creditors ledger)

(2) For credit purchases, bills payable dishonoured, interest and expenses charged by creditors etc.

General ledger adjustment A/c Dr.
(in creditors ledger)
To Creditors ledger adjustment A/c
(in general ledger)

Transfer from one Trade Ledger to Another or Set off

Where buying and selling transactions take place with the same party, for the purpose of self-balancing two accounts, one in the debtors ledger to record sales and the other in the creditors ledger to record purchases are opened. To settle the party's account, balance of one account would be transferred to the other account. Two additional adjustment (transfer) entries are required in that case. For example, when a credit balance of Rs. 200 on Shyam Account in the creditors ledger is transferred to his account in the debtors ledger, the additional entries would be:-

(i) To effect transfer in individual accounts

Shyam A/c (in creditors ledger)	Dr.	200	
To Shyam A/c (in debtors ledger)		200	

[Being balance of Shyam A/c in creditors ledger transferred to his A/c in debtors ledger]

(ii) To effect transfer on adjustment accounts.

(a) Creditors ledger adjustment A/c (in general ledger)	Dr.	200	
To general ledger adjustment A/c (in creditors ledger)			200

(b) General ledger adjustment A/c Dr. 200
(in debtors ledger)
To debtors ledger adjustment A/c 200
(in general ledger)

Whether the account is transferred from debtors ledger to creditors ledger or vice versa, the ultimate result is the reduction in the balance of both, total debtors and total creditors.

Advantages of Self-Balancing System

The following are the advantages of the accounts maintained under self-balancing system.

(i) Arithmetical accuracy of each ledger can be proved by preparing a trial balance for each ledger.

(ii) The system localises the errors and facilitates in their quick detection with minimum effort.

(iii) Accounting information necessary for communication can be extracted easily and quickly.

(iv) It facilitates division of work among different employees of the organisation.

(v) The maintenance of a private ledger ensures secrecy.

(vi) Responsibility for committing errors can be fixed, thus the system serves as a deterrent on careless work by employees.

(vii) It promotes specialisation and increases efficiency

(viii) Different ledgers are kept by different employees, hence the possibility of collusion among them to defraud is minimised.

Important Points to Note:

While self-balancing the ledgers the following points should be noted carefully:-

1. Items to be omitted: While writing the adjustment accounts only those items which affect the debtors and creditors should be taken into account. The items such as reserve for doubtful debts, cash sales or cash purchases, bad debts previously written off now recovered, trade discounts, provision for discount on debtors, provision for discount on creditors, bills receivable discounted etc. should not be considered while writing the adjustment accounts.

2. Wrong Balances (Contra balances): A debtors account usually shows debit balance and a creditor's account shows credit balance. However on the date of finalising accounts, some debtors' accounts may show credit balance and some creditors accounts may show debit balance temporarily.

In examination problems, such *opposite balances* may be given in a problem as opening balances or closing balances or both.

While writing the self-balancing accounts such *wrong balances*, either opening or closing, must be shown on the opposite side of the usual balance.

For example, in 'debtors ledger adjustment a/c' in general ledger, opening balance of debtors appears on debit side. If opening credit balance of debtors is given in the problem, along with the regular debit balance, the regular debit balance is shown on the debit side of the account and 'wrong' balance is shown on the credit side of the account. If closing credit balance of debtors is given in the problem, it is written on the debit side of the account. Balancing figure of the account will be the usual debtors balance which appears on the credit side.

3. ***Transfer or set off*** always decreases the debtors as well as creditors. Whether the transfer is from debtors ledger to creditors ledger or from creditors ledger to debtors ledger the net effect is that the transfer results in the decrease of debtors as well as creditors.

4. ***Bills Renewed:*** When a bill receivable or payable is renewed, the original bill is treated as dishonoured. New bill is to be included in the bills receivable or bills payable as the case may be. So there is no ledger account for 'bills renewed'. If it is given in a problem, it must be treated just like new bill received or given.

Self-balancing accounts at a Glance

General Ledger

Debtors ledger adjustment account

Particulars	Rs.	Particulars	Rs.
To Balance b/d		By Balance b/d (wrong balance)	
To General ledger adjustment A/c (debtors ledger):-		By General ledger adjustment A/c (debtors ledger):-	
Items which increase debtors		*Items which decrease debtors*	
To Balance c/d (wrong balance)		By Balance c/d (bal.fig)	

Creditors ledger adjustment account

Particulars	Rs.	Particulars	Rs.
To Balance b/d (wrong balance)		By Balance b/d (wrong balance)	
To General ledger adjustment A/c (creditors ledger):-		By General ledger adjustment A/c (creditors ledger):-	
Items which decrease creditors		*Items which increases creditors*	
To balance c/d		By balance c/d (wrong balance)	

Debtors ledger

General ledger adjustment account

Particulars	Rs.	Particulars	Rs.
To balance b/d (wrong balance)		By balance b/d	
To debtors ledger adjustment A/c (general ledger):-		By debtors ledger adjustment A/c (general ledger):-	
Items which decrease debtors		*Items which increase debtors*	
To balance c/d		By balance c/d (wrong balance)	

Creditors Ledger

General ledger adjustment account

Particulars	Rs.	Particulars	Rs.
To balance b/d		By balance b/d (wrong balance)	
To creditors ledger adjustment A/c (general ledger):-		By creditors ledger adjustment A/c (general ledger):-	
Items which increase creditors		*Items which decrease creditors*	
To balance c/d (wrong balance)		By balance c/d	

Note:

Wrong balances must be written only when they are given in the problem.

Transactions which increase or decrease the Debtors and Creditors

Since solving of problems completely depends on the students' ability to identify the effect of different items on the balances of debtors and creditors, the following list may be useful in that respect.

Transactions which increase Debtors	*Transactions which increase Creditors*
1. Credit Sales	1. Credit purchases
2. Interest charged to customers	2. Bills payable dishonoured
3. Cheques of debtors dishonoured	3. Cheques issued dishonoured
4. Bills receivable dishonoured	4. Endorsed bills dishonoured
5. Discounted bills dishonoured	5. Interest charged by creditors
6. Endorsed bills dishonoured	6. Cash received from creditors
7. Cash paid to debtors	
Transactions which decrease Debtors	*Transactions which decrease Creditors*
1. Cash received from debtors	1. Cash paid to creditors
2. Bills received from debtors	2. Bills payable issued to creditors
3. Cheques received from debtors	3. Bills receivable endorsed to creditors
4. Bad debts written off	4. Cheques issued to creditors
5. Sales returns	5. Purchase returns
6. Discount allowed	6. Discount received
7. Allowances to debtors	7. Allowances from creditors
8. Transfer or set off	8. Transfer or set off

Summarised self-balancing entries

Transactions with customers

Nature of transaction	*Original entry*	*Self-balancing entry*
(a) Credit sales	Debtors A/c Dr. To Sales A/c	D.L.A. A/c (in G.L) Dr. To G.L.A. A/c (in D.L.)
(b) Return inwards	Sales return A/c Dr. To Debtors A/c	G.L.A. A/c (in D.L.) Dr. To D.L.A. A/c (in G.L.)
(c) Collections from debtors	Bank/ Cash A/c Dr. To Debtors A/c	G.L.A. A/c (in D.L.) Dr. To D.L.A. A/c (in G.L.)
(d) Discount allowed to debtors	Discount allowed A/c Dr. To Debtors A/c	G.L.A. A/c (in D.L.) Dr. To D.L.A. A/c (in G.L.)
(e) **Bills Receivable (B/R)**		
(i) B/R drawn on customer	B/R A/c Dr. To Debtors A/c	G.L.A. A/c (in D.L.) Dr. To D.L.A. A/c (in G.L.)
(ii) B/R dishonoured	Debtors A/c Dr. To B/R To Cash (for noting charges)	D.L.A. A/c (In G.L.) Dr. To G.L.A. A/c (in D.L.)
(iii) B/R dishonoured after discounting with bank	Debtors A/c Dr. To Bank A/c (B/R amount + noting charges)	D.L.A. A/c (in G.L.) Dr. To G.L.A. A/c (in D.L.)
(iv) B/R dishonoured after endorsing to supplier	Debtors A/c Dr. To Creditors A/c (B/R amount + noting charges)	Two entries are to be passed: D.L.A. A/c (in G.L.) Dr. To G.L.A. A/c (in D.L.) G.L.A. A/c (in C.L) Dr. To C.L.A. A/c (in G.L.)
(v) B/R endorsed to supplier	Creditors A/c Dr. To B/R	C.L.A. A/c (in G.L.) Dr. To G.L.A. A/c (in C.L.)
(vi) B/R discounted with bankers	Bank A/c Dr. Discount A/c Dr. To B/R A/c	No entry
(vii) B/R sent for collection	Bills for collections A/c Dr. To B/R A/c	No entry
	Bank A/c Dr. To Bills for collection	No entry
(viii) B/R retained till maturity and amount	Bank A/c Dr. To B/R A/c	No entry

Transactions with suppliers (creditors)

Nature of transaction	*Original entry*		*Self-balancing entry*	
(a) Credit purchases	Purchases A/c To Creditors A/c	Dr.	G.L.A. A/c (in C.L) To C.L.A. A/c (in G.L.)	Dr.
(b) Return outwards	Creditors A/c To purchase returns A/c	Dr.	C.L.A. A/c (in G.L.) To G.L.A. A/c	Dr.
(c) Amount paid to creditors	Creditors A/c To Bank A/c	Dr.	C.L.A. A/c (in G.L.) To G.L.A. A/c (in C.L.)	Dr.
(d) Discount allowed by creditors	Creditors A/c To Discount A/c	Dr.	C.L.A. A/c (in G.L.) To G.L.A. A/c (in C.L.)	Dr.
(e) Bills payable (B/P)				
(i) B/P accepted	Creditors A/c To B/P A/c	Dr.	C.L.A. A/c (in G.L.) To G.L.A A/c (in C.L.)	Dr.
(ii) Payment of B/P on due date	B/P A/c To Bank A/c	Dr.	No entry	
(iii) Retirement of B/P	B/P A/c To Interest A/c (rebate) To Bank A/c	Dr.	No entry	
(iv) Renewal of B/P	B/P A/c To Creditors A/c	Dr.	G.L.A. A/c (in C.L) To C.L.A. A/c (in G.L.)	Dr.
	Interest A/c To Creditors A/c	Dr.	G.L.A. A/c To C.L.A. A/c (in G.L.)	Dr.
	Creditors A/c To New B/P A/c	Dr.	C.L.A. A/c To G.L.A. (in C.L.)	Dr.

G.L.A. : General Ledger Adjustment A/c
D.L.A. : Debtors Ledger Adjustment A/c
C.L.A. : Creditors Ledger Adjustment A/c
G.L. : General Ledger
C.L. : Creditors Ledger
D.L. : Debtors Ledger

II. Sectional Balancing system :

If it is felt that there is no need to make all the three Ledgers i.e., Debtors Ledger, Creditors Ledger and General Ledger fully balancing to extract separate Trial Balance for each of the three ledgers, Sectional balancing method may be followed. This method is simpler but slightly different from self balancing system.

Under sectional balancing, only a 'Section' of the ledgers is made 'Self-Balanced'. The general ledger is made full fledged by opening two extra accounts i.e., 'Total Debtors Account' and 'Total Creditors Account'. These extra accounts ensure accuracy of postings in Debtors ledger and creditors ledger.

Total Debtors Account : This account is opened in the general Ledger to record monthly totals of all transactions relating to all the Trade Debtors whose accounts are opened individually in the debtors ledger. Thus, the total debtors account is debited with the aggregate opening balances of all debtors, total credit sales for each month, B.R. dishonoured and interest charged to customers etc. It is credited with total Cash and Bills collected from the debtors each month, discounts and allowances, Bad debts written off, Sales returs etc. The closing balance of the account represents the total of all debtors in the debtors ledger.

The total debtors account provides the 'missing debit' in the general ledger in order to make it fully 'Self contained'.

Total Creditors Account : This account is opened in the general ledger to record monthly total of all transactions relating to all the Trade creditors whose accounts are opened individually in the creditors ledger. The total creditors account is credited with the aggregate opening balances of all trade creditors, Total credit purchases for each month, B.P. dishonoured and interest charged by creditors etc. It is debited with the Total cash paid and Bills payable issued to creditors, purchase returns, discount received etc. The closing balance of the account represents the Total of creditors balances in the creditors ledger.

The total creditors account provides the 'Missing Credit' in the general ledger in order to make it fully 'Self contained'.

Trial Balance can be prepared for general ledger alone under sectional balancing system.

Sectional balancing method is useful where the need for complete Self balancing ledger system is thought to be not necessary.

Accounts under Sectional Balancing at a Glance

Total Debtors Account

Particulars	*Rs.*	*Particulars*	*Rs.*
To Balance b/d (Opening Debit balance)		By Balance b/d (Opening Credit balance, if any)	
To Credit sales (Monthly totals from Sales book)		By Cash received from Debtors (From Cash book)	
To B/R dishonoured (From general journal)		By B/R received (Monthly total from B/R book)	
To Total creditors A/c (Endorsed B/R dishonoured)		By Sales Returns (Monthly total from returns book)	
To Balance c/d			

Self Bal...

(Closing Credit balance if any)		By Discounts allowed (Total from Cash book) By Bad Debts (From Journal) By Balance c/d (Closing Debit balance)	

Total Creditors Account

Particulars	*Rs.*	*Particulars*	*Rs.*
To Balance b/d (Opening debit balance, if any) To Cash paid to Creditors (From Cash book) To Discount received (From Cash book, Monthly total) To B/P issued (Monthly total from B/P book) To Purchase returns (Monthly total from returns books) To Balance c/d (Closing credit balance)		By Balance b/d (Opening credit balance) By Credit Purchases (Monthly Total from Purchases book) By B/P Dishonoured (From Journal) By Interest charged by Creditors (From Journal) By Balance c/d (Closing debit balance if any)	

ILLUSTRATIONS

I. Self Balancing Ledger System :

Illustration 1

Prepare the sales ledger adjustment A/c from the following information relating to the year ended 31.12.91.

	Rs.		Rs.
Opening balance of debtors	40,000	Bills Receivable dishonoured	500
Sales (for cash of Rs.10,000)	90,000	Bad debts	1,000
Cash received from debtors	80,000	Transfer to purchase ledger	2,000
Discount allowed to debtors	500	Reserve for doubtful debts	1,500
Bills receivable received from debtors	3,000	Bad debts of last year received	1,000
Sales returns	8,000		

[Madras, B.Com.(PZ2A) Nov. 2008; BCom., Sep. 1996]

Solution:

In the General ledger

Sales ledger Adjustment A/c

1991		Rs.	1991		Rs.
Jan. 1	To Balance b/d	40,000	Dec. 31	By General ledger Adjustment A/c (D.L.):–	
Dec. 31	To General Ledger Adjustment A/c (D.L.):–			Cash	80,000
	B/R (dishonoured)	500		Discount allowed	500
	Sales	80,000		B/R (Received)	3,000
				Sales Returns	8,000
				Bad debts	1,000
				Transfer	2,000
				By Balance c/d	26,000
		1,20,500			1,20,500

Illustration 2

The following are the summarised details for the year 1990 in the books of Arumugam who has adopted self-balancing system.

Opening Balance of Debtors

Debit Rs.12,500 ; Credit Rs. 300

	Rs.		Rs.
Sales	31,200	Cash received from customers	20,050
Sales Returns	3,120	Provision for bad debts	3,000
Discount allowed	1,300	Bad debts previously written off now recovered	400
Bad debts	350	B/R received	1,300
Allowance to customers	400	B/R dishonoured	500
B/R discounted	500	Closing balance of debtors (credit)	700

Prepare the Sales ledger Adjustment A/c as it would appear in the General ledger.

[Madras, B.Com.(PZ2A) Ap 2007; B.Com., Mar. 1992, Oct. 1985, May 1986]

Solution:

In the General Ledger

Sales Ledger Adjustment A/c

1990		Rs.	1990		Rs.
Jan. 1	To Balance b/d	12,500	Jan. 1	By Balance b/d	300
Dec. 31	To General Ledger Adjustment A/c; (D.L):–		Dec.31	By General Ledger Adjustment A/c; (D.L):–	
	Sales	31,200		Sales returns	3,120
	B/R (dishonoured)	500		Cash	20,050
	To Balance c/d	700		Discount allowed	1,300
				Bad debts	350
				Allowances to customers	400
				B/R (Received)	1,300
				By Balance c/d (bal.fig)	18,080
		44,900			44,900

Note: Bad debts recovered, provision for bad debts and Bills discounted will not affect the Sales Ledger Adjustment A/c.

Illustration 3

From the following prepare a Purchase ledger Adjustment A/c

		Rs.
1.1.93	Creditors Balance (Cr)	12,000
	Creditors balance (Dr)	150
31.12.93	Total Purchases	40,000
	Cash Purchases	4,000
	Cash Paid	20,000
	Bills accepted	15,000
	Returns Outwards	2,000
	Returns Inwards	1,000
	B/R dishonoured	1,000
	B/P dishonoured	500
	Discount earned	600
	Discount allowed	200
	Bills endorsed	800
	Bills discounted	200
	Creditors Balance (Dr)	140

[Madras, B.Com.(CS) Nov. 2008; B.Com.(PZ2A) Nov. 2007; B.Com., Mar. 1994]

Solution:

In the General Ledger

Purchase ledger Adjustment A/c

1993		Rs.	1993		Rs.
Jan. 1	To Balance b/d	150	Jan. 1	By Balance b/d	12,000
Dec. 31	To General ledger Adjustment A/c (C.L):–		Dec.31	By General ledger Adjustment A/c (C.L):–	
	Cash	20,000		Purchase	36,000
	B/P (accepted)	15,000		B/P (dishonoured)	500
	Return Outwards	2,000		By Balance c/d	140
	Discount earned	600			
	Bills endorsed	800			
	To Balance c/d (B.F.)	10,090			
		48,640			48,640

Illustration 4

From the following particulars prepare a Debtor ledger Adjustment A/c and Purchase Ledger Adjustment A/c in the General ledger for the year ended 31.12.1989

	Rs.		Rs.
Purchase ledger (Cr.)	2,00,000	Purchase returns	1,00,000
" " (Dr.)	22,700	Sales returns	80,000
Sales ledger (Cr.)	2,400	B/R received	3,00,000
" " (Dr.)	4,21,000	B/P accepted	2,00,000
Credit Purchases	20,00,000	Bad debts written off	10,000
Cash Purchases	2,00,000	Provision for bad debts	10,000
Credit Sales	18,00,000	B/R dishonoured	40,000
Cash Sales	7,00,000	Cash received from debtors	12,00,000
Closing Balances:–		Cash paid to creditors	16,00,000
Purchase Ledger (Dr.)	17,000		
Sales Ledger (Cr.)	9,000		

[Bharathidasan, B.Com., April 2002; Madras, B.Com., Sep. 1990]

Solution:

In the General Ledger

Debtors Ledger Adjustment A/c

1989		Rs.	1989		Rs.
Jan. 1	To Balance b/d	4,21,000	Jan. 1	By balance B/d	2,400
Dec. 31	To General Ledger Adjustment A/c (D.L):–		Dec. 31	By General Ledger Adjustment A/c (D.L):–	
	Sales	18,00,000		Sales returns	80,000
	B/R dishonoured	40,000		B/R	3,00,000
	To Balance c/d	9,000		Bad debts	10,000
				Cash	12,00,000
				By Balance c/d (bal.fig)	6,77,600
		22,70,000			22,70,000

In the General Ledger

Creditors Ledger Adjustment A/c

1989		Rs.	1989		Rs.
Jan. 1	To Balance b/d	22,700	Jan. 1	By Balance b/d	2,00,000
Dec. 31	To General Ledger		Dec. 31	By General ledger	
	Adjustment A/c (C.L):–			Adjustment A/c (C.L):–	
	Purchase Returns	1,00,000		Purchases	20,00,000
	B/P	2,00,000		By Balance c/d	17,000
	Cash	16,00,000			
	To Balance c/d (bal.fig)	2,94,300			
		22,17,000			22,17,000

Illustration 5

From the following particulars, prepare Sales ledger adjustment A/c and General ledger adjustment A/c.

1.1.92	Rs.	31.12.92	Rs.
Sales Ledger Balance	31,500	Sales during the month	75,000
Provision for doubtful debts	2,500	Cash received from customers	65,800
31.12.92:		Returns from Customers	550
Bills accepted by customers	3,200	Cheques dishonoured	250
Cheques received from customers	3,150		
Bad debts previously written off now recovered	80	Bills accepted by customers renewed	200
Carriage charged to customers	120	Cash discount allowed	1,300
Cash paid to customers by mistake	130	Interest Cheque on Bills renewed	5
Bills dishonoured	800	Bad debts written off	450

[Madras, B.Com., May 1993]

Solution:

In the General Ledger

Sales Ledger Adjustment A/c

		Rs.			Rs.
1.1.92	To Balance b/d	31,500	31.1.92	By General Ledger Adjustment A/c (D.L):–	
31.1.92	General Ledger Adjustment A/c (D.L):–			Cash	65,800
	Sales	75,000		Sales Return	550
	Bank (cheque dishonoured)	250		B/R (received)	3,200
	B/R (dishonoured)	800		Bank (Cheque)	3,150
	Carriage (Charged)	120		Bad debts	450
	Cash	130		B/R (renewed)	200
				Cash discount	1,300
				By Balance c/d (Bal.fig)	33,150
		1,07,800			1,07,800

In the Sales Ledger

General Ledger Adjustment A/c

		Rs.			Rs.
31.12.92	To Sales Ledger Adjustment A/c (G.L):–		1.1.92	By Balance b/d	31,500
	Cash	65,800	31.12.92	By Sales Ledger Adjustment A/c (G.L):–	
	Sales Return	550		Sales	75,000
	B/R	3,200		Bank (Cheque dishonoured)	250
	Bank (Cheque)	3,150		B/R (dishonoured)	800
	Bad debts	450		Carriage charged	120
	B/R (renewed)	200		Cash	130
	Cash discount	1,300			
	To Bal. c/d (Bal.fig)	33,150			
		1,07,800			1,07,800

Note:

(1) Bills renewed has no separate ledger account. Since they are the "bills accepted by customers", they are assumed as new bills received. The dishonoured bills on renewal would have become a part of bills receivable dishonoured.

(2) Interest cheque on bills renewed has to be ignored.

Illustration 6

From the following details, prepare the purchase ledger adjustment A/c in General Ledger and General ledger Adjustment A/c in purchase ledger for the year 1992.

	Rs.		Rs.
Purchase Ledger Balance on 1.1.92 (Cr)	1,20,000	Cheques paid to creditors	30,000
		Cheques dishonoured	1,000
Purchase Ledger Balance on 1.1.92 (Dr)	10,000	Goods returned to creditors	10,000
		Discount allowed by creditors	2,000
Purchases from creditors	1,80,000	Interest on suppliers accounts due	1,000
Bills Payable accepted	40,000	Bills Payable dishonoured	4,000
Cash Paid to creditors	1,00,000		

Solution:

In the General Ledger

Purchase Ledger Adjustment A/c

1991		Rs.	1992		Rs.
Jan. 1	To Balance b/d	10,000	Jan. 1	By balance b/d	1,20,000
Dec. 31	General Ledger Adjustment A/c (C.L):–		Dec.31	By General Ledger Adjustment A/c (C.L):–	
	Bills Payable	40,000		Purchases	1,80,000
	Cash	1,00,000		Bills Payable (dishonoured)	4,000
	Bank (Cheque)	30,000		Bank (Cheque dishonoured)	1,000
	Purchase Return	10,000		Interest on suppliers A/c's due	1,000
	Discount received	2,000			
	To Balance c/d (Bal.fig)	1,14,000			
		3,06,000			3,06,000

Illustration 11

Prepare Total Debtors Account from the following details.

	Rs.
Debtors Balance (Dr) on 1-4-2002	40,000
Cash and Cheques received till 31-3-2003	3,60,000
B/R Received from Trade debtors	1,40,000
B/R Dishonoured	20,000
Bad debts written off	8,000
Sales returns	15,000
Discount allowed	10,000
Interest charged to debtors	6,000
Transfer from Creditors ledger	6,000
Credit sales during the year	4,90,000

Solution :

Total Debtors Account

For the year ended 31-3-2003

Date	Particulars	Rs.	Date	Particulars	Rs.
1-4-02	To Balance b/d	40,000	31-3-03	By Cash & Cheques received	3,60,000
31-3-03	To Sales (Credit)	4,90,000	"	B/R received	1,40,000
"	To B/R Dishonoured	20,000	"	Bad Debts	8,000
	To Interest (Charged to Debtors)	6,000	"	Sales returns	15,000
			"	Discount allowed	10,000
			"	Transfer from Creditors ledger	6,000
			"	By Balance c/d (Bal.fig.)	17,000
		5,56,000			5,56,000
1-4-03	To Bal. b/d	17,000			

Note : Transfer reduces both debtors and Creditors.

Illustration 12

Prepare Total Creditors Account for the year ended on 31-3-2003 from the data given below :

	Rs.
Creditors Balance on1-4-2002	38,000
Credit Purchases during tthe year	2,67,000
Bills payable accepted	62,000
Cash paid to Creditors	1,37,000
B/R endorsed to creditors	16,000
Endorsed B/R dishonoured	3,000
B/P dishonoured	2,000
Purchase returns	11,000
Discount received	6,000
Transfer from Debtors ledger	7,000

Solution :

Total Creditors Account

For the year ended 31-3-2003

Date	*Particulars*	*Rs.*	*Date*	*Particulars*	*Rs.*
31-3-03	To Bills payable accepted	62,000	1-4-02	By Balance b/d	38,000
"	To Cash paid to creditors	1,37,000	31-3-02	By Purchases (Credit)	2,67,000
"	To B/R endorsed	16,000		By Endorsed B/R	
	To Purchase returns	11,000		Dishonoured	3,000
	To Discount received	6,000	"	B/P Dishonoured	2,000
	To Transer from debtors ledger	7,000			
	To Balance c/d (Bal. Fig.)	71,000			
		3,10,000			3,10,000

Note : Transfer decreases both creditors and debitors.

Chapter 20

UNIT-III -CHAPTER-II

Royalty Accounts

Royalty – Meaning:

Royalty is an amount payable by one person to another for the use of an asset or right or monopoly. It is a periodical payment in the nature of rent made to a person for the right to use certain property such as mine, patent, copy-right. When a person (lessor) having an exclusive right of some kind, surrenders it to another person (lessee) in exchange for a certain amount calculated with reference to output or units produced or sold, such an amount is known as royalty.

Royalty is payable by the following persons:

(i) by the lessee in mining business to the lessor (owner) of the mine for having been allowed to use the mine to extract minerals;

(ii) by publishers in publishing business to authors of books for having been allowed to publish the books; and

(iii) by manufacturer licensees to the owners of patents having been allowed to manufacture articles.

It is the actual rent calculated at an agreed rate based on output from a mine or number of units produced or sold. The payment of royalty is governed by the terms of 'Royalty agreement'.

Treatment in Final Accounts

Royalty is a revenue expenditure just like any 'Nominal Account'. It is like payment of rent. Since, it is a nominal account, it is debited in the books of the party paying it and credited in the books of the party receiving it. Like any other nominal account, royalty account is transferred either to profit and loss account, if the royalty is based on units sold or sale value or to 'production' account if the royalty is based on output.

Royalty is a 'revenue' income to the lessor in the nature of 'Nominal account'. It is credited to 'Royalty Receivable' account and transferred to Profit and Loss account at the time of closing the accounts.

Explanation of Technical Terms

1. Minimum Rent or Dead Rent or Fixed Rent: This is a guaranteed minimum amount payable by the lessees (tenant) to the landlord (lessor) irrespective of the actual output or sales of the lessee. It is the minimum amount which the lessee has to pay each period even when the mine is not worked at all or when the output for the period is below a certain quantity provided for in the agreement. Landlord will not accept anything less than this guaranteed minimum. In any year if the actual royalty is less, landlord will claim this minimum amount fixed. However, if the actual royalty is more than the dead rent, landlord will claim the actual royalty. Thus, it is always provided that minimum rent will merge into royalty and landlord will claim either royalty or dead rent whichever is higher. This clause is always inserted in the agreement with the intention of maintaining the regular flow of income to the landlord.

Minimum Rent in case of strike: When there is a general strike, the minimum rent already fixed should be reduced proportionate to the period of strike and then merged into royalty, unless otherwise provided in the agreement.

2. Shortworkings [Redeemable Dead Rent]: Excess of minimum rent over actual royalty paid to the landlord is known as shortworkings. It does not arise if actual royalty is more than minimum rent. Normally, it is allowed to be recovered by lessee and as such it is called redeemable dead rent.

3. Recoupment of shortworkings: The landlord permits the tenant to recoup the shortworkings in a specific period in future only out of the surplus royalties. The right to recover short working as per agreed terms is known as 'Recoupment of shortworkings'.

Recoupment of shortworkings allowed to lessee is mainly to compensate the lessee for the excess amount paid by him whenever production or sales is low.

Methods of Recoupment

The right of recoupment can be fixed or flexible.

(a) Fixed Recoupment: In this type of recoupment, the lessee may be allowed the privilege within a fixed number of years initially. For example, recoupment in the first 4 years. This means shortworkings of the first year can be recovered in the second or third or fourth years. Similarly, any shortworkings of the 2nd or 3rd years also must be recovered in the 3rd or 4th years. Otherwise, unrecovered shortworkings will be a definite loss to the tenant.

(b) Flexible Recoupment: In this method of recoupment, any particular year's short workings may be allowed to be recovered in the subsequent two or three years. This method gives the tenant or lessee a permanent privilege. For example, if shortworkings are agreed to be recouped in subsequent two years, they can be recovered fully or partly in the next year or subsequent year. At the end of the second year any unrecovered shortworkings will be a loss to the lessee.

4. Shortworkings lapsed or written off: This is the amount of shortworkings unrecovered by the lessee within the agreed period of recoupment. It is a loss to the lessee and gain to the lessor. For example, out of Rs.50,000 shortworkings, the lessee is able to recover Rs.35,000 within the agreed period, the balance of Rs.15,000 will be shortworkings lapsed.

Accounting Treatment

Both the lessee and lessor record all transactions relating to 'Royalty' in their respective books of accounts.

Books of Lessee or Tenant - Specimen Journal entries:

1. For Royalty Payable:

(a) When there are no shortworkings:

Royalty A/c Dr.
To Landlord's A/c

(b) When there are shortworkings:

(i) *If minimum rent account need not be shown*

Royalty A/c Dr.
Shortworkings A/c Dr.
To Landlord A/c

(ii) *If minimum rent account is required*

Minimum Rent A/c Dr.
To Landlord A/c

Royalty A/c Dr.
Shortworkings A/c Dr.
To Minimum Rent A/c

2. For payment of cash:

(a) When there is no recoupment of shortworkings:

Landlord A/c Dr.
To cash A/c

(b) When there is recoupment of shortworkings:

Landlord A/c Dr.
To cash A/c (Actual cash paid)
To shortworkings A/c (Recoupment made)

3. For Transferring Royalty at the end of the year:

Production A/c Dr.
or Profit and Loss A/c Dr.
To Royalty A/c

4. If there are shortworkings written off:

Profit and Loss A/c Dr.
To shortworkings A/c

Books of Landlord or lessor - Specimen Journal Entries

1. For Royalty Receivable:

(a) *If there are no shortworkings:*

Tenant's A/c Dr.
To Royalty Receivable A/c

(b) *If there are shortworkings:*

Tenant's A/c Dr.
To Royalty Receivable A/c
To shortworkings A/c

2. For Receiving cash:

(a) If there is no recoupment of shortworkings

Cash A/c Dr.
To Tenant's A/c

(b) If there is recoupment of shortworkings

Cash A/c (Actual cash received) Dr.
Shortworkings A/c (Recoupment mode) Dr.
To Tenant's A/c

3. For Transferring Royalty Receivable:

(a) If there is no 'lapse' of shortworkings

Royalty receivable A/c Dr.
To profit and loss A/c

(b) If there is shortworkings written off

Royalty Receivable A/c Dr.
Shortworkings A/c Dr.
To profit and loss A/c

It is advisable for students to prepare an analytical table based on facts given in a problem before writing journal or ledger.

Analytical Table

Year	Output	Royalty	Minimum Rent	Short workingss resulted	Short workings recouped	Shortworkings not recovered transfered to Profit & Loss	Payment to land lord

Sub-Lease

Meaning

When the terms of the original lease gives powers to the Lessee to sub-let a part of the land or right to another person, this privilege is known as *sublease.* In such a case, the same person will be serving in two different capacities, *vis-a-vis* the original lessor, he will serve as the lessee and will have to pay royalty on the total output of the mine; whereas *vis-a-vis* the sub-lessee, he shall serve as a lessor and will receive royalty on the output from the portion of the mine sub-leased by him. But the original landlord will get royalty from the lessee in respect of production/sale of not only the lessee but also the sub-lessee. It is to be noted that there are three parties in this type of transactions: *viz* (i) landlord (ii) the lessee and (iii) the sub-lessee.

The rate of royalty is usually different between original landlord and tenant and the tenant and sub lessee. The excess royalty charged by the lessee to sub-lessee is gain to him. The gain is transferred to P & L A/c. The lessee is responsible to pay royalty to his landlord on the entire output of himself and sub-lessee.

Accounting Treatment

In the books of landlord: The sublease does not make any difference in the books of landlord. The accounting treatment is similar to that explained earlier.

In the books of lessee: The tenant gets double status as lessee paying royalty to the landlord and as sub-lessor receiving royalty from the sub-lessee. As lessee, he maintains Royalty payable Account, Shortworking Account and Land lord Account.

As a sub-lessor, he maintains royalty receivable Account, shortworking suspense account and sub-lessee's account.

As such, two sets of accounting entries are to be passed in the books of tenant. *viz:* (i) as a lessee and (ii) as a sub-lessor.

In the books of sub-lessee: Entries and accounts are written by sub-lessee just like any ordinary tenant and entries given earlier for writing in the books of the tenant can be used.

The following are the specimen entries in the books of the tenant.

As Lessee to landlord		As Landlord to Sub-lessee	
1. For Royalty		**1. For Royalty**	
(a) Without Shortworkings		***(a) Without Shortworkings***	
Royalty payable A/c (on Total Production)	Dr.	Sub-lessee's A/c	Dr.
To Landlord's A/c		To Royalty Receivable A/c	
(b) With Shortworkings		***(b) With Shortworkings***	
Royalty payable A/c (on Total Production)	Dr.	Sub-lessee's A/c	Dr.
Shortworkings A/c	Dr.	To Royalty Receivable A/c	
To Landlord A/c		To Shortworkings A/c	
2. For payment of cash		**2. For receiving cash**	
(a) Without recoupment		***(a) Without recoupment***	
Landlord's A/c	Dr.	Cash A/c	Dr.
To Cash A/c		To Sub-lessee's A/c	
(b) With recoupment		***(b) With recoupment***	
Landlord's A/c	Dr.	Cash A/c	Dr.
To Cash A/c		Shortworkings suspense A/c	Dr.
To Shortworkings A/c		To sub-lessee's A/c	
3. For transferring Royalty payable		**3. For closing Royalty Receivable A/c**	
Production A/c	Dr.	Royalty Receivable A/c	Dr.
To Royalty payable A/c		To Royalty payable A/c (at the rate payable to landlord)	
		To Profit & Loss A/c (balance)	
4. For Shortworkings lapsed		**4. For Shortworkings lapsed**	
Profit & Loss A/c	Dr.	Shortworkings suspense A/c	Dr.
To Shortworkings A/c		To Profit & Loss A/c	

ILLUSTRATIONS

Fixed Recoupment of Short Workings

Illustration 1

A company leased a colliery on 1-1-92 at a minimum rent of Rs.20,000 merging into a royalty of Rs. 1.50 per tonne with power to recoup shortworkings over the first four years of the lease. The output of the colliery for the first four years was 9,000 tonnes, 12,000 tonnes, 16,000 tonnes and 20,000 tonnes respectively. Give journal entries and ledger accounts for four years in the books of lessee and lessor. ***[Madras, B.Com.(PZ2A) Nov. 2008; Ap. 2007; BCS(SY1A) Nov. 2006 (Modified); B.Com.(PZA) Nov. 2006 (Modified) B.Com., Nov. 2004]***

Solution:

Analysis of Royalty

Year	Output	Royalty at Rs. 1.50 per tonne	Minimum Rent Rs.	Short Workings Rs.	Short Workings recovere Rs.	Shortworkings irrecoverable transfered to P & L A/c Rs.	Payment to landlord Rs.
199	9,000	13,500	20,000	6,500	-	-	20,000
199	12,000	18,000	20,000	2,000	-	-	20,000
199	16,000	24,000	20,000	-	4,000	-	20,000
199	20,000	30,000	20,000	-	4,500	-	25,500

Journal entries in the books of Lessee

Date	Particulars		Rs.	Rs.
1992	Royalty A/c	Dr.	13,500	
Dec. 31	Shortworkings A/c	Dr.	6,500	
	To Landlord A/c			20,000
	[Being Royalty due to landlord]			
Dec. 31	Landlord A/c	Dr.	20,000	
	To Bank A/c			20,000
	[Being minimum rent paid to landlord]			
Dec. 31	Production A/c	Dr.	13,500	
	To Royalty A/c			13,500
	[Being Royalty transferred]			
1993				
Dec. 31	Royalty A/c	Dr.	18,000	
	Shortworkings A/c	Dr.	2,000	
	To Landlord A/c			20,000
	[Being Royalty due to landlord]			
Dec. 31	Landlord A/c	Dr.	20,000	
	To Bank A/c			20,000
	[Being minimum rent paid]			
Dec. 31	Production A/c	Dr.	18,000	
	To Royalty A/c			18,000
	[Being Royalty transferred]			
1994				
Dec. 31	Royalty A/c	Dr.	24,000	
	To Landlord A/c			24,000
	[Being Royalty due]			
Dec. 31	Landlord A/c	Dr.	24,000	
	To Shortworkings A/c			4,000
	To Bank A/c			20,000
	[Being minimum rent paid and Rs.4,000 recouped]			

Date	Particulars		Rs.	Rs.
Dec. 31	Production A/c	Dr.	24,000	
	To Royalty A/c			24,000
	[Being Royalty transferred]			
1995 Dec. 31	Royalty A/c	Dr.	30,000	
	To Landlord A/c			30,000
	[Being Royalty due]			
Dec. 31	Landlord A/c	Dr.	30,000	
	To Shortworkings A/c			4,500
	To Bank A/c			25,500
	[Being Rs.25,500 paid to landlord after recouping Rs. 4500]			
Dec. 31 1995	Production A/c	Dr.	30,000	
	To Royalty A/c			30,000
	[Being Royalty transferred]			

Journal entries in the books of Landlord

Date	Particulars		Rs.	Rs.
1992 Dec. 31	Lessee's A/c	Dr.	20,000	
	To Royalty Receivable A/c			13,500
	To Shortworkings A/c			6,500
	[Being Royalty due from Lessee]			
Dec. 31	Bank A/c	Dr.	20,000	
	To Lessee A/c			20,000
	[Being minimum rent received]			
Dec. 31	Royalty receivable A/c	Dr.	13,500	
	To P & L A/c			13,500
	[Being Royalty receivable transferred]			
1993 Dec. 31	Lessee A/c	Dr.	20,000	
	To Royalty Receivable A/c			18,000
	To Shortworkings A/c			2,000
	[Being Royalty due from Lessee]			
Dec. 31	Bank A/c	Dr.	20,000	
	To Lessee A/c			20,000
	[Being minimum rent received]			
Dec. 31	Royalty receivable A/c	Dr.	18,000	
	To P & L A/c			18,000
	[Being Royalty receivable transferred]			

Date	Particulars		Rs.	Rs.
1994				
Dec. 31	Lessee A/c	Dr.	24,000	
	To Royalty receivable A/c			24,000
	[Being Royalty due from landlord]			
Dec. 31	Bank A/c	Dr.	20,000	
	Shortworkings A/c	Dr.	4,000	
	To Lessee A/c			24,000
	[Being Rs.20000 received after adjusting shortworkings]			
Dec. 31	Royalty receivable A/c	Dr.	24,000	
	To P & L A/c			24,000
	[Being Royalty receivable transferred]			
1995				
Dec 31	Lessee A/c	Dr.	30,000	
	To Royalty receivable A/c			30,000
	[Being Royalty receivable due]			
Dec 31	Bank A/c	Dr.	25,500	
	Shortworkings A/c	Dr.	4,500	
	To Lessee's A/c			30,000
	[Being Royalty received]			
Dec 31	Royalty receivable A/c	Dr.	30,000	
	To P & L A/c			30,000
	[Being Royalty receivable transferred]			

Ledger Accounts in the Books of Lessee

Shortworkings A/c

		Rs.			Rs.
31-12-92	To Landlord A/c	6,500	31-12-92	By Balance c/d	6,500
		6,500			6,500
1-1-93	To Balance b/d	6,500	31-12-93	By Balance c/d	8,500
31-12-93	To Landlord A/c	2,000			
		8,500			8,500
1-1-94	To Balance b/d	8,500	31-12-94	By Landlord A/c	4,000
			"	By Balance c/d	4,500
		8,500			8,500
1-1-95	To Balance b/d	4,500	31-12-95	By Landlord A/c	4,500
		4,500			4,500

Landlord A/c

		Rs.			Rs.
31-12-92	To Bank A/c	20,000	31-12-92	By Royalty A/c	13,500
			"	By Shortworkings A/c	6,500
		20,000			20,000
31-12-93	To Bank A/c	20,000	31-12-93	By Royalty A/c	18,000
			"	By Shortworkings A/c	2,000
		20,000			20,000
31-12-94	To Shortworkings A/c	4,000	31-12-94	By Royalty A/c	24,000
	To Bank A/c	20,000			
		24,000			24,000
31-12-95	To Shortworkings A/c	4,500	31-12-95	By Royalty A/c	30,000
	To Bank A/c	25,500			
		30,000			30,000

Royalty A/c

		Rs.			Rs.
31-12-92	To Landlord A/c	13,500	31-12-92	By Production A/c	13,500
		13,500			13,500
31-12-93	To Landlord A/c	18,000	31-12-93	By Production A/c	18,000
		18,000			18,000
31-12-94	To Landlord A/c	24,000	31-12-94	By Production A/c	24,000
		24,000			24,000
31-12-95	To Landlord A/c	30,000	31-12-95	By Production A/c	30,000
		30,000			30,000

Ledger Accounts in the Books of Landlord

Shortworkings A/c

		Rs.			Rs.
31-12-92	To Balance c/d	6,500	31-12-92	By Lessee A/c	6,500
		6,500			6,500
31-12-93	To Balance c/d	8,500	1-1-93	By Balance b/d	6,500
			31-12-93	By Lessee A/c	2,000
		8,500			8,500
31-12-94	To Lessee A/c	4,000	1-1-94	By Balance b/d	8,500
"	To Balance c/d	4,500			
		8,500			8,500
31-12-95	To Lessee A/c	4,500	1-1-95	By Balance b/d	4,500
		4,500			4,500

Lessee's A/c

		Rs.			Rs.
31-12-92	To Royalty Receivable A/c	13,500	31-12-92	By Bank A/c	20,000
	To Shortworkings A/c	6,500			
		20,000			20,000
31-12-93	To Royalty Receivable A/c	18,000	31-12-93	By Bank A/c	20,000
	To Shortworkings A/c	2,000			
		20,000			20,000
31-12-94	To Royalty Receivable A/c	24,000	31-12-94	By Bank A/c	20,000
				By Shortworkings A/c	4,000
		24,000			24,000
31-12-95	To Royalty Receivable A/c	30,000	31-12-95	By Bank A/c	25,500
				By Shortworkings A/c	4,500
		30,000			30,000

Royalty Receivable A/c

		Rs.			Rs.
31-12-92	To P & L A/c	13,500	31-12-92	By Lessee A/c	13,500
		13,500			13,500
31-12-93	To P & L A/c	18,000	31-12-93	By Lessee A/c	18,000
		18,000			18,000
31-12-94	To P & L A/c	24,000	31-12-94	By Lessee A/c	24,000
		24,000			24,000
31-12-92	To P & L A/c	30,000	31-12-92	By Lessee A/c	30,000
		30,000			30,000

Flexible Recoupment of shortworkings

Illustration 2

Ravi took a colliery on lease. The dead rent was Rs.750 a year, merging into a royalty of 35 paise per tonne of coal raised, with the right to recover shortworkings out of royalties of two subsequent years from the period in which the shortworkings arose. The output raised were:

I year	– 1,000 tonnes	IV th year	– 1,500 tonnes
II year	– 1,500 tonnes	V th year	– 1,000 tonnes
III year	– 2,500 tonnes		

Give necessary ledger A/cs for each of the five years in the books of Ravi.

[... B.Com., March 1993]

Solution:

Analysis of Royalty

Year	Output Tonnes	Royalty at Re.0.35 per tonne	Minimum Rent Rs.	Short working Rs.	Short working recouped Rs.	Shortworking irrecoverable transferred to P & L A/c Rs.	Payment to Land lord Rs.
I	1,000	350	750	400	-	-	750
II	1,500	525	750	225	-	-	750
III	2,500	875	750	-	125	275	750
IV	1,500	525	750	225	-	225	750
V	1,000	350	750	400	-	-	750

Ledger Accounts in the Books of Ravi (Lessee)

Shortworkings A/c

		Rs.			Rs.
End of I year	To Landlord	400	End of I year	By Balance c/d	400
		400			400
End of II year	To Balance b/d	400	End of II year	By Balance c/d	625
	To Landlord A/c	225			
		625			625
End of III year	To Balance b/d	625	End of III year	By Landlord A/c	125
				By P & L A/c	275
				By Balance c/d	225
		625			625
End of IV year	To Balance b/d	225	End of IV year	By P & L A/c	225
	To Landlord A/c	225		By Balance c/d	225
		450			450
End of V year	To Balance b/d	225	End of V year	By Balance c/d	625
	To Landlord A/c	400			
		625			625
End of VI year	To Balance b/d	625		By Balance c/d	625
		625			625

Landlord A/c

		Rs.			Rs.
End of I year	To Bank A/c	750	End of I year	By Royalty A/c By Shortworkings A/c	350 400
		750			750
End of II year	To Bank A/c	750	End of II year	By Royalty A/c By Shortworkings A/c	525 225
		750			750
End of III year	To Bank A/c To Shortworkings A/c	750 125	End of III year	By Royalty A/c	875
		875			875
End of IV year	To Bank A/c	750	End of IV year	By Royalty A/c By Shortworkings A/c	525 225
		750			750
End of V year	To Bank A/c	750	End of V year	By Royalty A/c By Shortworkings A/c	350 400
		750			750

Royalty A/c

		Rs.			Rs.
End of I year	To Landlord A/c	350	End of I year	By P & L A/c	350
		350			350
End of II year	To Landlord A/c	525	End of II year	By P & L A/c	525
		525			525
End of III year	To Landlord A/c	875	End of III year	By P & L A/c	875
		875			875
End of IV year	To Landlord A/c	525	End of IV year	By P & L A/c	525
		525			525
End of V year	To Landlord A/c	350	End of V year	By P & L A/c	350
		350			350

Fluctuating Minimum Rent

Illustration 3

On 1.1.1982, Rama Collieries Ltd., leased a piece of land agreeing to pay a minimum rent of Rs. 2,000 in the first year, Rs. 4,000 in the second year and thereafter Rs. 6,000 per annum, merging into a royalty of 40 paise per tonne, with power to recoup shortworkings over the first three years only.

The figures of annual output for the four years to 31st December 1985 were 1,000, 10,000, 18,000 and 20,000 tonnes respectively. Record these transactions in the ledger of the Company. *[Bharathidasan, B.Com., April 2002]*

Analysis of Royalty

Year	Output Tonnes	Royalt at Re.0.4 tonne	Minimum Rent Rs.	Short working Rs.	Short working recouped Rs.	Shortworking irrecoverable transferred to P & L A/c Rs.	Payment to Land lord Rs.
1982	1,000	400	2,000	1,600	-	-	2,000
1983	10,000	4,000	4,000	-	-	-	4,000
1984	18,000	7,200	6,000	-	1,200	400	6,000
1985	20,000	8,000	6,000	-	-	-	8,000

Shortworkings A/c

		Rs.			Rs.
Dec.1982	To Landlord A/c	1,600	Dec.1982	By Balance c/d	1,600
		1,600			1,600
Dec. 1983	To Balance b/d	1,600	Dec.1983	By Balance c/d	1,600
		1,600			1,600
Dec.1984	To Balance b/d	1,600	Dec.1984	By Landlord A/c	1,200
				By P & L A/c	400
		1,600			1,600

Landlord A/c

		Rs.			Rs.
Dec.1982	To Bank A/c	2,000	Dec.1982	By Royalty A/c	400
				By Shortworkings A/c	1,600
		2,000			2,000
Dec. 1983	To Bank A/c	4,000	Dec. 1982	By Royalty A/c	4,000
		4,000			4,000
Dec. 1984	To Bank A/c	6,000	Dec. 1984	By Royalty A/c	7,200
	To Shortworkings A/c	1,200			
		7,200			7,200
Dec. 1985	To Bank A/c	8,000	Dec.1985	By Royalty A/c	8,000
		8,000			8,000

Royalty A/c

		Rs.			Rs.
Dec. 1982	To Landlord A/c	400	Dec. 1982	By P & L A/c	400
		400			400
Dec. 1983	To Landlord A/c	4,000	Dec. 1983	By P & L A/c	4,000
		4,000			4,000
Dec. 1984	To Landlord A/c	7,200	Dec. 1984	By P & L A/c	7,200
		7,200			7,200
Dec. 1985	To Landlord A/c	8,000	Dec. 1985	By P & L A/c	8,000
		8,000			8,000

Adjustment of Minimum rent due to stoppage of work (Strike)

Illustration 4

A company acquired lease of a mine at a minimum rent of Rs. 10,000 p.a. The royalty was fixed at Re. 0.50 per tonne. Shortworkings could be recouped within three years following the year in which the shortworkings occur. If there is stoppage of production due to strike in any year, the minimum rent world be proportionately reduced in regard to the length of the stoppage.

The output (in tonnes) of the mine was as follows:

1978	8,000	1981	26,000
1979	12,500	1982	17,000 (strike)
1980	21,500	1983	30,000

During 1982, there was strike lasting for 3 months. Show the necessary ledger accounts for each of the years in the books of the company.

[Madras, B. Com., May 1982, May 1996]

Solution:

Analysis of Royalty

Year	Output	Royalty	Minimum rent	Short workings	Short workings recouped	Shortworkings irrecovered transferred to P&L A/c (Rs.)	Payment to Landlord
	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.
1978	8,000	4,000	10,000	6,000	–	–	10,000
1979	12,500	6,250	10,000	3,750	–	–	10,000
1980	21,500	10,750	10,000	–	750	–	10,000
1981	26,000	13,000	10,000	–	3,000	2,250	10,000
1982	17,000	8,500	7,500	–	1,000	2,750	7,500
1983	30,000	15,000	10,000	–	–	–	15,000

* **Note:** Minimum Rent for 1982 = $10,000 \times \frac{9}{12}$ = Rs. 7,500 (for 9 months)

Ledger Accounts in the books of Lessee

Shortworkings A/c

Date	Particulars	Rs.	Date	Particulars	Rs.
Dec. 1978	To Landlord A/c	6,000	Dec. 1978	By Balance c/d	6,000
		6,000			6,000
Dec. 1979	To Balance b/d	6,000	Dec. 1979	By Balance c/d	9,750
	To Landlord A/c	3,750			
		9,750			9,750
Dec. 1980	To Balance b/d	9,750	Dec. 1980	By Landlord A/c	750
				By Balance c/d	9,000
		9,750			9,750
Dec. 1981	To Balance b/d	9,000	Dec. 1981	By Landlord A/c	3,000
				By P & L A/c	2,250
				By Balance c/d	3,750
		9,000			9,000
Dec. 1982	To Balance b/d	3,750	Dec. 1982	By Royalty A/c	1,000
				By P & L A/c	2,750
		3,750			3,750

Landlord A/c

Date	Particulars	Rs.	Date	Particulars	Rs.
Dec.1978	To Bank A/c	10,000	Dec. 1978	By Royalty A/c	4,000
				By Shortworkings A/c	6,000
		10,000			10,000
Dec.1979	To Bank A/c	10,000	Dec.1979	By Rotaly A/c	6,250
				By Shortworkings A/c	3,750
		10,000			10,000
Dec.1980	To Bank A/c	10,000	Dec.1980	By Royalty A/c	10,750
	To Shortworkings A/c	750			
		10,750			10,750
Dec.1981	To Bank A/c	10,000	Dec.1981	By Royalty A/c	13,000
	To Shortworkings A/c	3,000			
		13,000			13,000
Dec.1982	To Bank A/c	7,500	Dec.1982	By Royalty A/c	8,500
	To Shortworkings A/c	1,000			
		8,500			8,500
Dec.1983	To Bank A/c	15,000	Dec.1982	By Royalty A/c	15000
		15,000			15,000

Royalty A/c

		Rs.			Rs.
Dec. '78	To Landlord A/c	4,000	Dec. '78	By P & L A/c	4,000
		4,000			4,000
Dec. '79	To Landlord A/c	6,250	Dec. '79	By P & L A/c	6,250
		6,250			6,250
Dec. '80	To Landlord A/c	10,750	Dec. '80	By P & L A/c	10,750
		10,750			10,750
Dec. '81	To Landlord A/c	13,000	Dec. '81	By P & L A/c	13,000
		13,000			13,000
Dec. '82	To Landlord A/c	8,500	Dec.'82	By P & L A/c	8,500
		8,500			8,500
Dec. '83	To Landlord A/c	15,000	Dec.'83	By P & L A/c	15,000
		15,000			15,000

Illustration 5

Minerals Ltd. leased a property from Shri.P. Janakiraman at a royalty of Rs. 1.50 per ton with a minimum rent of Rs. 20,000 per annum. Each year's excess of minimum rent over royalties is recoverable out of royalty of next five years. In the event of strike and the minimum rental not being reached, the lease agreement provided that the actual royalties earned for the year discharged all rental obligation for the year.

The results of working of the property are given below:

Year	*Actual royalty* Rs.
1988	Nil
1989	6,600
1990	18,000
1991	22,200
1992	28,000
1993	30,000
1994 (strike year)	16,000
1995	30,400

Prepare Minimum Rent A/c, Shortworkings A/c, Landlord's A/c and Royalty A/c in the books of Mineral Ltd.

[Madras B.Com., (ICE) May 1999 ($\frac{1}{2}$ figures)]

Solution:

Analysis of Royalty

Year	Royalty Rs.	Minimum rent Rs.	Short workings Rs.	Short workings recovered Rs.	Short workings lapsed Rs.	Payment to Landlord Rs.
1988	Nil	20,000	20,000	–	–	20,000
1989	6,600	20,000	13,400	–	–	20,000
1990	18,000	20,000	2,000	–	–	20,000
1991	22,200	20,000	–	2,200	–	20,000
1992	28,000	20,000	–	8,000	–	20,000
1993	30,000	20,000	–	10,000	–	20,000
1994	16,000	16,000	–	–	13,200	16,000
1995	30,400	20,000	–	2,000	–	28,400

Ledger accounts in the books of Colliery Company Ltd.

Minimum Rent A/c

		Rs.			Rs.
31-12-88	To P. Janakiraman	20,000	31-12-88	By Shortworkings A/c	20,000
		20,000			20,000
31-12-89	To P. Janakiraman	20,000	31-12-89	By Royalty A/c	6,600
				By Shortworkings A/c	13,400
		20,000			20,000
31-12-90	To P. Janakiraman	20,000	31-12-90	By Royalty A/c	18,000
				By Shortworkings A/c	2,000
		20,000			20,000

Royalty A/c

		Rs.			Rs.
31-12-89	To Minimum rent A/c	6,600	31-12-89	By Production A/c	6,600
31-12-90	To Minimum rent A/c	18,000	31-12-90	By Production A/c	18,000
31-12-91	To P. Janakiraman A/c	22,200	31-12-91	By Production A/c	22,200
31-12-92	To P. Janakiraman A/c	28,000	31-12-92	By Production A/c	28,000
31-12-93	To P. Janakiraman A/c	30,000	31-12-93	By Production A/c	30,000
31-12-94	To P. Janakiraman A/c	16,000	31-12-94	By Production A/c	16,000
31-12-95	To P. Janakiraman A/c	30,400	31-12-95	By Production A/c	30,400

P. Janakiraman (Landlord) A/c

		Rs.			Rs.
31-12-88	To Bank A/c	20,000	31-12-88	By Minimum rent A/c	20,000
31-12-89	To Bank A/c	20,000	31-12-89	By Minimum rent A/c	20,000
31-12-90	To Bank A/c	20,000	31-12-90	By Minimum rent A/c	20,000
31-12-91	To Shortworkings A/c	2,200	31-12-91	By Royalty A/c	22,200
	To Bank A/c	20,000			
		22,200			22,200
31-12-92	To Shortworkings A/c	8,000	31-12-92	By Royalty A/c	28,000
	To Bank A/c	20,000			
		28,000			28,000
31-12-93	To Shortworkings A/c	10,000	31-12-93	By Royalty A/c	30,000
	To Bank A/c	20,000			
		30,000			30,000
31-12-94	To Bank A/c	16,000	31-12-94	By Royalty A/c	16,000
		16,000			16,000
31-12-95	To Shortworkings A/c	2,000	31-12-95	By Royalty A/c	30,400
	To Bank A/c	28,400			
		30,400			30,400

Shortworkings A/c

		Rs.			Rs.
31-12-88	To Minimum rent A/c	20,000	31-12-88	By Balance c/d	20,000
1-1-89	To Balance b/d	20,000	1-1-89	By Balance c/d	33,400
31-12-89	To Minimum Rent A/c	13,400			
		33,400			33,400
1-1-90	To Balance b/d	33,400	1-1-90	By Balance c/d	35,400
31-12-90	To Minimum Rent A/c	2,000			
		35,400			35,400
1-1-91	To Balance b/d	35,400	31-12-91	By P. Janakiraman	2,200
			"	By Balance c/d	33,200
		35,400			35,400
1-1-92	To Balance b/d	33,200	31-12-92	By P. Janakiraman	8,000
			"	By Balance c/d	25,200
		33,400			33,400
1-1-93	To Balance b/d	25,200	31-12-93	By P. Janakiraman	10,000
			"	By Balance c/d	15,200
		25,200			25,200
1-1-94	To Balance b/d	15,200	31-12-94	By P & L A/c	13,200
			"	By Balance c/d	2,000
		15,200			15,200
1-1-95	To Balance b/d	2,000	31-12-95	By P. Janakiraman A/c	2,000

When stocks of output are given

Illustration 6

S. Singh, who had patented a vacuum cleaner, granted Babu & Co. Ltd. a licence for ten years to manufacture and sell the cleaner on the following terms.

(a) Babu & Co., Ltd. to pay a royalty of Rs. 10 for every cleaner sold with a minimum of Rs. 10,000 per annum, calculations made annually as on 31st December and payment to be made on the same day.

(b) Each year's excess of minimum rent over royalties is recoverable out of royalties of next two years.

As from the commencement of the third year the agreement was revised and a minimum annual payment Rs. 8,000 was substituted for Rs. 10,000 the other terms of the agreement remaining unchanged.

Production and closing stock of cleaner for first four years were as follows:

Year end of	*Production (in units)*	*Closing stock (in units)*
1992	500	100
1993	900	200
1994	1,140	140
1995	1,260	300

Prepare necessary ledger accounts in the books of Babu & Co. Ltd., which are closed annually on 31st December.

Solution:

Calculation of number of units sold:

Sales may be ascertained by the following formula

Opening stock + Production – Closing stock = Sales

Year										Rs.
1992	=	–	+	500	–	100	=			400
1993	=	100	+	900	–	200	=			800
1994	=	200	+	1,140	–	140	=			1,200
1995	=	140	+	1,260	–	300	=			1,100

Analysis of Royalty

Year	Sales Rs.	Royalty Rs.	Minimum rent Rs.	Short workings Rs.	Short workings recovered Rs.	Short workings lapsed Rs.	Payment to Landlord Rs.
92	400	4,000	10,000	6,000	–	–	10,000
93	800	8,000	10,000	2,000	–	–	10,000
94	1,200	12,000	8,000	–	4,000	2,000	8,000
95	1,100	11,000	8,000	–	2,000	–	9,000

Books of Babu Co. Ltd.

Royalty A/c

		Rs.			Rs.
31-12-92	To S. Singh A/c	4,000	31-12-92	By P & L A/c	4,000
		4,000			4,000
31-12-93	To S. Singh A/c	8,000	31-12-93	By P & L A/c	8,000
		8,000			8,000
31-12-94	To S. Singh A/c	12,000	31-12-94	By P & L A/c	12,000
		12,000			12,000
31-12-95	To S. Singh A/c	11,000	31-12-95	By P & L A/c	11,000
		11,000			11,000

Shortworkings A/c

		Rs.			Rs.
31-12-92	To S. Singh A/c	6,000	31-12-92	By Balance c/d	6,000
		6,000			6,000
1-1-93	To Balance b/d	6,000	31-12-93	By Balance c/d	8,000
31-12-93	To S. Singh A/c	2,000			
		8,000			8,000
1-1-94	To Balance b/d	8,000	31-12-94	By S. Singh A/c	4,000
				By P & L A/c	2,000
				By Balance c/d	2,000
		8,000			8,000
1-1-95	To Balance b/d	2,000	31-12-95	By S. Singh A/c	2,000

S. Singh (Landlord) A/c

		Rs.			Rs.
31-12-92	To Bank A/c	10,000	31-12-92	By Royalty A/c	4,000
				By Shortworkings A/c	6,000
		10,000			10,000
31-12-93	To Bank A/c	10,000	31-12-93	By Royalty A/c	8,000
				By Shortworkings A/c	2,000
		10,000			10,000
31-12-94	To Shortworkings A/c	4,000	31-12-94	By Royalty A/c	12,000
"	To Bank A/c	8,000			
		12,000			12,000
31-12-95	To Shortworkings A/c	2,000	31-12-95	By Royalty A/c	11,000
"	To Bank A/c	9,000			
		11,000			11,000

UNIT - IV

Fire Insurance Claims

Need for Fire Insurance

Fire, in the business premises of any firm, can damage a number of assets like stock, buildings, furniture, fixtures, machinery etc. In addition, the normal working of a firm is affected for a number of days or months, resulting in loss of sales and loss of profits.

It is very difficult for a business to replace all the destroyed assets and normalise its working without affecting its working capital position and cash position. During such difficult times, external help is like a boon to the business.

All prudent business firms insure their stock and also other assets against the risk of fire. They take appropriate *Insurance Policy* from a recognised company by paying required premium. This enables the business to lodge claim against insurance company and receive sufficient funds to replace the lost assets.

Insurance companies investigate any claim made through experienced assessors. They evaluate the causes for fire and the actual loss through the damage. Based on the assessor's report, insurance company settles the claim made against it for loss due to fire.

Types of Fire Insurance Policies

There are two major types of policies issued by insurance companies – loss of stock policies and loss of profits or consequential loss policies.

Loss of Stock Claims

Business units who have insured their godown or store against the risk of loss of stock by fire are eligible to lodge loss of stock claims when a fire causes loss of their stock.

Salvage:- Fire may destroy some items of stock completely. Some other portion of stock may be damaged and some items of stock may not be affected at all.

The damaged stock and undamaged stock are separately valued and are called *salvage Value* or *Stock Salvaged.*

When claim is lodged for loss of stock, stock salvaged is subtracted from *Stock on the date of fire* and claim is made for the balance amount.

(A) Computation of claim to be lodged for loss of stock

The following are the major points to be noted for calculating claim for loss of stock.

(1) If a separate stock account is maintained by the firm, (which is possible if a Cost Accounting department exists), stock on the date of fire can be taken from the ledger account of stock. After subtracting *Salvaged stock*, claim can be lodged for the balance.

(2) In majority of firms, no ledger account is maintained for stock. So, value of *stock on the Date of Fire* must be found indirectly using *Gross Profit Ratio* as basis.

If the normal gross profit percentage of the firm to its sales is available, a *Memorandum Trading Account* can be prepared for the period from the beginning of the accounting year till the date of fire. Gross profit is shown as a percentage of sales. The balancing figure in the Memorandum Trading Account is *Stock on the date of fire*.

Memorandum Trading Account for the period.....

Particulars	Amount Rs.	Particulars	Amount Rs.
To opening stock	xxxx	By sales	xxxx
" purchases	xxxx	" stock on the date of fire (balancing figure)	xxxx
" gross profit c/d (Sales × Gross profit ratio)	xxxx		
Total	xxxx		xxxx

(3) Gross Profit Ratio

When ledger account for stock is not maintained, gross profit ratio to sales is the vital link to compute the claim. The following relevant points for this ratio are to be noted:

(a) $\text{Gross profit ratio} = \dfrac{\text{Gross profit}}{\text{Sales}} \times 100$

(b) Previous accounting year's gross profit and sales can be used for gross profit ratio.

(c) If information about two or more previous years is given, the average gross profit ratio of all the years has to be taken.

(d) If gross profit of previous years is not directly given, previous year's trading account has to be prepared to find gross profit.

(e) Abnormal practices followed in the previous years like undervaluation of stocks or overvaluation of stocks must be adjusted to find normal gross profit.

(f) Any samples given out of purchases, goods drawings, suppression of sales etc., must be adjusted.

Advertising samples and goods drawings have to be reduced from purchases,

(4) Abnormal items and gross profit ratio

Some items of stock might have been considered as poor selling line either in the current year or in the previous years. A part of them might have been written off. Later on such goods might have been sold, partly or fully, at a loss or at cost.

It is essential to eliminate the effect of abnormal items on 'gross profit ratio' and also in the memorandum trading account. Normal gross profit and sales are used for gross profit ratio in relation to previous years. In the Memorandum Trading Account gross profit is calculated on normal sales alone. For this purpose, separate columns are opened showing, normal, abnormal and total. [Refer Illustrations 10, 11, 12]

(5) Average Clause

Insurance policies for loss of stock may include average clause. This clause is needed to discourage under insurance.

If stock on the date of fire is more than the insured stock, average clause must be applied to compute claim.

Actual loss of stock = stock on the date of fire – salvage value.

$$\text{Claim to be lodged} = \frac{\text{Insured stock}}{\text{Stock on the date of fire}} \times \text{Actual loss of stock}$$

(B) Claim for loss of profits

Insurance policies taken for loss of profits are also called consequential policies. Under a consequential policy, the insurer indemnifies the policy holder against losses arising from the suspension, wholly or partly, of the activities of the business caused by fire. Claim can be made for loss of gross profit which is the total of net profit and insured standing charges (fixed costs) and also any increase in the cost of working which is consequential.

Important Terms

Some important terms used in computation of loss of profits claims are briefly explained below :

(1) *Indemnity Period:-* This is the period for which insurance policy is taken against the risk of fire. The Insurance policy is always taken for a period of one year. Indemnity period refers to the length of period which may be affected by fire. During the indemnity period, normal working is not expected.

(2) *Affected Period:-* This is the period for which normal working is affected because of fire.

(3) *Turnovers:-*

(a) *Affected Period Turnover:-* This is the actual sales made during the period in which work is affected by fire.

(b) *Standard Turnover:-* This is the sales during the same months as the affected period, in the previous year.

(c) *Accounting year Turnover:-* This is the sales in the last accounting year for which accounts were prepared.

(d) *Annual Turnover:-* This is the sales during the twelve months exactly before fire.

(e) *Saved Turnover:-* This is the sales achieved due to spending additional amounts during the affected period. This may be less than or equal to affected period turnover.

(4) *Standing Charges:-* These are the fixed expenses which have to be paid whether work is carried on or not, like salaries, rent, directors' fees, postage etc.

(5) *Insured Standing Charges:-* Fixed expenses which are mentioned in the policy taken by the insured firm.

(6) *Uninsured Standing Charges:-* These are the fixed expenses which are not mentioned in the insurance policy, but still incurred by the insured firm.

(7) *Short Sales:-* This is the difference between standard turnover and affected period turnover.

(8) *Saving in standing charges:-* Due to fire, some fixed costs need not be paid. The total of such costs is called 'Saving in standing charges'.

(9) *Special Circumstances Clause:-* If any increasing or decreasing trend is observed in sales, adjustment has to be made. The increasing or decreasing trend as a percentage should be found. Then the standard turnover and annual turnover should be increased or decreased, proportionate to the trend.

Computation of claims for loss of profits:-

Step 1: ***Claim for reduction in turn over:-***

	Rs.
Standard Turnover	xxxx
Add: Increase for trend	
or	
Less: Decrease for trend	xxxx
	xxxx
Less: Affected period turn over	xxxx
Short Sales	xxxx

$$\text{Gross profit ratio} = \frac{\text{Net profit} + \text{Insured standing charges}}{\text{Accounting year Turnover}} \times 100$$

Claim for Reduction in Turnover = Short Sales $\times$ Gross profit ratio

Step: 2 ***Claim for increased cost of working:-***

Lowest of the following three items can be claimed for increased cost of working.

(a) Actual increased cost of working	xxxx
(b) If all standing charges are not insured $\frac{\text{Net profit + Insured standing charges}}{\text{Net profit + All insurable standing charges}} \times \left[\text{Actual increased cost of working}\right]$	xxxx
(c) Saved turnover × Gross profit ratio	xxxx
Amount to be claimed for increased cost of working (lowest of A, B and C)	xxxx

Step: 3 ***Total claim for loss of profits:-***

	Claim for Reduction in Turnover (as per Step I)	xxxx
Add:	Claim for increased cost of working (as per Step II)	xxxx
		xxxx
Less:	Saving in standing charges	xxxx
	Total claim for loss of profit	xxxx

Step: 4 ***Application of average clause:***

If the policy amount is less than gross profit on annual turnover, average clause applies.

	Annual turnover	xxxx
Add:	Increase for trend	
	or	
Less:	Decrease for trend	xxxx
	Adjusted annual turnover	xxxx

$$\text{Claim to be made} = \text{Total claim} \times \frac{\text{Policy amount}}{\text{Gross profit on adjusted annual turnover}}$$

Note: Some experts use gross profit on 'Annual turnover' in Step 2 also to determine net profit + insured standing charges. But this is not a widely used method.

Accounting Entries for fire claims:-

The following are the specimen journal entries to be passed in relation to loss of stock and loss of profits:-

(1) Loss of stock

Distinction has to be made between stock fully destroyed without recovery value and stock damaged with recovery value.

(a) *When claim is admitted by the insurance company;*

Insurance Company A/c	Dr.	xxxx	
	(Amount of claim admitted)		
To Stock destroyed A/c			xxxx
To Stock damaged A/c			xxxx
(Being claim admitted for stock destroyed and damaged)			

(b) *For actual cost of the stock destroyed and damaged.*

Stock destroyed A/c	Dr.	xxxx	
Stock damaged A/c	Dr.	xxxx	
To Trading A/c			xxxx
(Being cost of stock destroyed and damaged due to fire)			

(c) *When damaged goods are sold*

Bank A/c	Dr.	xxxx	
To Stock damaged A/c			xxxx
(Being sale of damaged goods)			

Any balance in the stock destroyed and stock damaged accounts has to be transferred to profit and loss A/c

(d)

Profit and Loss A/c	Dr.	xxxx	
To Stock destroyed A/c			xxxx
To Stock damaged A/c			xxxx
(Being net loss due to fire)			

(e) *For receiving cash from insurance,*

Bank A/c	Dr.	xxxx	
To Insurance Company's A/c			xxxx
(Being amount of claim received)			

(2) Loss of Profit

(a) *When claim is admitted by insurance company;*

Insurance Company A/c	Dr.	xxxx	
To P & L A/c			xxxx
	(amount of loss of profit relating to current year)		
To P & L Suspense A/c			xxxx
	(amount of loss of profit relating to next year)		
(Being claim receivable)			

P & L Suspense A/c is closed by transferring to the credit of P & L A/c at the end of next year.

(b) *For any expenses incurred to put out fire*

(i) At the time when expenses were paid:

Fire expenses A/c	Dr.	xxxx	
To Bank A/c			xxxx
(Being expenses paid to put out fire)			

(ii) At the time of claim being admitted:

Insurance company A/c	Dr.		xxxx
To Fire expenses A/c			xxxx
(Being expenses payable admitted by insurance company)			

Note: It may be assumed in the absence of details that claims admitted include fire expenses also.

(c) *For receiving cash from insurance co.,*

Bank A/c	Dr.	xxxx	
To Insurance Co.			xxxx
(Being the amount of claim received)			

ILLUSTRATIONS

Loss of Stock

When Gross Profit Ratio is given

Illustration 1

A fire occurred at the premises of a trader on 31.5.94 destroying a great part of his goods. His stock at 1.1.94 was Rs. 60,000. The value of stock salvaged was Rs. 13,500. The gross profit on sales was 30% and sales amounted to Rs. 1,53,000 from January to date of fire, while for the same period the purchases amounted to Rs. 103 500. Prepare a statement of claim.

[Madras, B.Com., BBA etc. Nov. 2006; B.A. eco. Nov. 2006; B.Com., Sep. 1996]

Solution:

Memorandum Trading A/c for the period ended 31.5.94

Particulars	Amount Rs.	Particulars	Amount Rs.
To Opening Stock	60,000	By Sales	1,53,000
" Purchases	1,03,500	" Stock on the date of fire (Bal. fig)	56,400
" Gross profit c/d (1,53,000 × 30%)	45,900		
	2,09,400		2,09,400

Statement of claim:

	Stock on the date of fire	56,400
Less:	Stock salvaged	13,500
	Claim to be lodged	42,900

Illustration 2

Calculate insurance claim from the following facts assuming that the insurers met their liability under the policy on 'average basis'

A trader's stock valued at Rs. 40,000 was totally destroyed. The stock in the godown was insured for Rs. 30,000 subject to average clause. The balance of stock, left after fire, appeared in the books at Rs. 24,000.

[Madras, B.Com.(CS) Nov. 2008; B.Com., Nov. 2004]

Solution:

$$\text{Amount of claim} = \frac{\text{Amount of policy}}{\text{Stock on the date of fire}} \times \text{Actual loss of stock}$$

$$= \frac{30,000}{64,000} \times 40,000 = \text{Rs. } 18,750$$

Illustration 3

A fire occurred in the premises of Mr. Dheenadayalan on 15th August 1995. A large part of the stock was destroyed and Rs. 7,500 was realised for the salvage. For the period from 1st January 1995 to 15th August 1995, the following information is available:

(i) Purchases amounted to Rs. 42,500

(ii) Sales amounted to Rs. 45,000

(iii) Stock on hand on 1st January 1995 was Rs. 20,000 at cost price.

(iv) Goods costing Rs. 2,500 were taken by Dhenadayalan for his personal use.

The previous accounts reveal that the rate of gross profit was 33 $^1/_3$% on sale. The insurance policy was for Rs. 25,000 and included an average clause. Prepare the statement of claim to be made on the insurance company.

[Madras, B.Com., April 2005; B.Com. (ICE) May 2003]

Solution:

Memorandum Trading A/c for the period ending 15-8-1995

Particulars		Amount Rs.	Particulars	Amount Rs.
To opening Stock		20,000	By Sales	45,000
.. purchases	42,500			
Less: Drawings	2,500	40,000	.. Stock on the date of fire (Bal. fig)	30,000
To Gross profit $\left(45{,}000 \times \frac{33\frac{1}{3}}{100}\right)$		15,000		
		75,000		75,000

Calculation of Actual Loss of stock

		Rs.
	Stock on the date of fire	30,000
Less:	Salvaged stock	7,500
	Loss of stock	22,500

$$\text{Amount of claim} = \frac{\text{Amount of policy}}{\text{Stock on the date of fire}} \times \text{Actual loss of stock}$$

$$= \frac{25{,}000}{30{,}000} \times 22{,}500 = \text{Rs. } 18{,}750$$

Illustration 4

A trader asks for your help in preparing an insurance claim in respect of stock-in-trade destroyed by fire in his warehouse on June, 1 1996.

His books of accounts give the following information concerning trading account transactions for the period, January 1 to June 1, 1996.

Balance of stock, January 1, 1996 at cost Rs. 26,000.

	Rs.
Debtors on 1-1-96	50,000
Debtors on 1-6-96	80,000
Cash received from debtors	60,000
Discount allowed to debtors	10,000
Cash purchases	10,000
Cash paid to suppliers	67,000
Creditors on 1-1-96	16,000
Creditors on 1-6-96	18,500

The rate of gross profit on cost is 25%.

Calculate the amount of claim taking into account that goods salvaged from the fire were worth Rs. 3,000.

Solution:

(i) Calculation of credit sales:

Total Debtors A/c

Particulars	Amount Rs.	Particulars	Amount Rs.
To Balance b/d	50,000	By Cash	60,000
" Sales—credit (Bal. fig)	1,00,000	" Discount allowed	10,000
		" Balance c/d	80,000
	1,50,000		1,50,000

(ii) Calculation of credit purchases:

Total creditors A/c

Particulars	Amount Rs.	Particulars	Amount Rs.
To Cash	67,000	By Balance b/d	16,000
" Balance c/d	18,500	" Purchase—credit (bal.fig)	69,500
	85,500		85,500

(iii) Calculation of Stock on the date of fire:

Memorandum Trading A/c for the period ending 1-6-96

Particulars		Amount Rs.	Particulars	Amount Rs.
To Opening stock		26,000	By Sales	1,00,000
" Purchases:			" Stock on the date of fire (Bal. fig)	25,500
Cash	10,000			
Credit	69,500	79,500		
" Gross profit $1,00,000 \times \frac{25}{125}$		20,000		
		1,25,500		1,25,500

(iv) Calculation of amount of claim:

		Rs.
	Stock on the date of fire	25,500
Less:	Stock salvaged	3,000
	Claim	22,500

When Gross profit Ratio is not given

Illustration 5

A fire occurred in the Premises of X Ltd. on 10.10.91. All stocks were destroyed except to the extent of Rs. 6,200. From the following figures, ascertain the loss of stock suffered by the company:-

	Rs.
Stock on 1.1.90	40,000
Purchases during 1990	1,45,000
Sales during 1990	2,00,000
Stock on 31.12.90	25,000
Purchases during 1991 upto the date of fire	1,52,200
Sales during 1991 upto date of fire	1,89,000

[Madras, Adv. Accounts May 1995]

Solution:

Calculation of Gross Profit Ratio

Trading A/c for the year ending 31.12.90

Particulars	Amount Rs.	Particulars	Amount Rs.
To Opening stock	40,000	By Sales	2,00,000
" Purchases	1,45,000	" Closing Stock	25,000
" Gross Profit c/d (Bal.fig)	40,000		
	2,25,000		2,25,000

$$\text{Gross profit ratio} = \frac{\text{Gross profit}}{\text{Sales}} \times 100$$

$$= \frac{40,000}{2,00,000} \times 100 = 20\%$$

Calculation of Stock on the date of fire

Memorandum Trading A/c from 1.1.91 to 10.10.91

Particulars	Amount Rs.	Particulars	Amount Rs.
To Opening Stock	25,000	By Sales	1,89,000
" Purchases	1,52,200	" Stock on the date of fire (Bal. fig)	26,000
" Gross Profit c/d (1,89,000 × 20%)	37,800		
	2,15,000		2,15,000

Statement of Claim:

		Rs.
	Stock on the date of fire	26,000
Less:	Stock saved	6,200
	Claim to be made for Loss of stock	19,800

Illustration 6

The premises of a trading firm caught fire on 22.10.85 and the stock was damaged. The firm had made up accounts to 31st December.

	Rs.
Stock on 31.12.1984	13,272
Stock on 31.12.1983	9,614
Purchase during 1984	45,258
Purchase from 1.1.85 to the date of fire	34,827
Sales during 1984	52,000
Sales from 1.1.85 to the date fire	49,170

Additional information:-

a) In April 1985 goods which cost Rs. 1,000 were given away for advertising purposes, no entries being made in the books.

b) During 1985, a clerk had misappropriated unrecorded cash sales. It is estimated that the defalcation amounted to Rs. 400.

c) The rate of gross profit is constant.

From the above information, make an estimate of the stock on the date of fire.

[Madras, B.Com. Mar. 1986]

Solution:

Calculation of Gross Profit Ratio

Trading A/c for the year ended 31.12.84

Particulars	Amount Rs.	Particulars	Amount Rs.
To Opening Stock	9,614	By Sales	52,000
" Purchases	45,258	" Closing stock	13,272
" Gross Profit c/d (Bal. Fig)	10,400		
	65,272		65,27

$$\text{Gross Profit Ratio} = \frac{\text{G.P.}}{\text{Sales}} \times 100$$

$$= \frac{10,400}{52,000} \times 100 = 20\%$$

Calculation of stock on the date of fire

Memorandum Trading A/c for the period ending 22.10.85

Particulars		Amount Rs.	Particulars		Amount Rs.
To Opening Stock		13,272	By Sales	49,170	
To Purchases	34,827		*Add:* Cash sales misappropriated	400	49,570
Less: Adv. samples	1,000	33,827	By Stock on the date of fire (Bal. Fig)		7,443
To Gross Profit (49,570 × 20%)		9,914			
		57,013			57,013

∴ Claim to be made: Rs. 7,443

Illustration 7

Fire occurred in the premises of Paswan on 10th May 1996. In order to make a claim on their fire policies in respect of the stock, they ask your advice and you are able to obtain the following information.

	1993 Rs.	1994 Rs.	1995 Rs.	1996 Rs.
Opening Stock	16,000	15,000	16,000	18,000
Purchases	41,000	47,200	56,600	78,000
Sales	60,000	66,000	78,000	99,000
Closing stock	15,000	16,000	18,000	?

The stock salvaged was Rs. 3,800. Compute the amount of claim.

Solution:

Trading Account

	1993 Rs.	1994 Rs.	1995 Rs.		1993 Rs.	1994 Rs.	1995 Rs.
To Opening stock	16,000	15,000	16,000	By Sales	60,000	66,000	78,000
" Purchases	41,000	47,200	56,600	" Closing stock	15,000	16,000	18,000
" Gross profit (Ba.fig)	18,000	19,800	23,400				
	75,000	82,000	96,000		75,000	82,000	96,000

$$\text{Gross Profit Ratio} = \frac{\text{Gross profit}}{\text{Sales}} \times 100$$

$$\text{Gross Profit Ratio for 1993} = \frac{18{,}000}{60{,}000} \times 100 = 30\%$$

$$\text{Gross Profit Ratio for 1994} = \frac{19{,}800}{66{,}000} \times 100 = 30\%$$

$$\text{Gross Profit Ratio for 1995} = \frac{23{,}400}{78{,}000} \times 100 = 30\%$$

As the gross profit ratio for each one of the preceding three years is 30%, 30% can be taken to be the gross profit ratio for the year 1996 also.

Memorandum Trading A/c for the period ending 22.10.88

Particulars	Amount Rs.	Particulars	Amount Rs.
To Opening Stock	18,000	By Sales	99,000
" Purchases	78,000	" Stock on the date of fire	26,700
" Gross profit $\left(99{,}000 \times \frac{30}{100}\right)$	29,700	(Bal.fig)	
	1,25,700		1,25,700

Calculation of amount of claim

		Rs.
	Stock on the date of fire	26,700
Less:	Salvage stock	3,800
	Claim	22,900

Illustration 8

A fire occurred on the premises of Mr. Praveen on 30th June 1996, destroying the greater part of his stock. No stock records have been maintained. The following information was ascertained from his books which were not involved in the fire:

Accounting year	Sales Rs.	Gross Profit Rs.
1993	12,50,000	3,75,000
1994	8,00,000	1,60,000
1995	9,50,000	95,000
1996	2,83,000	?

Value of stock on 1-1-96 Rs. 75,000
Purchases from 1-1-96 to 30-6-96 Rs. 2,60,000
Value of stock salvaged Rs. 10,000

Prepare a statement showing the amount to be claimed from the insurance company.

Solution;

Calculation of Gross profit Ratio

$$\text{For 1993} = \frac{3{,}75{,}000}{12{,}50{,}000} \times 100 = 30\%$$

$$\text{For 1994} = \frac{1{,}60{,}000}{8{,}00{,}000} \times 100 = 20\%$$

$$\text{For 1995} = \frac{95{,}000}{9{,}50{,}000} \times 100 = 10\%$$

Since the gross profit has declined year after year, a still lower ratio, say, 5% should be assumed for the year 1996.

Particulars	Rs.		
...ening Stock	75,000	By Sales	2,83,000
...rchases	2,60,000	.. Stock on the date of fire (Bal.fig)	66,150
...oss profit (2,83,000 × 5%)	14,150		
	3,49,150		3,49,150

Calculation of amount of claim

		Rs.
	Stock on the date of fire	66,150
Less:	Stock salvaged	10,000
	Claim	56,150

Undervaluation of stock and Average Clause

...ustration 9

A fire occurred in the business premises of Raghavan on 19.7.89. From the ...llowing particulars ascertain the loss of stock and prepare a claim for insurance.

	Rs.
Stock on 1.1.88	36,720
Stock on 31.12.88	32,400
Sales for 1988	2,16,000
Purchases for 1988	1,46,400
Purchases from 1.1.89 to 19.7.89	1,76,400
Sales from 1.1.89 to 19.7.89	1,80,000

The stocks were always valued at 90% of cost. The stock saved from fire was worth Rs. 21,600. The amount of the policy was Rs. 75,600. There was an average clause in the policy.

Solution:

Calculation of Gross Profit Ratio

Trading A/c for the year ended 31.12.88

Particulars	Amount Rs.	Particulars	Amount Rs.
To Opening Stock $\left(\frac{36,720}{90} \times 100\right)$	40,800	By Sales	2,16,000
		.. Closing Stock $\left(\frac{32,400}{90} \times 100\right)$	36,000
" Purchases	1,46,400		
" Gross Profit (bal.fig)	64,800		
	2,52,000		2,52,000

$$\text{Gross profit Ratio} = \frac{\text{Gross profit}}{\text{Sales}} \times 100$$

$$= \frac{64{,}800}{2{,}16{,}000} \times 100 = 30\%$$

Calculation of Stock on the date of fire

Memorandum Trading A/c from 1.1.89 to 19.7.89

Particulars	Amount Rs.	Particulars	Amount Rs.
To Opening Stock	36,000	By Sales	1,80,000
" Purchases	1,76,400	" Stock on the date of fire (Bal.fig)	86,400
" Gross Profit $(1{,}80{,}000 \times 30\%)$	54,000		
	2,66,400		2,66,400

Calculation of actual loss of stock:

		Rs.
	Stock on the date of fire	86,400
Less:	Stock Salvaged	21,600
	Actual loss of Stock	64,800

Calculation of claim under average clause:

$$\text{Claim} = \frac{\text{Amount of policy}}{\text{Stock on the date of fire}} \times \text{Actual loss of Stock}$$

$$= \frac{75{,}600}{86{,}400} \times 64{,}800 = \text{Rs. } 56{,}700$$

∴ Claim to be made = Rs. 56,700.

Treatment of abnormal items

Illustration 10

On 1.7.1988 a fire took place in the Godown of Ram Kumar which destroyed all stocks.

	Rs.		Rs.
Sales in 1986	2,00,000	Sales in 1987	3,00,000
Gross Profit in 1986	60,000	Gross Profit in 1987	60,000
Stock on 1.1.88	2,70,000	Purchases from 1.1.88 to 30.6.88	4,00,000
Sales from 1.1.88 to 30-6-88	7,20,000		

Additional information:

a) Stock as on 31.12.87 had been undervalued by 10%.

b) A stock taking conducted in March 1988 had revealed that stock costing Rs. 80,000 were lying in a damaged condition. 50% of that stock had been sold in May 1988 at 50% of the cost and the balance were expected to be sold at 40% of the cost.

[Madras, B.Com., Sep. 1989]

Solution:

$$\text{Gross Profit rate for 1986} = \frac{\text{Gross profit}}{\text{Sales}} \times 100$$

$$= \frac{60{,}000}{2{,}00{,}000} \times 100 = 30\%$$

$$\text{Correct value of stock on 31-12-87} = 2{,}70{,}000 \times \frac{100}{90} = \text{Rs. } 3{,}00{,}000$$

$$\text{Correct profit for 1987} = 60{,}000 + 30{,}000 = \text{Rs. } 90{,}000$$

$$\text{G.P. Ratio} = \frac{90{,}000}{3{,}00{,}000} \times 100 = 30\%$$

∴ Average rate of gross profit for 1986 and 1987 = 30%.

Working Notes :

a) Total cost of damaged goods Rs. 80,000. 50% of the goods are sold at 50% of cost.
Selling price of damaged goods = 80,000 × 50% × 50% = 20,000

b) *Stock of damaged goods:*

	Rs.
Total cost of damaged goods	80,000
50% is sold i.e. Less: Cost price of goods sold	40,000
Stock of damaged goods	40,000

* Value of stock of damaged goods Rs. 40,000 × 40% = Rs. 16,000

Calculation of Stock on the date of fire

Memorandum Trading A/c for the period ending 30.6.88

Particulars	Normal items Rs.	Abnormal items Rs.	Total Rs.	Particulars	Normal items Rs.	Abnormal items Rs.	Total Rs.
To Opening stock $\left(\frac{2{,}70{,}000}{90} \times 100\right)$	2,20,000	80,000	3,00,000	By Sales	7,00,000	20,000	7,20,000
				By Gross Loss (20,000+24,000) (Transfer to P & L A/c)	–	44,000	44,000
To Purchases	4,00,000	–	4,00,000				
To Gross profit @ 30% (7,00,000 × 30%)	2,10,000	–	2,10,000	By Stock on the date of fire (bal.fig)	1,30,000	,16,000	1,46,000
	8,30,000	80,000	9,10,000		8,30,000	80,000	9,10,000

Statement of Claim

	Rs.
Stock on the date of fire:-	
Normal Items:	1,30,000
Abnormal Items:	16,000
	1,46,000
Less: stock salvaged	Nil
Claim to be made	1,46,000

Illustration 11

On 15.6.90, the premises of a concern were destroyed by fire; but sufficient records were saved from which the following particulars were obtained:

	Rs.
Stock at cost 1.1.89	36,750
Stock at cost 31.12.89	39,800
Purchases for 1989	1,99,000
Sales for 1989	2,43,500
Purchases from 1.1.90 to 15.6.90	81,000
Sales from 1.1.90 to 15.6.90	1,15,600

In valuing stock on 31.12.89, Rs. 1,150 had been written off certain stock which was a poor selling line, having cost Rs. 3,450. A portion of these goods was sold in March 1990 at a loss of Rs. 100 on their original cost of Rs. 1,725. The remainder of this stock was now estimated to be worth 80% of the original cost. Subject to the above explanation, gross profit had remained at an uniform rate throughout.

The stock salvaged was Rs. 2,900. Show the amount of the claim.

[Madras, B.Com., Mar. 1992]

Solution:

Calculation of Gross Profit Ratio

Trading A/c for the year ended 31.12.89

Particulars	Amount Rs.	Particulars		Amount Rs.
To Opening Stock	36,750	By Sales		2,43,500
" Purchases	1,99,000	" Closing Stock		
" Gross Profit c/d	48,700	as valued	39,800	
		Add: Stock written off	1,150	40,950
		(to restore stock to full cost)		
	2,84,450			2,84,450

$$\text{Gross Profit Ratio} = \frac{\text{Gross profit}}{\text{Sales}} \times 100$$

$$= \frac{48,700}{2,43,500} \times 100 = 20\%$$

Calculation of Stock on the date of fire

Memorandum Trading A/c for the period ending 15.6.90

	Normal Rs.	Abnormal Rs.	Total Rs.		Normal Rs.	Abnormal Rs.	Total Rs.
To Opening stock	37,500	3,450	40,950	By Sales	1,13,975	1,625	1,15,600
To Purchases	81,000	–	81,000	By Gross Loss (transfer to P & L A/c)	–	445	445
To Gross profit (1,13,975 × 20%)	22,795	–	22,795	By Stock on the date of fire (Bal. Fig) (1,725 × 80% in case of abnormal item)	27,320	1,380	28,700
	1,41,295	3,450	1,44,745		1,41,295	3,450	1,44,745

Statement of Claim

	Rs.
Stock on the date of fire (Normal + Abnormal goods)	28,700
Less: Stock salvaged	2,900
Claim	25,800

Illustration 12

The premises of a company have been destroyed by fire on 15th June 1984. The records, however, were saved wherefrom the following particulars are available.

	Rs.
Stock at cost on 1-1-83	30,000
Stock at cost on 31-12-83	40,000
Purchases less returns for the year ended 31-12-83	2,00,000
Sales less returns for the year ended 31-12-83	2,50,000
Purchases less returns from 1-1-84 to 15-6-84	85,000
Sales less returns from 1-1-84 to 15-6-84	1,20,000

Rs. 2,500 have been written off certain stock, which was a poor selling line, while valuing the stock for the Balance Sheet as at 31-12-83. The cost of such stock was Rs. 4,000. A portion of this stock was sold in March 1984 at a loss of Rs. 500, on the original cost of Rs. 2000. The balance of this stock was now estimated to be worth the original cost. Excepting the above, the gross profit had remained at an uniform rate throughout. The stock saved was Rs. 5,000. You are required to ascertain the claim for loss of stock.

[Madras, B.Com., April 1985]

Solution:

(i) Calculation of Gross Profit Ratio

Trading A/c for the year ended 31-12-83

Particulars	Amount Rs.	Particulars		Amount Rs.
To Opening stock	30,000	By sales		2,50,000
To Purchases	2,00,000	By closing stock	40,000	
To Gross profit (Bal.fig)	62,500	*Add:* Stock written off	2,500	42,500
	2,92,500			2,92,500

$$\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100$$

$$= \frac{62,500}{2,50,000} \times 100 = 25\%$$

(ii) Calculation of stock on the date of fire

Memorandum Trading A/c for the period ending 15.6.90

	Normal Rs.	Abnormal Rs.	Total Rs.		Normal Rs.	Abnormal Rs.	Total Rs.
To Opening stock	38,500	4,000	42,500	By Sales	1,18,500	1,500	1,20,000
To Purchases	85,000	–	85,000	By Gross Loss	–	500	500
To Gross profit ($1,18,500 \times 25\%$)	29,625	–	29,625	By Stock on the date of fire (Bal. Fig)	34,625	2,000	36,625
	1,53,125	4,000	1,57,125		1,53,125	4,000	1,57,125

(iii) Calculation of amount of claim:

	Rs.
Stock on the date of fire (Normal + Abnormal goods)	36,625
Less: Stock salvaged	5,000
Claim	31,625

Loss of Profits

When change in trend of sales is given and Increased cost of working is not given

Illustration 13

A fire occurred in the premises of Ganesh Flour Ltd., on 1.5.1989. The company had a loss of profit policy for Rs. 2,40,000. Sales from 1.5.1988 to 30.4.1989 were Rs. 20,00,000, the sales from 1.5.1988 to 31.8.1988 being Rs. 6,00,000. During the indemnity period, which lasted four months, sales amounted to only Rs. 80,000. The company made up its accounts to 31st December. The profit & loss account for 1988 is given below.

Profit & Loss A/c

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To Opening Stock	2,00,000	By Sales	19,00,000
.. Purchases	12,00,000	.. Closing Stock	1,00,000
.. Manufacturing expenses	1,34,000		
.. Variable selling expenses	1,81,000		
.. Fixed expenses	1,45,000		
.. Net Profit	1,40,000		
	20,00,000		20,00,000

Comparing the sales of the first four months of 1989 with those of 1988, it was found that sales were 20% higher in 1989. Calculate the loss of profits and the claim to be made.

Solution:

	Rs.
Sales from 1.5.1988 to 31.8.1988	6,00,000
Add: 20% increase observed in 1989 over 1988	1,20,000
	7,20,000
Less: Sales from 1.5.1989 to 31.8.1989	80,000
Short Sales	6,40,000

Gross profit Ratio: $= \dfrac{\text{Net profit + Standing Charges (both for 1988)}}{\text{Sales for 1988}} \times 100$

$= \dfrac{1,40,000 + 1,45,000}{19,00,000} \times 100 = 15\%$

$\therefore$ Loss of profit $=$ Short Sales $\times$ G.P. Ratio

$= 6,40,000 \times 15\% = \text{Rs. } 96,000$

Application of Average Clause:

	Rs.
Annual turnover = Sales for 12 months to 1.5.89	20,00,000
Add: 20% increase in the current year	4,00,000
	24,00,000
Gross Profit on 24,00,000 @ 15%	3,60,000
Amount of Policy	2,40,000
Loss of Profit	96,000

Amount of claim: $\dfrac{\text{Amount of Policy}}{\text{G.P. on annual turnover}} \times \text{Loss of Profit}$

$\dfrac{2,40,000}{3,60,000} \times 96,000 = \text{Rs. } 64,000$

Illustration 14

There was a serious fire in the premises of M/s Careless on 1st Sep. 1990. Their business activities were interrupted until 31.12.1990, when normal trading conditions were re-established. M/s Careless are insured under the loss of profit policy for Rs. 4,20,000 the period of indemnity being six months.

You are able to ascertain the following information:-

a) The net profit for the year ended 31.12.1989 was Rs. 2,00,000.

b) The annual insurable standing charges amounted to Rs. 3,00,000 of which Rs. 20,000 were not included in the definition of insured standing charges under the policy.

c) The additional cost of working in order to mitigate the damage caused by the fire amounted to Rs. 6,000 and but for this expenditure, the business would have had to shut down.

d) The saving in insured standing charges in consequence of the fire amounted to Rs. 15,000.

e) The turnover for the period of four months ended April 30, August 31 and December 31 in each of the years 1989, and 1990 was as under.

	Rs.	Rs.	Rs.
1989	6,50,000	8,00,000	9,50,000
1990	7,00,000	8,00,000	1,50,000

You are required to compute the relevant claim under the terms of the loss of profit policy.

Solution:

Step I: ***Claim for Reduction in Turnover***

Computation of Short Sales

Standard turnover (for the 4 months ending with 31.12.1989)	9,50,000
Less: Actual Sales for the indemnity period (for the 4 months ending with 31.12.1990)	1,50,000
Short Sales	8,00,000

Computation of Gross Profit Ratio:-

$$= \frac{\text{Net Profit} + \text{Insured Standing Charges}}{\text{Accounting year Turnover}} \times 100$$

$$= \frac{2,00,000 + 2,80,000}{24,00,000} \times 100 = 20\%$$

Gross Profit on short sales or claim for reduction in turnover $= 8,00,000 \times 20\%$

$= \text{Rs. } 1,60,000$

Step II ***Claim for Increased Cost of Working:-***

a) Additional cost of working in order to mitigate the damage : Rs. 6,000

b) Since all the standing charges are not insured, the amount of claim will be:-

$$\frac{\text{Net profit} + \text{Insured Standing Charges}}{\text{Net Profit} + \text{All Insurable Standing Charges}} \times \text{Actual increased cost}$$

$$= \frac{2,00,000 + 2,80,000}{2,00,000 + 3,00,000} \times 6,000 = \text{Rs. } 5,760$$

c) G. P. on Saved Turnover = $= 1,50,000 \times \frac{20}{100} = \text{Rs. } 30,000$

Claim for increased cost (lowest of a, b and c) = Rs. 5,760

Step III ***Calculation of claim***

		Rs.
Claim for Reduction in turnover	=	1.60,000
Add: Claim for increased cost (Step II)	=	5,760
		1,65,760
Less: Savings in standing charges	=	15,000
Total Claim for loss of profit=		1,50,760

Step IV ***Application of Average Clause:***

$$\text{Claim to be made} = \frac{\text{Sum Insured}}{\text{G.P. on annual turnover}} \times \text{Total Claim}$$

Annual turnover = Sales for 12 months ending with 31.8.1990
= Rs. 24,50,000

Gross profit on annual turnover = 20% of Rs. 24,50,000 = Rs. 4,90,000

Amount of claim admissible $= \frac{4,20,000}{4,90,000} \times 1,50,760 = \text{Rs. } 1,29,223$

Illustration 15

From the following information you are required to workout claim under the loss of profit insurance policy.

a) Cover Gross Profit – Rs. 2,00,000

b) Indemnity Period – six months

c) Damage due to a fire accident on 28th December accounting year ends on 31st December.

d) Net Profit plus all standing charges in the prior accounting year Rs. 3,00,000.

e) Standing Charges uninsured Rs. 50,000.

f) Turnover of the last accounting year was Rs. 10,00,000, the rate of gross profit being 25%.

g) The annual turnover, namely, the turnover for 12 months immediately preceding the fire Rs. 10,40,000.

h) As a consequence of fire, there was a reduction in certain insured standing charges at the rate of Rs. 50,000 per annum.

i) The standard turnover Rs. 5,20,000.
j) Increased cost of working during the period of indemnity was Rs. 40,000.
k) Turnover during the period of indemnity was Rs. 2,00,000 and out of this turnover of Rs. 1,60,000 was maintained due to increased cost of working.

Solution:

Step I: ***Claim for Reduction in Turnover:-***

Calculation of Short Sales

	Rs.
Standard Turnover	5,20,000
Less: Turnover during the indemnity period	2,00,000
Short sales	3,20,000

Calculation of Gross Profit Ratio:

$$\frac{\text{Net Profit} + \text{all standing charges} - \text{Uninsured standing charges}}{\text{Sales of the last accounting year}} \times 100$$

$$= \frac{3,00,000 - 50,000}{10,00,000} \times 100 = 25\%$$

Claim for Reduction in turnover = Short sales × G.P. Ratio
= 3,20,000 × 25% = Rs. 80,000

Step II: ***Claim for increased cost of working:-***

a) Increased cost of working: Rs. 40,000

b) Since all standing charges are not insured, the amount allowed will be:

$$\frac{\text{Net Profit} + \text{Insured Standing Charges}}{\text{Net Profit} + \text{All Insurable Standing Charges}} \times \text{Actual increased cost of working}$$

$$= \frac{3,00,000 - 50,000}{3,00,000} \times 40,000 = 33,333$$

c) G.P. on saved turnover = 1,60,000 × 25% = 40,000

Claim for increased cost of working is least of (a), (b) and (c) i.e., Rs. 33,333

Step III: ***Calculation of claim:***

	Rs.
Claim for loss of Profit	80,000
Add: Claim for increased cost of working	33,333
	1,13,333
Less: Savings in Standing charges for 6 months $(50,000 \times 6/12)$	25,000
Total Claim for loss of profit	88,333

Step IV: ***Application of Average Clause:***

	Rs.
Annual turnover given	10,40,000
G.P. at 25% on annual turnover	2,60,000
Sum insured	2,00,000

As the sum insured is less than the gross profit on annual turnover, the claim is restricted to.

$$\frac{\text{Sum Insured}}{\text{G.P. on annual turnover}} \times \text{Total Claim}$$

$$= \frac{2{,}00{,}000}{2{,}60{,}000} \times 88{,}333 = \text{Rs. } 67{,}948$$

∴ Claim to be lodged Rs. 67,948.

Illustration 16

From the following information, find the claim under a loss of profits policy.

	Rs.
Sales in 1991	2,00,000
Sales in 1992	2,40,000
Sales in 1993	2,88,000
Sales in 1994	3,45,600
Net Profit in 1994	20,000
Standing charges (all insured) in 1994	14,560
Date of dislocation by fire 1.1.1995; Period of dislocation 3 months	
Sales from 1.1.1994 to 31.3.1994	86,400
Sales from 1.1.1995 to 31.3.1995	23,680
Indemnity Period	9 months
Policy Value	1,00,000

There was no reduction in standing charges during the dislocation period nor were there any additional costs. *[Madras, B.Com. (PZIA) Nov. 2008]*

Solution:

		Rs.
	Sales in 1992	2,40,000
Less:	Sales in 1991	2,00,000
	Increase in sales in 1992	40,000

$$\text{Percentage of increase in sales in 1992} = \frac{40{,}000}{2{,}00{,}000} \times 100 = 20\%$$

	Sales in 1993	2,88,000
Less:	Sales in 1992	2,40,000
	Increase in sales in 1993	48,000

$$\text{Percentage of increase in sales in 1993} = \frac{48{,}000}{2{,}40{,}000} \times 100 = 20\%$$

	Sales in 1994	3,45,600
Less:	Sales in 1993	2,88,000
	Increase in sales in 1994	57,600

$$\text{Percentage of increase in sales in 1994} = \frac{57{,}600}{2{,}88{,}000} \times 100 = 20\%$$

From the above calculations, it is clear that there is an annual increase of 20% in the sales during the period 1991-94. So, in the calculation of standard turnover, 20% adjustment must be made to reflect the trend of the business.

Calculation of amount of Short Sales:

		Rs.
	Sales from 1.1.1994 to 31.3.1994	86,400
Add:	20% increase expected	17,280
	Standard Sales	1,03,680
Less:	Sales during the dislocation period	23,680
	Short sales	80,000

Calculation of Gross Profit Ratio:

$$\text{Gross profit Ratio} = \frac{\text{Net Profit} + \text{Insured standing Charges}}{\text{Sales}} \times 100$$

$$= \frac{20{,}000 + 14{,}560}{3{,}45{,}600} \times 100 = 10\%$$

Loss of Profit: 10% of short sales $= 80{,}000 \times 10\% =$ Rs. 8,000.

Amount of claim for loss of profit is also Rs. 8,000 as there is no need to apply average clause. Full Claim will be admitted by the insurance company as the amount of policy Rs. 1,00,000 is more than the annual profit of Rs. 41,472 (i.e. 10% of Rs. 3,45,600 sales in 1994 + 20% increase of Rs. 3,45,600).

Chapter 9

UNIT-IV - CHAPTER-II

Sale or Return

Accounting for goods sent on sale or return

Meaning

Traders may send goods to customers with the understanding that they can inspect the goods and decide to keep them or return them, within a specified time. It may be understood that after the expiry of the time, the trader can assume the goods are approved, if no intimation is received. The transactions which involve customers' approval or rejection of goods after physical delivery are called *Sale on approval* or *Sale* or *Return* transactions.

Purpose

1. Traders can increase their turnover, particularly in the case of slow moving goods.
2. Valued customers or bulk buyers can be provided with the opportunity of inspecting the goods at their own place conveniently before approval or rejection.

Merchants of costly sarees, jewellery and book-sellers follow this method since their goods are not fragile or perishable.

Nature of the Transaction

Sending goods on approval is not actual sales. The ownership of goods is not transferred till they are approved. The trader is responsible for any loss of the goods, if the customer has taken reasonable precautions for their safety. Treatment of such transactions as actual sales can inflate the profits which are not fully earned, unless appropriately adjusted while finalising the accounts.

Methods of Recording 'Sale or Return' transactions

The frequency of 'Sale or Return' transactions decides the method to be followed for recording them as explained below:

1. When the transactions are very few and rare : Separate accounting method is unnecessary when the transactions are rare and casual. They can be recorded as actual sales appropriately adjusted later on. The following are the entries recorded and procedure followed in such cases.

A. When goods are sent on approval:

Customer's A/c ... Dr.

To Sales A/c

B. When customer intimates approval:

No further entry is needed.

C. When customer returns the goods, fully or partly, for the goods returned:

Sales A/c Dr.

To Customer's A/c

This entry reverses the original sale entry.

D. At the end of the accounting year:

(i) The goods rejected by the customer should be included in the stock at cost even if they are not yet received back.

(ii) Goods sent for which the specified time is finished but no intimation is received can be assumed as approved. No further entry is needed.

(iii) Regarding goods sent for which specified time is not yet finished, the following adjustment entries are needed.

For reversing the original sale entry:

Sales A/c Dr.

To Customer's A/c

For taking goods with the customers into stock at their cost.

Stock with customers' A/c Dr.

To Trading A/c

Note: For goods rejected by the customer but not yet received, the same entry as above is recorded. *If market price of goods is less than cost, stock must be shown at market price.*

Treatment in Final Accounts: Goods with customers who are still having time to decide are shown in final accounts as follows:

In Trading Account: Sale value of such goods is reduced from the sales on the credit side. Cost of such goods is added to closing stock as *stock with customers.*

In the Balance Sheet: Sale value of such goods is reduced from sundry debtors on the assets side. Cost of such goods is added to closing stock as *stock with customers.*

2. When the transactions are frequent: Recording of *Sale* or *Return* transactions as actual sales results in frequent 'reverse entries' for sale which is inconvenient. 'Memorandum Record' method is usually used for frequent occurrence of Sale or Return transactions. The following is the procedure:-

(a) A *'Sale or Return Day book'* is opened on memorandum basis to show the goods sent, approved, rejected and balance. (*See specimen below*).

(b) *When goods are sent*, they are recorded at sale value in the goods sent column, because actual sale has not resulted.

(c) *When goods are approved*, the sale value of the goods is recorded in the goods approved column. Immediately, customers' accounts are debited in the regular ledger. Periodic total of this column is credited to the sales account in the regular ledger to complete the double entry.

(d) *When goods are rejected*, the sale value of the goods is recorded in the goods returned column. No posting is needed from this column.

(e) *Balance of goods* are recorded in the balance column. This column shows the sale value of goods with customers.

If specified time given to customers is expired, they may be treated as 'approved' and recorded in the goods approved column.

At the end of the Accounting year:– The cost of goods shown in the balance column must be found and included in the closing stock. If market price of the goods is less than the cost, the value of stock must be shown at the market price.

Sale or Return Day Book

Date	Goods sent on approval. Customer name	Rs.	Goods approved Customer name	Rs.	Goods returned. Customer name	Rs.	Balanc Rs.	Rs.

3. When transactions are large in number: 'Sale on approval' may constitute a significant part of the overall business of some firms. In such cases, an elaborate accounting system is needed to distinguish such dealings from normal business transactions. The following is the usual system of accounting used in such firms.

Books Needed: In addition to the usual subsidiary books and ledger, the following additional books are opened:

(1) *Sale or Return Day book* to record goods sent *(See the form below).*

(2) *Sales and Returns book* to record goods approved and also goods returned *(See the form below).*

(3) Sale or Return ledger, which is an addition as *Katcha* ledger or *Rough ledger.*

It contains personal accounts and sale or return account which are not to be confused with customers' accounts and sales account in the regular ledger.

Sale or Return Day Book

Date	*Customer's name*	*Sale or Return (L.F.)*	*Amount Rs.*

Sales and Returns Book

	Goods sold				Goods returned			
Date	Custome name	Regula L.F.	Sale or Return L.F.	Amoun Rs.	Date	Custome name	Sale or Return L.F.	Amoun Rs.

Method of Recording Transactions

(1) *When goods are sent on approval:* In the 'Sale or Return Day book' goods are entered at sales value. Immediately, Customer's account in the 'Sale or Return ledger' is debited and the 'Sale or Return account' in the same ledger is credited.

(2) *When goods are returned:* The sale value of the goods returned is entered in the goods returned column of the 'Sales and Returns Book'. Immediately, the personal accounts of customers are credited and 'Sale or Returns A/c' is debited in the 'Sale or Return ledger'.

(3) *When goods are approved:* The sales value of the goods is recorded in the goods approved column of the 'Sales and Returns book'. Immediately, personal account in the 'Regular' ledger is debited and personal account of the customer in the 'Sale or Return' ledger is credited. This entry shifts the debit for sale to the customer from *Rough ledger* to regular ledger. Similarly, 'Sale or Return account' in the 'Sale or Return ledger' is debited for the value of the goods and sales account in the regular ledger is credited. This entry shifts the credit for the goods sold from *Rough ledger* to the regular 'ledger'. The entries may be shown as follows:

(i) *When goods are sent :–*

Customer's A/c	Dr.	(Sale or Return ledger)
To Sales or Returns A/c		(")

(ii) *When goods are returned:–*

Sales or Returns A/c	Dr.	(")
To Customer's A/c.		(")

(iii) *When goods are approved:–*

Customer's A/c	Dr.	(Regular ledger)
To Customer's A/c (Sale or Return ledger)		
Sale or Return A/c	Dr.	(Sale or Return ledger)
To Sales A/c (Regular ledger)		

At the end of accounting year:– The balance in the 'sale or Return account' in the 'Sale or Return ledger' represents goods with customers who have not yet decided. The cost of these goods must be ascertained and a separate adjustment entry is passed in the .egular journal as follows:

Stock with customer's Account Dr.
To Trading A/c

In the final accounts, the stock with customers is added to the closing stock in the Trading account credit side. It is also added to the closing stock in the assets side of the Balance Sheet.

ILLUSTRATIONS

(1) When the number of transactions are few and rare

Illustration 1

Amar sells goods to his approved customers on 'Sale or Return' basis at a profit of 20% on sales, treating as actual sales. On 15th December, goods costing Rs. 1,000 were sent to Usha Traders. No confirmation has been received from Usha Traders until 31st December.

Give the necessary Journal entries in the books of Amar.

[Madras, B. Com.(PZ2A) April 2007; B.Com., March 1995]

Solution:

Books of Amar

Journal entries

Date	Particulars		Dr. Rs.	Cr. Rs.
Dec. 15	Usha Traders A/c	Dr.	1,250	
	To sales A/c			1,250
	[Being goods sold on approval]			
Dec. 31	Sales A/c	Dr.	1,250	
a)	To Usha Traders A/c			1,250
	[Being cancellation of sale entry for goods not yet approved]			
b)	Stock with customers A/c	Dr.	1,000	
	To Trading A/c			1,000
	[Being cost of goods with customers, not yet approved]			

Working Notes: Cost of goods 1,000
Add: 20% Profit on sale or 25% on cost: 250
Sale price of goods sent on approval 1,250

Illustration 2

On 31-12-92 goods sold at sales price of Rs. 3,000 were lying with customer Anu to whom they were sold on 'Sale or Return' basis and recorded as actual sales. Since no consent has been received from the customer, you are required to pass adjustment entries presuming goods were sent on approval at a profit of cost plus 20%. Present market price is 10% less than the cost price.

[Madras,B.Com.(PZ2A)Nov.2007;Nov.2006(20Times);B.Com.,March 1993;B.Com.,May 1993]

Solution:

Books of Anu
Journal entries (Adjustment)

Date	Particulars		Dr. Rs.	Cr. Rs.
31.12.92 1)	Sales A/c	Dr.	3,000	
	To Anu's A/c			3,000
	[Being cancellation of sale entry for goods not yet approved]			
2)	Stock with customer's A/c	Dr.	2,250	
	To Trading A/c			2,250
	[Being stock with customers recorded at Market price]			

Working Notes:

Sale price of goods sent on approval		3,000
Less: Profit	$3{,}000 \times \frac{20}{120}$	500
Cost of goods		2,500

Market price $= 2{,}500 - (2{,}500 \times 10\%) = 2{,}250$

Note: Since the market price is less than the cost price, stock with customers is valued at market price.

Illustration 3

A merchant sends out his goods casually to his dealers on approval basis. All such transactions are, however, recorded as actual sales and are passed through sales book. On 31-12-90 it was found that 500 articles at a sale price of Rs. 300 each were out on approval basis and were recorded as actual sale at that price. The sale price was at cost plus 25%.

You are required to give adjustment entries and show how they will appear in final accounts.

Solution:

Journal of Merchant (Adjustment)

Date 31-12-90	Particulars		Dr. Rs.	Cr. Rs.
1)	Sales A/c	Dr.	1,50,000	
	To Customer A/c			1,50,000
	[Being cancellation of sales entry for goods not yet approved]			
2)	Stock with customer's A/c	Dr.	1,20,000	
	To Trading A/c			1,20,000
	[Being cost of goods lying with customer not yet approved]			

Working Note:

	Rs.
Sale price of goods sent on approval: (500 × Rs. 300)	1,50,000
Less: Profit $1,50,000 \times \frac{25}{125} =$	30,000
Cost of goods	1,20,000

Trading Account (Includes)

Dr.	Rs.	Rs.		Rs.	Cr. Rs.
			By Sales	xxx	
			Less: sale on approval	1,50,000	xxx
			By Closing stock	xxx	
			Add: stock with customers	1,20,000	xxx

Balance Sheet (Includes)

Liabilities		*Assets*	Rs.	Rs.
		Sundry Debtors	xxx	
		Less: Sale or return	1,50,000	xxx
		Stock with customers		1,20,000

Illustration 4

A trader has credited certain items of sales on approval aggregating Rs. 30,000 to sales Account. Of these, goods of the value of Rs. 8,000 have been returned and taken into stock at cost Rs.4,000 though the record of return was omitted in the accounts. In respect of another parcel of Rs. 6,000 (cost being Rs. 3,000) the period of approval did not expire on the closing date. Show the adjustment and correcting entries in the books of trader.

Solution:

Books of Trader

Journal (Adjustment)

Date	Particulars		Debit Rs.	Credit Rs.
1	Sales A/c	Dr.	8,000	
	To Debtors A/c			8,000
	[Being Return of goods by customers sent out on approval basis and included in stock]			
2	Sales A/c	Dr.	6,000	
	To Debtors A/c			6,000
	[Being Goods sent out an approval basis and included in sales but not yet approved]			
3	Stock with customer's A/c	Dr.	3,000	
	To Trading A/c			3,000
	[Being Cost of goods lying with customers on approval basis included in stock]			

(2) When transactions are large in number

Illustration 5

M/s Metha Bros. sends out goods on approval as follows:

January 10. A - Rs. 300 January 13. A returned Rs. 100 rest retained.
January 12. B - Rs. 200 January 22. B retained all the goods.
January 30. C - Rs.1,500 January 31. No intimation.

Show how these transactions will appear when books are kept on double entry system. Give journal entries and ledger accounts.

[Manonmanian, B.Com. April 2000]
Madras, B.Com., Sep. 1989]

Solution:

Journal Entries in the books of M/s Metha Bros.

Date	Particulars		L.F.	Debit Rs.	Credit Rs.
Jan. 10	A's A/c To Sale or Return A/c [Being goods sent on approval to 'A' entered in sale or return ledger]	Dr.		300	300
Jan. 12	B's A/c To Sale or Return A/c [Being goods sent to B on approval entered in Sale or Return ledger]	Dr.		200	200
Jan. 13	Sale or Return A/c To A's A/c [Being goods returned by A entered in Sale or Return Ledger]	Dr.		100	100
Jan. 13	A's A/c (in main ledger) To A (in Sale or Return ledger) [Being goods approved transferred to Personal A/c in the main ledger]	Dr.		200	200
Jan. 13	Sale or Return A/c To Sales A/c (in main ledger) [For goods approved transferred from Sale or Return ledger to main ledger]	Dr.		200	200
Jan. 22	B's A/c (in main ledger) To B (in Sale or Return ledger) [Being goods approved transferred to Personal A/c in the main ledger]	Dr.		200	200
Jan. 22	Sale or Return A/c (in Sale or Return ledger) To sales A/c (in main ledger) [Being goods approved transferred from Sale or Return ledger to main ledger]	Dr.		200	200
Jan. 30	C's A/c To Sale or Return A/c [Being goods sent on approval to C entered in Sale or Return ledger]	Dr.		1,500	1,500

Step 1: Recording in the books

Sale or Return Day Book

Date	Customer's Name	Sale or Return (L.F)	Amount (Rs.)
Jan. 10	A		300
Jan. 12	B		200
Jan. 30	C		1,500
			2,000

Sales and Returns Book

Goods Sold					Goods Returned			
Date	Customer's Name	Regular L.F	Sale or Return L.F	Amount Rs.	Date	Customer's Name	Sale or Return L.F	Amount Rs.
Jan. 13	A			200	Jan. 13	A		100
Jan. 22	B			200				

Step 2: Posting to Sales or Returns Ledger.

A's Account

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
Jan.10	To Sale or Return A/c	300	Jan. 13	By A's A/c (in main ledger)	200
				By Sale or Return A/c	100
		300			300

B's Account

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
Jan. 12	To Sale or Return A/c	200	Jan. 22	By B's A/c (in main ledger)	200
		200			200

C's Account

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
Jan. 30	To Sale or Return A/c	1,500	Jan. 31	By Balance c/d	1,500
		1,500			1,500

Sale or Return Account

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
Jan. 13	To A's A/c (returns)	100	Jan. 10	By A's A/c	300
Jan. 13	To Sales A/c (in main ledger)	200			
Jan. 22	To sales A/c (in main ledger)	200	Jan. 12	By B's A/c	200
Jan. 31	To Balance c/d	1,500	Jan. 30	By C's A/c	1,500
		2,000			2,000

Step 3: Posting to Main Ledger.

A's Account

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
Jan. 13	To A (in Sale or Return ledger)	200	Jan. 31	By Balance c/d	200
		200			200

B's Account

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
Jan 22	To B (in Sale or Return ledger)	200	Jan 31	Balance c/d	200
		200			200

Sales Account

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
Jan 31	To Balance c/d	400	Jan 13	By Sale or Return A/c (in Sale or Return ledger)	200
			Jan 22	By Sale or Return A/c (in Sale or Return ledger)	200
		400			400

Chapter 19

UNIT–V

Insolvency Accounts

Meaning of 'Insolvent': According to popular usage, an '***Insolvent***' is one who is not able to pay his debts as and when they are due.

Even the Indian Sale of Goods Act, in Sec. 2 (8) says *"A person is said to be* ***'Insolvent'*** *who has ceased to pay his debts as they become due, whether he has committed an* ***`act of Insolvency'*** *or not".*

However, legally a person can be called insolvent only when an order of adjudication is passed against him by a competent court of law.

Relevant Acts: There are two Acts dealing with Insolvency affairs in India which were modelled on the English Bankruptcy Act. They apply to the insolvency of Individuals, partnership firms and Hindu undivided families.

1. The Presidency Towns Insolvency Act, 1909 which applies to persons residing in Presidency towns of Mumbai, Calcutta and Chennai.
2. The Provincial Insolvency Act, 1920 which applies to people residing in rest of India.

But for minor differences, both the Acts are similar.

Procedure under Insolvency Acts

1. For declaration of a person to be insolvent by a court, a person must be a debtor with inadequate assets for repayment of his liabilities in full.

He must have committed an '*act of insolvency*'.

Act of insolvency includes several actions on the part of the debtor like:

Transferring all or substantial portion of his property to a third person with the intention to defraud or delay his creditors; his property is sold or attached in the execution of a court decree; the debtor notifying any of his creditors that he is suspending payment of his debts; the debtor departs from India or from his usual residence to delay creditors etc.

2. Petition for adjudication of the debtor as insolvent can be filed in a court of law by the debtor himself or by a creditor or a group of creditors.
3. On receipt of application, the court satisfies itself about certain conditions and adjudges the debtor as Insolvent.
4. On adjudication of the debtor as insolvent, the insolvent's property vests in the Official Assignee or the Official Receiver appointed by the court.
5. The insolvent has to file a statement in official form of his financial position.
6. The Official Assignee or Receiver proceeds to realise the assets and distribute the amount available in the following order:

(a) Fully secured creditors
(b) Partly secured creditors, to the extent of security.
(c) Realisation expenses and remuneration of the assignee or Receiver.
(d) Preferential creditors
(e) Unsecured creditors

7. The insolvent has to apply for an order of discharge. The court hears the debtor and the official assignee or receiver and if satisfied, issues the order of discharge.
8. The order of discharge makes the debtor free from all of his obligations on that date except debts to government, debts incurred by fraud and liability of maintenance.

For the purpose of insolvency proceedings the following are to be noted.

(a) *Voluntary transfers* of property by the debtor in the previous two years, without receiving consideration are treated as *void*. The exception is transfer in consideration of marriage, or in favour of a purchase or encumberance.
(b) *Interest* cannot be claimed by the creditors after the date of adjudication. If there is surplus in the estate, they can get interest at 6% per annum till the date of actual payment.

Distinction between insolvency of an individual and a partnership firm

There is a major difference between insolvency of individuals carrying on business as sole traders and partnership firms.

No distinction is made between private assets and business assets of an individual functioning as a sole trader. Similarly, his private and business liabilities are also treated alike. For example, if Raman who is a businessman is adjudged insolvent and has Rs. 50,000 business assets and Rs.20,000 private assets, his total assets, for the purpose of insolvency, are taken as Rs.70,000.

In the case of partnership firms, business creditors have first claim on firm's assets. Any balance of assets, after satisfying firm's creditors are available to the private creditors of the partners. Similarly, personal creditors of each partner has first claim over his personal assets. Any balance of assets can be claimed by the creditors of the firm.

Statement of Affairs and Deficiency Account

Insolvency accounts are concerned with the preparation of Statement of Affairs and Deficiency Account.

When a person or a partnership firm is adjudged insolvent, the following should be revealed to the court:

(i) Amount of deficiency and (ii) Reasons for such deficiency.

For this purpose, a Statement of Affairs is prepared to show the amount of deficiency and deficiency account to enumerate the reasons for the deficiency. The statement of affairs should show all the liabilities on the basis of their security and all the assets at their estimated realisable values.

The normal practice of any business unit, whether owned by a sole trader or partners is to show all the assets in the balance sheet at their book values. It is essential to estimate the realisable value of each and every asset. Most of the fixed assets like machinery, equipment, fixtures and furniture may realise significantly lower amounts than their book values. The sundry debtors should be carefully classified into three categories. *i.e.*, good, doubtful and bad. This can be done on the basis of the personal knowledge of each debtor possessed by the insolvent. Similarly, the bills receivable likely to be honoured and dishonoured should be determined by the insolvent, using his knowledge of the drawees as the criterion. The stocks also are likely to realise lower amounts due to clearance sale.

The liabilities to outsiders must be classified, using the security for each creditor as the basis. Creditors with mortgage on specific assets are fully secured, if the realisable value of their securities is more than the loan amount. If the realisable value of the security is less than the loan amount, they are partly secured creditors. Creditors for wages, salaries, rent and the government for taxes are preferential, subject to the limits prescribed by the Insolvency Acts. All other creditors are unsecured.

Deficiency arises due to accumulated losses, loss on realisation of assets, contingent liabilities materialising etc. Information about the capital with which business was started, losses and gains till the date of adjudication and losses or gains due to realisation of assets has to be gathered to explain the causes for deficiency.

All the information about the assets, liabilities, losses and gains is presented in the official formats of statement of affairs and deficiency account.

Differences between Balance Sheet and Statement of Affairs:

1. Legal Basis: Statement of Affairs is prepared as per the provisions of Insolvency Act. Balance sheet of a sole trader or partnership is not based on any Act of law.

2. Periodicity: Balance sheet is prepared at the end of every accounting year. A Statement of Affairs is prepared by a person who is adjudicated as Insolvent.

3. Capital and Profit or loss: Owner's capital and accumulated profits or losses are shown in a balance sheet. They are completely omitted from Statement of Affairs.

4. Recording of Assets: Assets are shown at book values individually in balance sheet. Statement of Affairs shows book values and realisable values of assets. They are grouped into property, debtors and bills receivable.

5. Recording of Liabilities: Balance sheet shows liabilities individually and separately at book values. Statement of Affairs shows them on the basis of security as four separate groups – fully secured, partly secured, unsecured and preferential – at expected values to be paid.

6. Lists: Balance Sheet is not accompanied by any lists, though schedules may be there. For the purpose of Statement of Affairs, assets and liabilities are divided into lists which must be attached to it, giving full details in each list.

7. Deficiency: Balance sheet does not show any deficiency. Statement of Affairs shows deficiency which is separately explained in deficiency A/c.

8. Assets given as Security: All assets are shown on the assets side in balance sheet. Assets lodged as security are shown on the liabilities side in Statement of Affairs, as deduction from the secured loans.

9. Contra Entries: Balance sheet does not show any contra items. In Statement of Affairs surplus from secured creditors' assets is transferred from liabilities side to assets side as a 'contra' item. Similarly, preferential creditors shown on liabilities side are deducted as a 'contra' item on the assets side.

Form of Statement of Affairs

Statement of Affairs of Mr.......................... as on ....

Gross Liabilities Rs.	Liabilities	Rs.	Expected to rank Rs.	Assets	Book Value	Estimated to produce Rs.
....	Unsecured creditors as per list 'A'		....	Property as per list E:		
....	Fully secured creditors as per list B	....		Cash in hand	.....	....
				Cash at Bank	.....	....
				Investments	.....	....
				Stock	.....	....
				Machinery etc.	.....	....
	Less: Estimated value of security	.....		Book debts as per list F:		
		.....				
	Less: Amount carried down to list C	.....		Good	.....	....
				Doubtful	.....	....
				Bad	.....	....
	Surplus as per contra	.....		Bills of Exchange as per list G:		....
....	Partly secured creditors as per list C	.....		Surplus from securities in the hands of secured creditors as per contra		....
						....
	Less: Estimated value of security	.....	....	*Less:* Preferential creditors as per list D as per contra		....
....	Preferential Creditors as per list D	.....		Deficiency as explained in List H (Bal.fig.)		....
	Less: Deducted as per contra	.....				
....			....			....

Form of Deficiency Account

Deficiency Account (List H)

As on............

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
Excess of assets over liabilities (capital) on		....	Excess of liabilities over assets on..........		....
Net profit from carrying on business from ——— to ——— after deducting usual trade expenses.		....	Net loss from carrying on business from ——— to the date of adjudication		....
Income or profit from other sources.		....	Bad debts as per list F.		....
Deficiency as per Statement of Affairs		....	Expenses incurred since.........., other than usual business expenses i.e., Household expenses. (Drawings)		....
			Other losses: Loss on realisation of Assets:		....
		....			
		XXX			XXX

Points to note for preparation of Statement of Affairs

1. Unsecured creditors: All creditors who have no specific asset as security are shown under this list. They include the following:

(a) *Sundry trade creditors*, bills payable, bank overdraft if unsecured.

(b) *Wife's loan*, if it was lent out of her ***'Stridhan'*** (personal property). If the loan is out of funds previously given to her by the husband, it is not to be treated as a loan at all.

(c) *Private liabilities* of the owner which are not a part of the balance sheet given.

(d) *Contingent liabilities* expected to rank like bills discounted expected to be dishonoured.

(e) *Outstanding expenses* for salaries, wages, rent etc., to the extent of the amount in excess of the legal limits.

2. Fully secured creditors: These creditors have securities whose realisable value is more than the loan and outstanding interest.

(a) If more than one creditor is fully secured, the loans and security value should be combined and shown.

(b) If second 'charge' is given on security to a second creditor who has only part security, surplus from the security must be carried to list C from list 'B' to the extent of that asset. Any balance of surplus can be carried to contra if it is from other securities.

(c) Any interest outstanding on the secured creditors must also be deducted from the amount realised from security.

3. Partly secured creditors: The creditors whose loan is more than the realisable value of their security are termed as partly secured. The balance of their loan is shown in the second column. They also share proportionately with the unsecured creditors from amount realised from assets which were not given as security.

4. Preferential creditors: These are creditors who must be fully paid, though they have no specific security.

There is some difference between the two Insolvency Acts. The following are the preferential creditors under both the Acts.

Creditors	Presidency Towns Insolvency Act, 1909	Provincial Insolvency Act, 1920
1. Amounts due to Government, State, Central, local, etc.	Fully preferential	Fully preferential
2. Salaries	4 months salary or Rs.300 whichever is less for each person is preferential	Rs. 20 flat for each person is preferential.
3. Wages	4 months wages or Rs.100 whichever is less for each person is preferential	Rs.20 flat for each person is preferential.
4. Rent payable to landlord	One month's rent whatever is the amount is preferential	–

Note: Any salary, rent and wages beyond the limits given above should be added to unsecured creditors in List A.

5. Property as per List E: All assets, except debtors and bills are shown here, if they are not given as security for loans.

(a) *All private assets* of the proprietor should also be shown here, at realisable values.

(b) If wife of the proprietor gives up her personal property like jewellery, that is also included in this list.

6. Debtors: (a) Goods debtors are assumed to realise full amount; unless otherwise given.

(b) Doubtful debts, usually realise part amount and bad debts won't realise any amount.

7. Bills of Exchange: Bills in hand alone are shown. Any bills endorsed or discounted are not shown in this list.

Points to be noted for preparation of Deficiency Account

1. Excess of assets over liabilities is the capital with which the proprietor started his business if it is given. Otherwise, the capital given in the balance sheet is to be shown.

2. Net profit from carrying on business

(a) If there was profit in one or more years and loss in one or more years in the past, the total of profits alone should be shown.

(b) If the profit figures are after charging interest on capital, it can be added back to the profits or it can be shown as profit from other sources.

3. Income or profit from other sources

This includes,

(a) Private assets, not shown in balance sheet

(b) Private assets like jewellery of proprietor's wife, if surrendered by her.

(c) Wife's loan if it is not payable.

(d) Any creditors giving up their claims

(e) Additional capital contributed by the owner after starting the business.

(f) Profit on realisation of any assets

(g) Reserve for doubtful debts

(h) Interest on capital.

4. Excess of Liabilities over Assets: In problems where current balance sheet is given, without mentioning original starting capital of the owner, capital may be a debit balance, shown on the assets side. Such debit balance is shown in deficiency account right hand side.

5. Net loss from carrying a business

(a) If there were losses in more than one year in the past, they must be added and shown.

(b) If the losses were after charging interest on capital, the interest can be deducted from the losses and the balance only can be shown or it can be shown under other incomes on the left hand side.

(c) If tallied balance sheet or trial balance is not given in the problem, given information must be used to prepare a trial balance. Difference in the trial balance will be excess credit. That is the accumulated loss and can be assumed as Net loss from carrying on business.

6. Losses other than usual business expenses [Drawings]

(a) Drawings of different years given must be added and shown as a single figure.

(b) Any amounts given by the owner to his son, wife etc. are also treated as drawings.

7. Other Losses

This includes,

(a) Loss through betting and speculation

(b) Private liabilities, if any

(c) Liabilities not shown in balance sheet materialising.

(d) Contingent liabilities expected to rank like bills discounted expected to rank.

ILLUSTRATIONS

Calculation of preferential creditors

Illustration 1

What are preferential creditors in the following liabilities of insolvent Bhupesh according to Presidency Towns Insolvency Act and Provincial Insolvency Act:?

	Rs.
3 Month's salary for 10 clerks	3,600
One month wages of 12 labourers	1,600
Sales Tax	400
3 Months rent of landlord	600
Income tax	1,000
Wages of four servants	1,400
Salaries	1,000
Municipal tax	400
Wages	6,000

Solution:

Liabilities		Preferential	
Amount Rs.	*Particulars*	*Under provincial insolvency Act* Rs.	*Under Presidency Towns Insolvency Act* Rs.
3,600	Salary of 10 clerks	200	3,000
1,600	Wages of 12 labourers	240	1,200
400	Sales Tax	400	400
600	Rent to landlord for 3 months	NIL	200
1,000	Income tax	1,000	1,000
1400	Wages of 4 servants	80	400
400	Municipal tax	400	400
6,000	Wages	6,000	6,000
1,000	Salaries	1,000	1,000
16,000		9,320	13,600

Rs.16,000 – Rs.9,320 = Rs.6680 List A; Rs.16,000 – Rs.13,600 = Rs.2,400 List A

(Total amount paid – preferential creditors = Unsecured creditors as per list A)

Note : In the absence of details, 'Wages Rs. 6000' and 'Salaries Rs. 1,000' are shown as 'fully preferential, assuming that they are payable to a large number of individuals.

Calculation of preferential and non preferential creditors

Illustration 2

Mr. Deepak filed his petition for insolvency on 31st December 1994. The details of outstanding expenses are as follows:

(i) Salaries of 8 clerks @ Rs.150 per month for each clerk for 3 months.

(ii) Wages of a labourer for the month of August 1994 Rs.120.

(iii) Wages of 8 labourers for the month of September 1994 @ Rs.110 per labourer.

(iv) Rent of landlord for the months of November and December 1994 Rs. 800.

(v) Amount due to the Municipality for Rs. 1,000, to the income tax department Rs.2,000 and to the sales tax department Rs. 2,000.

(vi) Salaries of two clerks for the month of July 1993 Rs. 500 each.

You are required to find out the amount of preferencial and non-preferencial creditors according to Presidency Towns Insolvency Act.

Solution:

Particulars	Total Amount due Rs.	preferential creditors Rs.	non - preferential creditors Rs.
(1) Amount due to the Government or Any local Authority;			
(i) Income tax Dept.	2,000	2,000	–
(ii) Sales tax Dept.	2,000	2,000	–
(iii) Municipal Dues	1,000	1,000	–
(2) Salaries or Wages due to clerks or labourers			
(i) Salaries of 8 clerks for 3 months @ Rs. 150 p.m.	3,600	2,400	1,200
(ii) Wages of a labourer for the month of August 1994	120	100	20
(iii) Wages of 8 labourers for the month of Sep. 1994 @ Rs. 110 per labourer.	880	800	80
(iv) Salaries of two clerks (for July 1993)	1,000	–	1,000
(3) Rent due to landlord (for two months)	800	400	400
	11,400	8,700	2,700

Note: Salaries for July 1993 are not preferential because they are not within 12 months before the date of Insolvency.

Various creditors under Lists A, B, C & D

Illustration 3

Mr. Umesh of Madurai consults you for preparing a statement of affairs. How will the following items appear in the various lists ?

(i) Private liabilities Rs. 20,000.

(ii) Unsecured loans Rs. 4,00,000

(iii) Loans from Guru Rs. 1,20,000 secured by plant & machinery. The estimated value of plant & machinery is Rs. 1,10,000 (Book value Rs.1,16,000)

(iv) Bills discounted Rs. 16,000 out of which bills of Rs. 10,000 are expected to be dishonoured.

(v) Loans from Pawar secured by first mortgage on life insurance policy Rs. 80,000. Surrender value of life insurance policy Rs. 1,00,000.

(vi) Land lord Rent for 4 months @ Rs. 150 per month due.

(vii) Loan from Ram Rs. 70,000 secured by second charge on life insurance policy mentioned above.

(viii) Rates and taxes Rs. 800.

(ix) Bank overdraft Rs. 60,000 secured by personal guarantee of a friend of

(x) Loan from wife Rs. 30,000 out of which she received Rs. 16,000 from her father.

(xi) Wages @ Rs. 30 per month per servant for 6 months for 3 servants.

(xii) Salaries @ Rs. 200 per month per clerk for 7 months for 4 clerks.

(xiii) Bills Payable Rs. 8,000.

Solution:

Various items given in the above illustration will appear in the lists A, B, C and D according to Provincial Insolvency Act as given below; since Umesh is from Madurai.

Unsecured Creditors as per List 'A'

Gross Rs.		*Expected to Rank* (Rs.)
4,00,000	Unsecured Loans	4,00,000
20,000	Private Liabilities	20,000
16,000	Bills discounted	10,000
600	Rent of Landlord (for 4 months unsecured) (150×4)	600
60,000	Bank Overdraft	60,000
30,000	Loan from wife	16,000
480	Wages $(30 \times 6 \times 3) =$ Rs. 540, $(540 - 20 \times 3) =$ Rs. 480	480
5,520	Salaries $(200 \times 7 \times 4) =$ Rs. 5,600, $(5{,}600 - 20 \times 4) =$ Rs. 5,520	5,520
8,000	Bills Payable	8,000
5,40,600		5,20,600

Fully secured Creditors as per list B

Rs.				Rs.
80,000	Loan From Pawar			80,000
	Less: Estimated value of securities			1,00,000
	Surplus carried to List 'C'			20,000
	Partly secured Creditors as per List 'C'			
	Loan from Guru		1,20,000	
	Loan from Ramu		70,000	
1,90,000			1,90,000	
	Less: Estimated Value of			
	Plant & Machinery	1,10,000		
	Surplus from List B	20,000	1,30,000	60,000
	Preferencial Creditors as per list 'D'			
800	Rates & taxes			800
60	Wages $(20 \times 3 = 60)$			60
80	Salaries $(20 \times 4 = 80)$			80
940	Total			940

Treatment of specified items

Illustration 4

How will you treat the following in the statement of affairs and deficiency A/c?

(i) Rs. 40,000 loan from wife has been included in unsecured creditors of Rs. 1,00,000. Wife has paid this loan out of her *Stridhan.*

(ii) 16 months before declaration of insolvency, a private house of Rs. 60,000 was transferred to his wife without consideration.

(iii) Private assets of Rs. 50,000 of the insolvent include Rs. 6,000 *Stridhan* of his wife and private liabilities are Rs. 30,000.

(iv) The insolvent has transferred his private cottage of Rs. 36,000 to his daughter in consideration of her marriage.

Solution:

(i) Loan of Rs. 40,000 taken from wife is included in unsecured creditors of Rs. 1,00,000 as this loan has been paid out of *Stridhan* (Women's Property). Hence, it will be treated as unsecured creditors. Whole of this amount Rs. 1,00,000 will be shown in List 'A'.

(ii) Any asset transferred without consideration within two years before the date of declaration of insolvency, can be taken back for payment to creditors, hence the amount of Rs. 60,000 for house will be recorded in List 'E'.

(iii) Rs. 6000 *Stridhan* of wife will not be recorded in List 'E'. Only Rs. 50,000–6,000 i.e. Rs. 44,000 will be recorded in List 'E'. His private liabilities of Rs. 30,000 will be recorded in List 'A'. The difference between Rs. 44,000 and Rs. 30,000 i.e. Rs. 14,000 will be recorded as surplus in the left side of Deficiency Account.

(iv) This amount of Rs. 36,000 will neither be recorded in statement of affairs nor in deficiency Account.

Preparation of statement of affairs of sole trader

Illustration 5

Mr. Chandran of Calcutta finds himself insolvent on 31.12.93. His position was as follows:

Leasehold property Rs. 10,000 (estimated to realise Rs. 9,000)
Plant & Machinery Rs. 4,000 (estimated to realise Rs. 3,000)
Stock in trade Rs. 2,000 (estimated to realise Rs. 1,400)
Book Debts – Good Rs. 6,000
– Doubtful Debts Rs. 500 (estimated to realise 50%)
– Bad Debts Rs. 1,400
Bills in hand – Rs. 375.
Life policy for Rs. 2,500 whose surrender value is Rs. 500 is held by insurance company against a loan of Rs. 200.
Household furniture Rs. 360; household debt Rs. 290.
Bills discounted Rs. 600 (Rs. 200 likely to be dishonoured).

Loan on Mortgage of Leasehold Rs. 5,000.

Cash in hand Rs. 10.

Bank overdraft secured by personal guarantee of Chandran's brother and second mortgage on leasehold Rs. 5,000.

Unsecured creditors Rs. 15,000.

Loan from Nathan Rs. 250 secured by second charge on life policy.

Ground Rent on leasehold for three months accrued Rs. 25.

He could not pay his office clerk's (two in number).

Salaries for six months, Rs. 150 and also rates and taxes amounting to Rs. 150.

Prepare a statement of affairs. ***[Bharathidasan, B.Com., Nov. 2002]***

Solution:

Statement of affairs of Mr. Chandran as on 31.12.93

Gross Liabilities Rs.	*Liabilities*		*Expected to Rank* Rs.	*Property & Assets* Rs.	*Book Value* Rs.	*Expected to produce* Rs.
15,957	Unsecured Creditors as per List 'A'		15,557	Property as per List 'E'		
				Cash in Hand	10	10
5,450	Fully Secured Creditors as per List 'B'	5,450		Stock	2,000	1,400
	Less: Estimated value of Securities	9,500		Machinery	4,000	3,000
	Surplus	4,050		Furniture	360	360
	Less: Amount thereof carried to List 'C'	4,000		Book Debts as per List 'F'		
	Surplus as per contra	50		Good	6,000	6,000
5,000	Partly Secured Creditors as per List 'C'	5,000		Doubtful	500	250
	Less: Estimated Value of Security	4,000	1,000	Bad	1,400	-
258	Preferential Creditors as per list 'D'	258		Bill of Exchange as per List 'G'	375	375
	[Deducted as per contra]	258		Surplus as per Contra		50
		Nil			14,645	11,445
				Less: Preferential Creditors as per Contra		258
						11,187
				Deficiency as per List 'H'		5,370
26,665			16,557			16,557

Working Notes:

(i) Calculation of Unsecured Creditors as per List 'A'

		Rs.
(a)	Unsecured Creditors	15,000
(b)	Bills discounted (likely to be dishonoured) (full amount of Rs. 600 appears under gross liabilities)	200
(c)	Household debts	290
(d)	Salary of two clerks $\left(150 \times \frac{2}{6}\right)$	50
(e)	Outstanding rent (two month's rent is not preferential) (i.e) $\left(25 \times \frac{2}{3}\right)$	17
		15,557

(ii) Calculation of fully secured creditors:

(a)	Loan on mortgage on lease hold	5,000
(b)	Insurance Company (As the surrender value of Rs.500 both Mr. Nathan and Insurance Company can be fully covered having surplus of Rs. 50)	200
(c)	Mr. Nathan	250
		5,450

(iii) After meeting the first charge on lease hold, only Rs. 4,000 is left which is not sufficient to meet the Bank overdraft fully. As such, bank will be partly secured. Personal guarantee of Chandran's brother cannot be considered at all.

(iv) Calculation of Preferential Creditors

(a)	Outstanding Rent $\left(25 \times \frac{1}{3}\right)$	8
(b)	Clerk's salaries $\left(150 \times \frac{4}{6}\right)$	100
(c)	Outstanding taxes	150
		258

Note: In the above problem, Presidency Towns Insolvency Act 1909 has been applied because the insolvent debtor resided in a presidency town. i,e, Calcutta.

Statement of affairs & Deficiency A/c of sole trader

Illustration 6

From the following particulars, prepare the statement of affairs and deficiency account of Mohan who is an insolvent debtor:

Unsecured Creditors Rs. 30,100; Creditors partly secured Rs. 38,160 (Holding security of the value of Rs. 36,200 which is estimated to realise only Rs. 12,000). Preferential creditors Rs. 1,000; Bills Receivable discounted Rs. 4,120 (upon which it is estimated that there will be liability of Rs. 560); Stock in trade Rs. 20,020 (estimated to realise Rs. 16,000). Book debts: Good Rs. 15,720; doubtful and bad Rs. 1,300 (estimated to realise Rs. 356) Land and Buildings Rs. 16,000 (estimated to realise Rs. 10,000). Plant & Machinery Rs. 25,000 (estimated to realise Rs. 11,000). Cash in hand Rs. 4.

He started business five years ago with a capital of Rs. 50,000; The trading after charging interest on capital at Rs. 2,000 per year resulted in a profit of Rs. 1204 for the first year and losses of Rs. 740, Rs. 900, Rs. 1,000 and Rs. 1,400 for the subsequent years. His drawings were at the rate of Rs. 1,800 a year and there was a speculation loss of Rs. 3,180 during the whole period of five years.

Solution:

Statement of Affairs as at ....

Gross Liabilities Rs.	*Liabilities*	*Estimated to rank* Rs.	*Assets*	*Book Value* Rs.	*Exp. to produce* Rs.
34,220	Unsecured creditors as per List 'A'	30,660	Property as per List 'E':– Cash in hand	4	4
			Stock in trade	20,020	16,000
–	Fully secured creditors as per List 'B'	–			
38,160	Partly secured creditors as List 'C' 38,160 *Less* Estimated value of of securities 12,000	26,160	Plant & Machinery	25,000	11,000
			Land & Buildings	16,000	10,000
			Book debts as per List 'F':–		
1,000	Preferential creditors as per List 'D' 1,000 Deducted as per contra 1,000 Nil		Good	15,720	15,720
			Doubtful & Bad	1,300	356
			Bill of Exchange as per List 'G'	–	–
				78,040	53,080
			Less: Preferential creditors as per contra	–	1,000
					52,080
			Deficiency as per List H		4,740
					56,820
73,380		56,820			

Working Note: *Unsecured creditors as per List A*

	Gross Rs.	Estimated to Rank Rs.
Unsecured Creditors	30,100	30,100
Bills Receivable discounted	4,120	560
	34,220	30,660

Deficiency A/c (List 'H')

Particulars	Rs.	*Particulars*		Rs.
Excess of assets over Liabilities i.e., Capital	50,000	Losses from business (740 + 900 + 1000 + 1400)		4,040
Profit (Ist year)	1,204			
Interest on Capital (Rs. 2,000 × 5 years)	10,000	Drawings (Rs. 1,800 × 5 years)		9,000
Deficiency (as per statement of affairs)	4,740	Bad debts (1,300 – 356)		944
		Other Losses:		
		Stock	4,020	
		Plant & Machinery	14,000	
		Land & Buildings	6,000	
		Bills discounted & dishonoured	560	
		Security (Partly secured creditors) (36200 – 12000)	24,200	
		Loss in speculation	3,180	51,960
	65,944			65,944

Illustration 7

Prabu filed a petition in bankruptcy on 31.6.91. His books showed the following in balances:

	Rs.	Rs.
Capital		3,320
Cash in hand	20	–
Fixtures & fittings (estimated to produce Rs. 160)	500	–
Stock in trade (estimated to produce Rs. 2,400)	3,600	–
Bank Overdraft	–	2,400
Sundry Creditors:–		
Trade Creditors	–	4,000
Bills Payable	–	4,000
Mrs. Prabu	–	400
Sundry Debtors:–		
Good	2,000	
Doubtful (estimated at 50%)	4,000	
Bad	4,000	
Total	14,120	14,120

Liability on bills discounted Rs. 1000, expected to rank Rs. 200. The amount due to Mrs. Prabu was a loan out of money given to her by Prabu.

His household furniture etc. was valued at Rs. 500. He owned a house valued at Rs. 1,500, having a mortgage on it Rs. 1,200 at 4%. Interest paid upto the preceding 31st December.

Preferential creditors amounted to Rs. 70 (included in sundry creditors) and Rs. 30 for rates on the house.

Prepare a statement of affairs and deficiency A/c. *[Madras, B.Com April 2007 1/2 Figs]*

Solution:

Statement of affairs of Prabu as on 30.6.91

Gross liabilities Rs.	Liabilities		Estimated to Rank Rs.	Property & Assets Rs.	Book Value Rs.	Expected to produce Rs.
			10,530	Property as per List E:-		
11,730	Unsecured Creditors as per List 'A'			Cash in hand	20	20
				Stock in trade	3,600	2,400
1,224	Fully secured Creditors as per List 'B'	1,224		Fixture & fittings	500	160
	Less: Estimated value of security	1,500		Household furniture	–	500
	Surplus as per contra	276		Book debts as per list F:-		
				Good	2,000	2,000
				Doubtful	4,000	2,000
				Bad	4,000	-
–	Partly secured creditors as per List 'C'		–	Surplus as per Contra	–	276
100	Preferential Creditors as per List 'D'	100			14,120	7,356
				Less: Preferential Creditors as per contra		100
	Deducted as per Contra	100				7,256
			–	Deficiency as per List 'H'		3,274
13,054			10,530			10,530

Deficiency A/c (List 'H')

Excess of assets over liabilities i.e. Capital		3,320	Bad debts as per List 'F'		6,000
Surplus from Prabu's Estate			Other. Losses:–		
Household furniture		500	Loss on realisation of:		
House	1,500		fixture & fittings	340	
Less: Rates	30		Stock in trade	1,200	1,540
	1,470		Loss on Bills discounted		200
Less: Mortgage together with interest	1,224	246			
Exemption from Mrs. Prabu's Loan		400			
Deficiency (as per statement of affairs)		3,274			
		7,740			7,740

Working Notes:

(1) Mrs. Prabu cannot claim the amount due to her since the loan is out of money given to her by the insolvent.

(2) *Unsecured creditors as per List 'A'*

Gross Rs.		Net. Rs.
3,930	Trade Creditors (4000 – 70 preferential creditors)	3,930
4,000	Bills Payable	4,000
2,400	Bank overdraft	2,400
1,000	Bills discounted expected to rank	200
400	Mrs. Prabu	Nil
11,730		10,530

(3) *Fully Secured as per List 'B'*

	Amount Rs.	Value of Security Rs.
Mortgage on house	1, 200	–
Interest @ 4% p.a. on Rs. 1,200 for 6 months	24	1,500
	1, 224	1,500

(4) *Preferential Creditors as per List 'D'*	Rs.
Included in trade creditors	70
Rates on the house	30
	100

Illustration 8

Mr. X is insolvent. He supplies to you the following information as on 31.12.92.

	Rs.
Cash in hand	1,000
Creditors for goods	5,25,000
Salary due to clerks	7,000
Taxes due to Government	21,000
Bank loan secured by lien on stock of the book value of Rs. 3,50,000	1,75,000
Furniture (Expected to realise Rs. 35,000)	70,000
Stock (Expected to realise 60%)	5,25,000
Book debts (good)	70,000
Book debts (doubtful, expected to realise 40%)	1,75,000
Bills receivable (Rs. 52,500 bad)	87,500
Bills discounted (Rs. 35,000 bad)	1,05,000
Loan from Mrs. 'X'	1,75,000

Mr.'X' started business six years ago with a capital of Rs. 4,37,500. He drew Rs. 87,500 each year for private purposes but did not maintain proper books of accounts. Mrs. 'X' gave up her jewellery valued at Rs. 70,000 to the receiver.

[*Bharathiar, B.Com., April 2001 (10 Times)*]

Solution:

Working Notes: (i) **Trial Balance**

	Debit Rs.		Credit Rs.
Cash	1,000	Creditors	5,25,000
Furniture	70,000	Outstanding Salary	7,000
Stock	5,25,000	Outstanding taxes	21,000
Debtors (70,000+1,75,000)	2,45,000	Bank Loan	1,75,000
Bills Receivable	87,500	Loan from Mrs. 'X'	1,75,000
Drawings $(87{,}500 \times 6 \text{ yrs.})$	5,25,000	Capital	4,37,500
		Accumulated profit (Bal.fig)	1,13,000
	14,53,500		14,53,500

(ii) Calculation of Unsecured Creditors:-

	Gross Rs.	*Expected to Rank* (Rs.)
Trade Creditors	5,25,000	5,25,000
Liabilities for bills discounted	1,05,000	35,000
	6,30,000	5,60,000

Statement of affairs of Mr. X as on 31.12.92

Gross Liabilities Rs.	*Liabilities*		*Expected to rank* Rs.	*Property & Assets*	*Book Value* Rs.	*Expected to produce* Rs.
6,30,000	Unsecured Creditors as per List 'A'		5,60,000	Property as per List 'E':–		
	Fully Secured creditors as per List 'B'	1,75,000		Cash in hand	1,000	1,000
	Less: Estimated value of securities $(3{,}50{,}000 \times 60\%)$	2,10,000		Stock	1,75,000	1,05,000
				Furniture	70,000	35,000
				Jewellery from wife	–	70,000
–	Surplus as per contra	35,000		Book debts as per List 'F':–		
	Partly secured Creditors as per List 'C'		–	Good	70,000	70,000
				Doubtful $\left(1{,}75{,}000 \times \frac{40}{100}\right)$	1,75,000	70,000
28,000	Preferential creditors as per List 'D'	28,000		Bills Receivable as per List 'G'	87,500	35,000
	Deducted as per contra	28,000	–	Surplus from contra	–	35,000
					5,78,500	4,21,000
				Less: Preferential creditors as per contra		28,000
						3,93,000
				Deficiency as per List 'H'		1,67,000
6,58,000			5,60,000			5,60,000

Deficiency A/c (List 'H')

Excess of assets over liabilities i.e., Capital	4,37,500	Bad debts as per List 'F'		1,05,000
Profit (as calculated in trial Balance)	1,13,000	Drawings $(87{,}500 \times 6\,yrs)$		5,25,000
Income or Profit from others sources since 1.1.86 (Jewellery from wife)	70,000	Other Losses:		
Exemption from Mrs. X's Loan	1,75,000	Loss on realisation of:		
Deficiency (as per statement of affairs)	1,67,000	Furniture	35,000	
		Stock	2,10,000	
		Bills Receivable	52,500	2,97,500
		Loss on bills discounted		35,000
	9,62,500			9,62,500

Note: It is assumed that loan from wife (Mrs. X) Rs. 1,75,000 has been given by her out of her husband's money.