

7. HIRE PURCHASE SYSTEM

PROBLEM NO: 1

(i)

Journal Entries in Books of H.P & Co

Date	Particulars	Dr. Rs.	Cr. Rs.
2010			
Jan 1	Pick –up van A/c Dr.	10,000	
	To FM & Co A/c		10,000
	(Being purchase of a pickup van on hire purchase from FM & Co)		
Jan 1	FM & Co A/c Dr.	40,000	
	To Bank A/c		40,000
	(Being down payment made on signing the HP contract)		
Dec 31	Interest A/c Dr.	3,600	
	To FM & Co A/c		3,600
	(Being interest payable @ 6% on 60,000)		
Dec 31	FM & Co A/c (20000+3600) Dr.	23,600	
	To Bank A/c		23,600
	(Being 1 st Installment paid along with interest)		
Dec 31	Depreciation A/c Dr.	10,000	
	To pickup van A/c		10,000
	(Being depreciation charged @ 10% p.a on 1,00,000)		
Dec 31	Profit & Loss A/c Dr.	1,36,000	
	To Interest A/c		3,600
	To Depreciation A/c		10,000
	(Being depreciation & interest transferred to Profit & Loss A/c)		
2011			
Dec 31	Interest A/c Dr.	2400	
	To FM & Co A/c		2400
	(Being interest payable @ 6% on 40,000)		
Dec 31	FM & Co A/c Dr.	22,400	
	To Bank A/c		22,400
	(Being 2 nd Installment paid along with interest)		
Dec 31	Depreciation A/c Dr.	10,000	
	To pickup van A/c		10,000
	(Being depreciation charged @ 10% p.a)		
Dec 31	Profit & Loss A/c Dr.	10,000	
	To Depreciation A/c		10,000
	(Being depreciation transferred to Profit & Loss A/c)		
Dec 31	Profit & Loss A/c Dr.	2,400	
	To interest A/c		2,400
	(Being interest paid transferred to P&L A/c)		
2012			
Dec 31	Interest A/c Dr.	1,200	
	To FM & Co A/c		1,200
	(Being interest payable @ 6% on 20,000)		
Dec 31	FM & Co A/c Dr.	21,200	
	To Bank A/c		21,200
	(Being last installment paid along with interest)		
Dec 31	Depreciation A/c Dr.	10,000	
	To Pick up van A/c		10,000
	(Being depreciation charged @ 10% p.a on 1,00,000)		

Dec 31	Profit & Loss A/c	Dr.	11,200	
	To Depreciation A/c			10,000
	To Interest A/c			1200
	(Being depreciation & interest transferred to Profit & Loss A/c)			

(ii)

Ledger in Books of H.P & Co

Pick up van A/c

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
01.01.10	To FM & Co A/c	1,00,000	31.12.10	By depreciation A/c	10,000
			31.12.10	By balance c/d	90,000
		1,00,000			1,00,000
01.01.11	To balance b/d	90,000	31.12.11	By depreciation A/c	10,000
				By balance c/d	80,000
		90,000			90,000
01.01.12	To balance b/d	80,000	31.12.12	By depreciation	10,000
				By balance c/d	70,000
		80,000			80,000

F.M & Co A/c

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
01.01.10	To Bank A/c	40,000	1.1.10	By Pickup van A/c	1,00,000
31.12.10	To Bank A/c	23,600	31.12.10	By Interest A/c	3600
	To Balance c/d	<u>40000</u>			
		<u>1,03,600</u>			<u>1,03,600</u>
31.12.11	To Bank A/c	22,400	1.1.11	By Balance b/d	40,000
	To Balance c/d	<u>20,000</u>	31.12.11	By Interest A/c	<u>2400</u>
		<u>42,400</u>			<u>42,400</u>
31.12.12	To Bank A/c	21,200	1.1.12	By Balance b/d	20,000
			31.12.12	By Interest A/c	<u>1200</u>
		<u>21,200</u>			<u>21,200</u>

Depreciation A/c

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
31.12.10	To Pick up van A/c	10000	31.12.10	By Profit & Loss A/c	10,000
		<u>10000</u>			<u>10000</u>
31.12.11	To Pick up van A/c	<u>10000</u>	31.12.11	By Profit & Loss A/c	<u>10000</u>
		<u>10000</u>			<u>10000</u>
31.12.12	To Pick up van A/c	<u>10000</u>	31.12.12	By Profit & Loss A/c	<u>10000</u>
		<u>10000</u>			<u>10000</u>

Interest A/c

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
31.12.10	To FM & Co A/c	<u>3600</u>	31.12.10	By Profit & Loss A/c	<u>3600</u>
		<u>3600</u>			<u>3600</u>
31.12.11	To FM & Co A/c	<u>2400</u>	31.12.11	By Profit & Loss A/c	<u>2400</u>
		<u>2400</u>			<u>2400</u>
31.12.12	To FM & Co A/c	<u>1200</u>	31.12.12	By Profit & Loss A/c	<u>1200</u>
		<u>1200</u>			<u>1200</u>

Balance Sheet of HP & Co as on 31st Dec 2010

Liabilities	Amount Rs.	Assets	Amount Rs.
FM & Co A/c	40000	Pick up van	90000

Balance Sheet of HP & Co as on 31st Dec 2011

Liabilities	Amount Rs.	Assets	Amount Rs.
FM & Co A/c	20000	Pick up van	80000

Balance Sheet of HP & Co as on 31st Dec 2012

Liabilities	Amount Rs.	Assets	Amount Rs.
FM & Co A/c	-	Pick up van	70000

(iii)

Hire Purchase interest suspense A/c

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
01.01.10	To FM & Co A/c	7,200	31.12.10	By Interest A/c	3,600
				By balance c/d	<u>3,600</u>
		<u>7,200</u>			<u>7,200</u>
01.01.11	To balance b/d	3600	31.12.11	By Interest	2400
				By balance c/d	<u>1200</u>
		<u>3600</u>			<u>3600</u>
01.01.12	To balance b/d	<u>1200</u>	31.12.12	By Interest	<u>1200</u>
		<u>1200</u>			<u>1200</u>

Interest A/c

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
31.12.10	To HP interest suspense A/c	3600	31.12.10	By Profit & Loss A/c	<u>3,600</u>
		<u>3600</u>			<u>3,600</u>
31.12.11	To HP interest suspense A/c	<u>2400</u>	31.12.11	By Profit & Loss A/c	<u>2400</u>
		<u>2400</u>			<u>2400</u>
31.12.12	To HP interest suspense A/c	<u>1200</u>	31.12.12	By Profit & Loss A/c	<u>1200</u>
		<u>1200</u>			<u>1200</u>

FM & Co A/c

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
01.01.10	To Bank	40000	01.01.10	By Pick up van A/c	100000
31.12.10	To Bank	23600		By HP interest suspense A/c	7200
31.12.10	To Balance c/d	<u>43600</u>			
		<u>107200</u>			<u>107200</u>
31.12.11	To Bank A/c	22400	1.1.11	By Balance b/d	<u>43600</u>
31.12.11	To Balance c/d	<u>21200</u>			
		<u>43600</u>			<u>43600</u>
31.01.12	To Bank A/c	<u>21200</u>	1.1.12	By Balance b/d	<u>21200</u>
		<u>21200</u>			<u>21200</u>

Balance Sheet of HP & Co as on 31st Dec 2010

Liabilities	Amount Rs.	Assets	Amount Rs.
FM & Co A/c	43600	Pick up van	100000
(-) Interest suspense 3600	40000	(-) Depreciation 10000	90000

Balance Sheet of HP & Co as on 31st Dec 2011

Liabilities	Amount Rs.	Assets	Amount Rs.
FM & Co A/c	21200	Pick up van	90000
(-) Interest suspense 1200	200000	(-) Depreciation 10000	80000

Balance Sheet of HP & Co as on 31st Dec 2012

Liabilities	Amount Rs.	Assets	Amount Rs.
FM & Co A/c	-	Pick up van	80000
		(-) Depreciation 10000	70000

PROBLEM NO: 2

Statement showing computation of cash value of machine acquired

Particulars	Installment amount	Interest	Principal
5 th installment	6,000		
Interest (6000 x 5 / 105)	(286)	286	5714
	5,714		
Add 4 th installment	6000		
	11,714		
(-) Interest (11714 x 5 / 105)	(558)	558	5442
	11,156		
Add 3 rd installment	6000		
	17,156		
(-) Interest (11156 x 5 / 105)	(817)	817	5183
	16,339		
Add 2 nd installment	6000		
	22,339		
(-) Interest (22339 x 5 / 105)	(1064)	1064	4936
	21,275		
Add 1 st installment	6000		
	27,275		
(-) Interest (27275x5/105)	(1299)	1299	4701
	25,976	4024	25976

PROBLEM NO: 3

Computation of cash price of Machinery and interest

Particulars	Installment	Interest	Principal
Third installment	55000		
Interest (55000 x 10 / 110)	(5000)	5000	5000
	5000		
Add : 2 nd installment	4900		
	99000		
Interest = 99000x10/110	9000	9000	40000
	90000		

Add: 1 st installment	53000 143000		
Interest 143000x10/10	(13000)	13000	40000
Add: down payment			70000
		27000	2,00,000

Interest paid = 5000 + 9000 + 13000 = 27000

Told cash price = 2,00,000.

PROBLEM NO: 4

Hire Purchase Price = Down Payment + Installments

$$= 1,58,500 + 2,21,900 + 2,06,050 + 1,90,200 + 1,74,350$$

$$= 9,51,000$$

Difference between any two successive installments represents the least amount of interest charged in the last year i.e. $2,21,900 - 2,06,050 = 15,850$

Thus, Interest for the 3rd year = $15,850 \times 2 = 31,700$

Interest for the 2nd year = $15,850 \times 3 = 47,550$

Interest for the 1st year = $15,850 \times 4 = 63,400$

Thus allocation of installment between cash price and interest is as follows:

Year	Installment	Interest	Cash Price
1	2,21,900	63,400	1,58,500
2	2,06,050	47,550	1,58,500
3	1,90,200	31,700	1,58,500
4	1,74,350	15,850	1,58,500

Total Cash Price = $6,34,000 + 1,58,500 = 7,92,500$.

PROBLEM NO: 5

In books of hire purchaser Machinery a/c

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
Year1	To hire render	15533	Year1	By depreciation	1553
				By balance c/d	13980
		<u>15538</u>			<u>15538</u>
Year 2	To balance b/d	13980	Year 2	By depreciation	1398
				By balance c/d	12582
		13980			13980
Year3	To balance b/d	12582	Year 3	By depreciation	1258
				By hire render	11000
				By profit & loss a/c	324
		<u>12582</u>			<u>12582</u>

Hire Vendor a/c

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
Year1	To bank a/c	6000	Year1	By Machinery a/c	15533
	To balance c/d	12639		By interest a/c	3106
		18639			18639
Year 2	To bank a/c	6000	Year2	By balance b/d	12639
	To balance c/d	9167		By interest a/c	2528
		15167			15167
Year 3	To Machinery	11000	Year 3	By balance b/d	9167
				By interest a/c	1833
		<u>11000</u>			<u>11000</u>

WORKING NOTE:**Computation of cash value of machinery**

Particulars	Installment	Interest	Principal
4 th installment	6000		
Interest = $6000 \times 20/120$	(1000)	1000	5000
add: 3 rd installment	5000 6000		
	11000		
Interest = $11000 \times 20/120$	(1833)	1833	4167
Add : 2 nd installment	9167 6000		
	15167		
Interest ($15167 \times 20/120$)	2528	2528	3427
Add: 1 st installment	12639 6000		
	18639	3106	2894
	3106		
	<u>15533</u>	<u>8467</u>	<u>15533</u>

PROBLEM NO: 6

In books of transport Ltd

Tempo a/c

Date 2010	Particulars	Rs.	Date	Particulars	Rs.
Jan 1	To Delhi Motors	150000	Dec 21	By depreciation ($150000 \times 20\%$)	30000
				By balance e/d	120000
		150000			150000
2011 Jan 1	To balance b/d	120000	2011 Dec 31	By depreciation	24000
				By Delhi Motors A/c	49000
				(value 2 tempo's taken away)	
				By profit & loss A/c (B/F)	15000
				By balance c/d (value of one tempo left)	32000
		120000			120000
2012 Jan 1	To balance b/d	32000	2012 Dec 31	By depreciation	6400
				By balance c/d	25600
		32000			32000

Delhi motors A/c

Date 2010	Particulars	Rs	Date	Particulars	Rs
Jan 1	To bank (downpay)	30000	2010 Jan 1	By tempo's a/c	150000
31 Dec	To bank	50800	Dec 31	By interest ($120000 \times 9\%$)	10800
31. Dec	To balance c/d	80000			
		160800			160800
2011 Jan 1	To tempos a/c	49000	2011	By balance b/d	80000

			Jan1		
Dec 31	To balance c/d	38200	Dec 31	By interest (80000x9%)	7200
		87200			87200
2012 Dec 31	To bank d/c	41638	2012 Jan1	By balance b/d	38200
			Dec 31	By interest a/c (38200x9%)	3438
			41638		41638

WORKING NOTES:

(10000 + 8000)

18000

Particulars	Amount
WORKING NOTE 1:	
Value of one tempo left with buyer	
cost	50000
Depreciation for 2 years @ 20% w (10000 + 8000)	(18000)
Value of tempo at end of 2 nd year	32000
WORKING NOTE 2:	
Value of 2 tempos taken by hire vendor	
Cost (50000 x 2)	100000
Depreciation @ 30% w.d.v method for 2yrs (30000 + 21000)	(51000)
Value of tempos taken away	49000
WORKING NOTE 3:	
Computation of profit (or) loss on Repossession	
Value of tempos taken over	49000
Book value of 2 tempos (32000 x 2)	(64000)
Loss to X Transport Ltd on taken over of 2 tempos	(15000)

THE END