

11

Hire Purchase and Instalment Sale Transactions

Learning Objectives

After studying this chapter, you will be able to:

- ◆ Understand the salient features and nature of Hire purchase transactions.
- ◆ Journalise the Hire purchase entries both in the books of hire purchaser and the hire vendor.
- ◆ Learn various methods of accounting for hire purchase transactions.
- ◆ Ascertain various missing values, required while accounting the hire purchase transactions, on the basis of given information.
- ◆ Calculate and record the value of repossessed goods and also to calculate the profit on re-sale of such goods.
- ◆ Understand the instalment payment system and also how it is different from hire purchase transactions.

1. Introduction

With an increasing demand for better life, the consumption of goods has been on the expanding scale. But, this has not been backed up by adequate purchasing power, transforming it into effectual demand, i.e., actual sale at set or settled prices. This has created the market for what is called **hire purchase**.

When a person wants to acquire an asset but is not sure to make payment within a stipulated period of time he may pay in instalments if the vendor agrees. This enables the purchaser to use the asset while paying for it in instalments over an agreed period of time. This type of a business deal is known as hire purchase transaction. Here, the customer pays the entire amount either in monthly or quarterly or yearly instalments, while the asset remains the property of the seller until the buyer squares up his entire liability. For the seller, the agreed instalments include his interest on the assets given on credit to the purchaser. Therefore,

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when the total amount is paid in instalments over a period of time is certainly higher than the cash down price of the article because of interest charges. Obviously, both the parties gain in the bargain. By virtue of this, the purchaser has the right of immediate use of the asset without making down right payment from his own, by this, he gets both credit and product from the same seller. From seller's view point, he derives the benefit by increase in sale and also he recovers his own cost of credit.

2. Nature of Hire Purchase Agreement

Under the Hire Purchase System the Hire Purchaser gets possession of the goods at the outset and can use it, while paying for it in instalments over a specified period of time as per the agreement. However, the ownership of the goods remains with the Hire Vendor until the hire purchaser has paid all the instalments. Each instalment paid by the hire purchaser is treated as hire charges for using the asset. In case he fails to pay any of the instalments (even the last one) the hire vendor will take back his goods without compensating the buyer, i.e., the hire vendor is not going to pay back a part or whole of the amount received through instalments till the date of default from the buyer.

3. Special Features of Hire Purchase Agreement

1. **Possession:** The hire vendor transfers only possession of the goods to the hire purchaser immediately after the contract for hire purchase is made.
2. **Installments:** The goods are delivered by the hire vendor on the condition that a hire purchaser should pay the amount in periodical instalments.
3. **Down Payment:** The hire purchaser generally makes a down payment i.e an amount on signing the agreement.
4. **Constituents of Hire purchase instalments:** Each instalment consists partly of a finance charge (interest) and partly of a capital payment.
5. **Ownership:** The property in goods is to pass to the hire purchaser on the payment of the last instalment and exercising the option conferred upon him under the agreement.
6. **Repossession:** In case of default in respect of payment of even the last instalment, the hire vendor has the right to take the goods back without making any compensation.

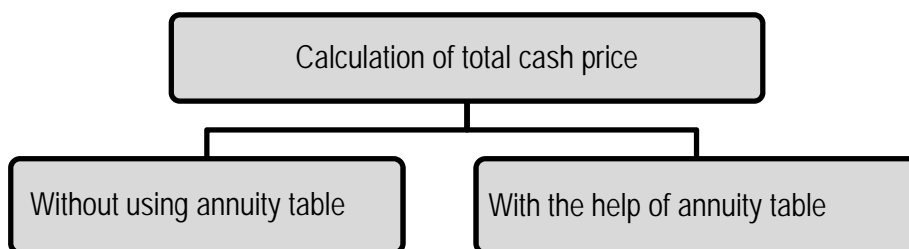
4. Terms used in Hire Purchase Agreements

1. **Hire Vendor:** Hire vendor is a person who delivers the goods alongwith its possession to the hire purchaser under an hire purchase agreement.
2. **Hire Purchaser:** Hire purchaser is a person who obtains the goods and rights to use the same from hire vendor under an hire purchase agreement.
3. **Cash Price:** Cash price is the amount to be paid by the buyer on outright purchase in cash.

4. **Down Payment:** Down payment is the initial payment made to the hire vendor by the hire purchaser at the time of entering into hire purchase agreement.
5. **Hire Purchase Instalment:** Hire purchase instalment is the amount which the hire purchaser has to pay after a regular interval upto certain period as specified in the agreement to obtain the ownership of the asset purchased under a hire purchase agreement. It comprises of principal amount and the interest on the unpaid amount.
6. **Hire purchase price:** It means the total sum payable by the hire purchaser to obtain the ownership of the asset purchased under hire purchase agreement. It comprises of cash price and interest on outstanding balances.

5. Ascertainment of Total Cash Price

We know that the basis for accounting in the books of the hire purchaser is the total cash price. Sometimes, the total cash price may not be given. For the purpose of ascertaining the total cash price, we can use any of the following methods according to the need.



5.1. Calculation of Total Cash Price without using Annuity Table

In this method, the interest included in the last instalment is to be calculated first with the help of the appropriate formula (explained below).

For example in a hire purchase transaction, apart from down payment, four other instalments are payable. The interest will be calculated first on the 4th instalment, then on the 3rd instalment, then on the 2nd instalment and lastly on the 1st instalment. Interest on down payment will be nil.

In this connection, it should be noted that the amount of interest will go on increasing from the 4th instalment to the 3rd instalment, from the 3rd instalment to the 2nd instalment and from the 2nd instalment to the 1st instalment.

We know that interest is to be calculated on the outstanding balance of cash price.

In this case, we will have to calculate the interest with the help of the total amount due on hire purchase price since the cash price is not known. For the purpose of calculating the interest, the following steps should be followed:

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Step 1: Calculate the ratio between interest and the amount due with the help of the following formula:

$$\text{Ratio of interest and amount due} = \frac{\text{Rate of interest}}{100 + \text{Rate of interest}}$$

Step 2: Calculate the interest included in the last instalment by applying the following formula:

Interest = Total amount due at the time of instalment x Ratio of interest and amount due (as calculated in step 1)

Step 3: Subtract the interest (as calculated in step 2) from this instalment to get the amount of outstanding cash price at the time of last instalment.

Step 4: Add the cash price calculated in Step 3 to the amount of instalment due at the end of the third year.

Step 5: Calculate the interest on the entire sum (cash price included in the 4th instalment + amount of 3rd instalment). Deduct this interest from the total amount due at the end of 3rd year to get the outstanding cash price at the time of 3rd instalment.

Step 6: Add the cash price calculated in step 5 to the amount of instalment due at the end of 2nd year.

Step 7: Calculate the interest on the entire sum so obtained in Step 6. Deduct this interest from the total amount due at the end of 2nd year to get the outstanding cash price at the time of 2nd instalment.

Step 8: Add the cash price calculated in Step 7 to the amount of instalment due at the end of 1st year.

Step 9: Calculate the interest on the entire sum so obtained in Step 8. Deduct this interest from the total amount due at the end of 1st year to get the outstanding cash price at the time of 1st instalment.

Step 10: Add the cash price calculated in Step 9 to the amount of down payment, if any. The sum so obtained will be the total cash price.

Illustration 1

Asha purchased a truck on hire purchase system. As per terms he is required to pay ₹ 70,000 down, ₹ 53,000 at the end of first year, ₹ 49,000 at the end of second year and ₹ 55,000 at the end of third year. Interest is charged @ 10% p.a.

You are required to calculate the total cash price of the truck and the interest paid with each instalment.

Solution

(1) Ratio of interest and amount due = $\frac{\text{Rate of interest}}{100 + \text{Rate of interest}} = \frac{10}{110} = \frac{1}{11}$

(2) Calculation of Interest and Cash Price

No. of instalments	Amount due at the time of instalment	Interest	Cash price
[1]	[2]	[3]	[4]
3 rd	55,000	1/11 of ₹ 55,000 = ₹ 5,000	50,000
2 nd	*99,000	1/11 of ₹ 99,000 = ₹ 9,000	90,000
1 st	**1,43,000	1/11 of ₹ 1,43,000 = ₹ 13,000	1,30,000

Total cash price = ₹ 1,30,000 + 70,000 (down payment) = ₹ 2,00,000.

* ₹ 50,000 + 2nd instalment of ₹ 49,000 = ₹ 99,000.

** ₹ 90,000 + 1st instalment of ₹ 53,000 = ₹ 1,43,000.

Illustration 2

A acquired on 1st January, 2012 a machine under a Hire-Purchase agreement which provides for 5 half-yearly instalments of ₹ 6,000 each, the first instalment being due on 1st July, 2012. Assuming that the applicable rate of interest is 10 per cent per annum, calculate the cash value of the machine. All working should form part of the answer.

Solution

Statement showing cash value of the machine acquired on hire-purchase basis

	Instalment Amount	Interest @ 5% half yearly (10% p.a.) = $\frac{5}{105} = \frac{1}{21}$ (in each instalment)	Principal Amount (in each instalment)
	₹	₹	₹
5th Instalment	6,000	286	5,714
Less: Interest	<u>(286)</u>		
	5,714		
Add: 4th Instalment	<u>6,000</u>		
	11,714	558	5,442
Less: Interest	<u>(558)</u>		(11,156-5,714)
	11,156		
Add: 3rd instalment	<u>6,000</u>		
	17,156	817	5,183
Less: Interest	<u>(817)</u>		(16,339-11,156)
	16,339		

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<i>Add:</i> 2nd instalment	<u>6,000</u>		
	22,339	1,063	4,937
<i>Less:</i> Interest	<u>(1,063)</u>		(21,276–16,339)
	21,276		
<i>Add:</i> 1st instalment	<u>6,000</u>		
	27,276	1,299	4,701
<i>Less:</i> Interest	<u>(1,299)</u>	—	<u>(25,977–21,276)</u>
	<u>25,977</u>	<u>4,023</u>	<u>25,977</u>

The cash purchase price of machinery is ₹ 25,977.

5.2 Calculation of Total Cash Price with the help of Annuity Table

Cash price = Down payment + Present value of instalments

Present value of instalments is calculated as follows:

(a) If present value of an annuity of ₹ 1 for a given period, at given rate of interest, is given
 Present value of instalments = Annual instalments x Present value of an annuity of ₹ 1 for a given period at given rate of interest

$$= \text{Annual instalment} \times \frac{(1+r)^n - 1}{r(1+r)^n}$$

(b) If annuity to recover ₹ 1 during a given period at given rate of interest is given

$$= \text{Annual instalment} \times \frac{r(1+r)^n}{(1+r)^n - 1}$$

6. Ascertainment of Interest

We know that the hire purchase price consists of two elements: (i) cash price; and (ii) interest. Cash price is the capital expenditure incurred for the acquisition of an asset and (ii) interest is the revenue expense for the delay in making the full payment. Ascertainment of any of these two gives the answer for the other, e.g., if we ascertain the total amount of interest, it becomes very simple to ascertain the cash price just by deducting the amount of interest from the hire purchase price.

Interest is charged on the amount outstanding. Therefore, if the hire purchaser makes a down payment on signing the contract, it will not include any amount of interest. It should be noted that though the instalments of a hire purchase agreement may be equal, the interest element in each instalment is not the same.

At the time of calculating interest, students may face the following two situations:

(a) When the cash price, rate of interest and the amount of instalments are given; and

(b) When the cash price and the amount of instalments are given, but the rate of interest is not given.

Now, let us consider the above two situations.

6.1 When the cash price, rate of interest and the amount of instalments are given

In this situation, the total amount of interest is to be ascertained first. It is the difference between the hire purchase price (down payment + total instalments) and the cash price. To calculate the amount of interest involved in each instalment the following steps are followed:

Step 1: Deduct down payment from the cash price. Calculate the interest at the given rate on the remaining balance. This represents the amount of interest included in the first instalment.

Step 2: Deduct the interest of Step 1 from the amount of first instalment. The resultant figure is the cash price included in the first instalment.

Step 3: Deduct the cash price of the 1st instalment (Step 2) from the balance due after down payment. It represents the amount outstanding after the 1st instalment is paid.

Step 4: Calculate the interest at the given rate on the balance outstanding after the 1st instalment. Deduct this interest from the amount of the 2nd instalment to get the cash price included in the 2nd instalment.

Step 5: Deduct the cash price of the 2nd instalment (Step 4) from the balance due after the 1st instalment. It represents the amount outstanding after the 2nd instalment is paid.

Repeat the above steps till the last instalment is paid.

Illustration 3

Om Ltd. purchased a machine on hire purchase basis from Kumar Machinery Co. Ltd. on the following terms:

- (a) Cash price ₹ 80,000
- (b) Down payment at the time of signing the agreement on 1.1.2013 ₹ 21,622.
- (c) 5 annual instalments of ₹ 15,400, the first to commence at the end of twelve months from the date of down payment.
- (d) Rate of interest is 10% p.a.

You are required to calculate the total interest and interest included in cash instalment.

Solution:

Calculation of interest

	Total (₹)	Interest in each instalment (1)	Cash price in each instalment (2)
Cash Price	80,000		

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Less : Down Payment	(21,622)	Nil	₹ 21,622
Balance due after down payment	58,378		
Interest/Cash Price of 1 st instalment	-	₹ 58,378 x 10/100 = ₹ 5,838	₹ 15,400 - ₹ 5,838 = ₹ 9,562
Less : Cash price of 1 st instalment	(9,562)		
Balance due after 1st instalment	48,816		
Interest/cash price of 2 nd instalment	-	₹ 48,816 x 10/100 = ₹ 4,882	₹ 15,400 - ₹ 4,882 = ₹ 10,518
Less: Cash price of 2 nd instalment	(10,518)		
Balance due after 2nd instalment	38,298		
Interest/Cash price of 3 rd instalment	-	₹ 38,298 10/100 = ₹ 3,830	₹ 15,400 - ₹ 3,830 = ₹ 11,570
Less: Cash price of 3 rd instalment	(11,570)		
Balance due after 3rd instalment	26,728		
Interest/Cash price of 4 th instalment	-	₹ 26,728 x 10/100 = ₹ 2,672	₹ 15,400 - ₹ 2,672 = ₹ 12,728
Less : Cash price of 4 th instalment	(12,728)		
Balance due after 4th instalment	14,000		
Interest/Cash price of 5 th instalment	-	₹ 14,000 x 10/100 = ₹ 1,400	₹ 15,400 - ₹ 1,400 = 14,000
Less : Cash price of 5 th instalment	(14,000)		
Total	Nil	₹ 18,622	₹ 80,000

Total interest can also be calculated as follow:

$$(\text{Down payment} + \text{instalments}) - \text{Cash Price} = ₹ [21,622 + (15400 \times 5)] - ₹ 80,000 = ₹ 18,622$$

6.2 When the cash price and the amount of instalments are given, but the rate of interest is not given

When the rate of interest is not given, but the cash price and the amount of instalments are given, the following steps are followed to calculate the interest:

- Step 1: Calculate the total interest by deducting the cash price from the hire purchase price (i.e., down payment + amount of instalment x number of instalments).
- Step 2: Deduct down payment from the hire purchase price.
- Step 3: Calculate the amount of outstanding balance of the hire purchase price at the beginning of each year.
- Step 4: Calculate the ratio of outstanding balance of Step 3.
- Step 5: Calculate the amount of interest of each instalment on the basis of the ratio of Step 4.

Illustration 4

A Ltd. purchases a plant on hire purchase basis for ₹ 1,00,000 and makes the payment in the following order:

Down payment ₹ 20,000,

the 1st instalment after one year ₹ 40,000;

the 2nd instalment after two years ₹ 20,000

and the last instalment after three years.

The cash price of the plant is ₹ 86,000.

You are required to calculate: (i) the total interest and (ii) the interest included in each instalment.

Solution :

- (i) Total interest = Hire Purchase price – Cash price = ₹ 1,00,000 – ₹ 86,000 = ₹ 14,000
- (ii) Hire purchase price outstanding at the beginning of each year.

	₹
Hire purchase price	1,00,000
Less: Down payment	<u>(20,000)</u>
(a) Hire Purchase Price outstanding at the beginning of the 1 st year	80,000
Less 1 st instalment	<u>(40,000)</u>
(b) Hire Purchase price outstanding at the beginning of the 2 nd year	40,000
Less: 2 nd instalment	<u>(20,000)</u>
(c) Hire Purchase Price outstanding at the beginning of the 3 rd year	20,000
Less: 3 rd instalment	<u>(20,000)</u>
	Nil

Ratio of (a) : (b) : (c) = 80:40:20 or 4:2:1

Interest of 1st instalment = $\frac{4}{7} \times ₹ 14,000 = ₹ 8,000$. Interest of 2nd instalment = $\frac{2}{7} \times ₹ 14,000 = ₹ 4,000$.

And interest of 3rd instalment = $\frac{1}{7} \times ₹ 14,000 = ₹ 2,000$

6.3 When the amount of instalment is given but cash price and rate of interest not given

The difference between any two successive instalments represents the least amount of interest charged in the last year. The amount of interest for each year is calculated as follows:

Interest for 1 st year	= Difference between two successive instalments x (N)
Interest for 2 nd year	= Difference between two successive instalments x (N-1)

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Interest for 3 rd year	= Difference between two successive instalments x (N-2)
Interest for 4 th year	= Difference between two successive instalments x (N-3)
Interest for 5 th year onwards	= Difference between two successive instalments x (N-4)
Note 'N' denotes the number of instalments.	

Illustration 5

X Ltd. purchased a machine on hire purchase basis from Y Ltd. on the following terms: (a) Cash Down payment- ₹ 1,58,500 (b) Four instalments of ₹ 2,21,900, ₹ 2,06,050, ₹ 1,90,200 and ₹ 1,74,350 at the end of the 1st year, 2nd year, 3rd year and 4th year respectively. (c) The payment of cash price in each instalment is uniform. Compute the amount of interest and total cash price of the machine.

Solution

Difference between any two successive instalments 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 = Least amount of interest x 2

$$\text{i.e. } ₹ 15,850 \times 2 = ₹ 31,700.$$

Thus, interest for the 2nd year = ₹ 15,850 x 3 = ₹ 47,550

Thus, interest for the 1st year = ₹ 15,850 x 4 = ₹ 63,400

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

Year	Instalment (₹)	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	<u>1,74,350</u>	<u>15,850</u>	<u>1,58,500</u>
Total	<u>7,92,500</u>	<u>1,58,500</u>	<u>6,34,000</u>

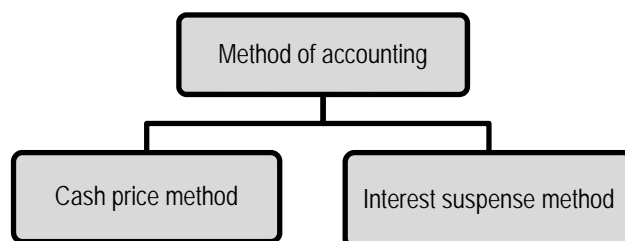
Total cash price = ₹ 6,34,000 + ₹ 1,58,500 = ₹ 7,92,500.

7. Accounting Arrangements of Hire Purchase Transaction

7.1 In the Books of Hire Purchaser

There are following two methods of recording the hire purchase transactions in the books of the hire-purchaser:

1. Cash price method
2. Interest suspense method



Asset taken on hire purchase basis should be considered like ordinary purchase.

However, it is necessary to disclose this fact by classifying it as "Asset on Hire Purchase". Accordingly, amount due to the hire vendor should also be shown in his books as a liability—"Hire Purchase Creditors" with additional such classifications of amount of hire purchase instalment due and amount of hire purchase instalment not yet due.

Cash price method

Under this method, the full cash price of the asset is debited to the Asset Account and credited to the Hire Vendor Account. At the time of payment of instalment, Interest Account is debited and Hire Vendor Account is credited (with the interest on outstanding balance). When instalment is paid, the Hire Vendor Account is debited and Bank Account is credited. At the time of preparation of Final Accounts, interest is transferred to Profit and Loss Account and asset is shown in the Balance Sheet at cost less depreciation. The balance due to hire vendor is shown in the Balance Sheet as a liability (alternatively it can be shown as a deduction from Asset Account).

Accounting

To have proper accounting record, one should know: (1) Date of purchase of the asset; (2) Cash price of the asset; (3) Hire purchase price of the asset; (4) The amount of down payment; (5) Number and amount of each instalment; (6) Rate of interest; (7) Method and rate of depreciation; (8) Date of payment of every instalment; and (9) Date of closing the books of account.

Journal Entries

1.	<i>On entering into the agreement</i> Asset Account To Hire Vendor Account	Dr. [Full cash price]
2.	<i>When down payment is made</i> Hire Vendor Account To Cash/Bank Account	Dr. [Down payment]

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3.	<i>When an instalment becomes due</i> Interest Account To Hire Vendor Account	Dr. [Interest on outstanding balance]
4.	<i>When an instalment is paid</i> Hire Vendor Account To Bank Account	Dr. [Amount of instalment]
5.	<i>When depreciation is charged on the asset</i> Depreciation Account To Asset Account	Dr. [Calculated on cash price]
6.	<i>For closing interest and depreciation account</i> Profit and Loss Account To Interest Account To Depreciation Account	Dr.

However, a firm may maintain Provision for Depreciation A/c instead of charging depreciation to Hire Purchase Asset A/c. In such case the journal entry is:

Profit and Loss A/c	Dr.
To Provision for Depreciation for Asset on Hire Purchase A/c	

and naturally, Asset on Hire Purchase is shown at its historical cost.

Disclosure in the balance sheet

Assets

Fixed Assets :	
Asset (at cash price)	XXXXXXXX.XX
Less : Depreciation	<u>XXXX.XX</u>
	<u>XXXXXXXX.XX</u>

Creditors :

Hire Purchase Creditors :	
Balance in hire vendor's A/c	XXXXX.XX
Instalment due	XXXXX.XX
Instalment not yet due	XXXXX.XX

Illustration 6

On January 1, 2010 HP M/s acquired a Pick-up Van on hire purchase from FM M/s. The terms of the contract were as follows:

(a) *The cash price of the van was ₹ 1,00,000.*

- (b) ₹ 40,000 were to be paid on signing of the contract.
- (c) The balance was to be paid in annual instalments of ₹ 20,000 plus interest.
- (d) Interest chargeable on the outstanding balance was 6% p.a.
- (e) Depreciation at 10% p.a. is to be written-off using the straight-line method.

You are required to:

- (a) Give Journal Entries and show the relevant accounts in the books of HP M/s from January 1, 2010 to December 31, 2012; and
- (b) Show the relevant items in the Balance Sheet of the purchaser as on December 31, 2010 to 2012.

Solution

**In the books of HP M/s
Journal Entries**

Date	Particulars	Dr.	Cr.
		₹	₹
2010 Jan. 1	Pick-up Van A/c Dr. To FM M/s A/c (Being the purchase of a pick-up van on hire purchase from FM M/s)	1,00,000	1,00,000
"	FM M/s A/c Dr. To Bank A/c (Being the amount paid on signing the H.P. contract)	40,000	40,000
Dec. 31	Interest A/c Dr. To FM M/s A/c (Being the interest payable @ 6% on ₹ 60,000)	3,600	3,600
"	FM M/s A/c (₹ 20,000+₹ 3,600) Dr. To Bank A/c (Being the payment of 1 st instalment along with interest)	23,600	23,600
"	Depreciation A/c Dr. To Pick-up Van A/c (Being the depreciation charged @ 10% p.a. on ₹ 1,00,000)	10,000	10,000
"	Profit & Loss A/c Dr.	13,600	

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	To Depreciation A/c			10,000
	To Interest A/c			3,600
	(Being the depreciation and interest transferred to Profit and Loss Account)			
2011	Interest A/c	Dr.	2,400	
Dec. 31	To FM M/s A/c			2,400
	(Being the interest payable @ 6% on ₹ 40,000)			
	FM M/s A/c (₹ 20,000 + ₹ 2,400)	Dr.	22,400	
	To Bank A/c			22,400
	(Being the payment of 2 nd instalment along with interest)			
	Depreciation A/c	Dr.	10,000	
	To Pick-up Van A/c			10,000
	(Being the depreciation charged @ 10% p.a.)			
	Profit & Loss A/c	Dr.	12,400	
	To Depreciation A/c			10,000
	To Interest A/c			2,400
	(Being the depreciation and interest charged to Profit and Loss Account)			
2012	Interest A/c	Dr.	1,200	
Dec. 31	To FM M/s A/c			1,200
	(Being the interest payable @ 6% on ₹ 20,000)			
	FM M/s A/c (₹ 20,000 + ₹ 1,200)	Dr.	21,200	
	To Bank A/c			21,200
	(Being the payment of final instalment along with interest)			
	Depreciation A/c	Dr.	10,000	
	To Pick-up Van A/c			10,000
	(Being the depreciation charged @ 10% p.a. on ₹ 1,00,000)			
	Profit & Loss A/c	Dr.	11,200	
	To Depreciation A/c			10,000
	To Interest A/c			1,200
	(Being the interest and depreciation charged to Profit and Loss Account)			

Ledgers in the books of HP M/s

Pick-up Van Account

Date	Particulars	₹	Date	Particulars	₹
1.1.2010	To FM M/s A/c	1,00,000	31.12.2010	By Depreciation A/c	10,000
		<u> </u>	31.12.2011	By Balance c/d	<u>90,000</u>
		1,00,000			1,00,000
1.1.2011	To Balance b/d	90,000	31.12.2011	By Depreciation A/c	10,000
		<u> </u>	31.12.2011	By Balance c/d	<u>80,000</u>
		90,000			90,000
1.1.2012	To Balance b/d	80,000	31.12.2012	By Depreciation A/c	10,000
		<u> </u>	31.12.2012	By Balance c/d	<u>70,000</u>
		80,000			80,000

FM M/s Account

Date	Particulars	₹	Date	Particulars	₹
1.1.10	To Bank A/c	40,000	1.1.10	By Pick-up Van A/c	1,00,000
31.12.10	To Bank A/c	23,600	31.12.10	By Interest c/d	3,600
31.12.10	To Balance c/d	<u>40,000</u>			<u> </u>
		1,03,600			1,03,600
31.12.11	To Bank A/c	22,400	1.1.11	By Balance b/d	40,000
31.12.11	To Balance c/d	<u>20,000</u>	31.12.11	By Interest A/c	<u>2,400</u>
		42,400			42,400
31.12.12	To Bank A/c	21,200	1.1.12	By Balance b/d	20,000
		<u> </u>	31.12.12	By Interest A/c	<u>1,200</u>
		21,200			21,200

Depreciation Account

Date	Particulars	₹	Date	Particulars	₹
31.12.2010	To Pick-up Van A/c	<u>10,000</u>	31.12.2010	By Profit & Loss A/c	<u>10,000</u>
31.12.2011	To Pick-up Van A/c	<u>10,000</u>	31.12.2011	By Profit & Loss A/c	<u>10,000</u>
31.12.2012	To Pick-up Van A/c	<u>10,000</u>	31.12.2012	By Profit & Loss A/c	<u>10,000</u>

Interest Account

Date	Particulars	₹	Date	Particulars	₹
31.12.2010	To FM M/s A/c	<u>3,600</u>	31.12.2010	By Profit & Loss A/c	<u>3,600</u>

11.16 Accounting

31.12.2011	To	FM M/s A/c	<u>2,400</u>	31.12.2011	By Profit & Loss A/c	<u>2,400</u>
31.12.2012	To	FM M/s A/c	<u>1,200</u>	31.12.2012	By Profit & Loss A/c	<u>1,200</u>

Balance Sheet of HP M/s as at 31st December, 2010

<i>Liabilities</i>	₹	<i>Assets</i>	₹
FM M/s	40,000	Pick-up Van	90,000

Balance Sheet of HP M/s as at 31st December, 2011

<i>Liabilities</i>	₹	<i>Assets</i>	₹
FM M/s	20,000	Pick-up Van	80,000

Balance Sheet of HP M/s as at 31st December, 2012

<i>Liabilities</i>	₹	<i>Assets</i>	₹
	20,000	Pick-up Van	70,000

Interest suspense method

Under this method, at the time of transfer of possession of asset, the total interest unaccrued is transferred to interest suspense account. At latter years, as and when interest becomes due, interest account is debited and interest suspense account is credited.

Journal Entries

1.	<i>When the asset is acquired on hire purchase</i> Asset Account To Hire Vendor Account	Dr. [Full cash price]
2.	<i>For total interest payment is made</i> H.P. Interest Suspense Account To Hire Vendor Account	Dr. [Total interest]
3.	<i>When down payment is made</i> Hire Vendor Account To Bank Account	Dr.
4.	<i>For Interest of the relevant period</i> Interest Account To H.P. Interest Suspense Account	Dr. [Interest of the relevant period]

5.	When an instalment is paid Hire Vendor Account To Bank Account	Dr.
6.	<i>When depreciation is charged on the asset</i> Depreciation Account To Asset Account	Dr. [Calculated on cash price]
7.	<i>For closing interest and depreciation account</i> Profit and Loss Account To Interest Account To Depreciation Account	Dr.

Illustration 7

In illustration 6 assume that the hire purchaser adopted the interest suspense method for recording his hire purchase transactions. On this basis, prepare H.P. Interest Suspense Account, Interest Account and FM M/s Accounts and Balance Sheets in the books of hire purchaser.

Solution

H.P. Interest Suspense Account

Date	Particulars	₹	Date	Particulars	₹
1.1.2010	To FM M/s A/c (W.N.)	7,200	31.12.2010	By Interest A/c	3,600
		<u> </u>	31.12.2010	By Balance c/d	<u>3,600</u>
		<u>7,200</u>			<u>7,200</u>
1.1.2011	To Balance b/d	3,600	31.12.2011	By Interest A/c	2,400
		<u> </u>	31.12.2011	By Balance c/d	<u>1,200</u>
		<u>3,600</u>			<u>3,600</u>
1.1.2012	To Balance b/d	1,200	31.12.2012	By Interest A/c	1,200

Interest Account

Date	Particulars	₹	Date	Particulars	₹
31.12.2010	To H.P. Interest Suspense A/c	3,600	31.12.2010	By Profit & Loss A/c	3,600
31.12.2011	To H.P. Interest Suspense a/c	2,400	31.12.2011	By Profit & Loss A/c	2,400
31.12.2012	To H.P. Interest Suspense A/c	1,200	31.12.2012	By Profit & Loss A/c	1,200

11.18 Accounting

FM M/s Account

Date	Particulars	₹	Date	Particulars	₹
1.1.2010	To Bank A/c	40,000	1.1.2010	By Pick-up Van A/c	1,00,000
31.12.2010	To Bank A/c	23,600	1.1.2010	By H.P. Interest	7,200
31.12.2010	To Balance c/d	<u>43,600</u>		Suspense A/c	
		<u>1,07,200</u>			<u>1,07,200</u>
31.12.2011	To Bank A/c	22,400	1.1.2011	By Balance b/d	43,600
31.12.2011	To Balance c/d	<u>21,200</u>			
		<u>43,600</u>			<u>43,600</u>
31.12.2012	To Bank A/c	21,200	1.1.2012	By Balance b/d	21,200

Balance Sheet of HP M/s as at 31st December, 2010

Liabilities		₹	Assets		₹
FM M/s	43,600		Pick-up Van	1,00,000	
Less: H.P. Interest Suspense	<u>(3,600)</u>	40,000	Less: Depreciation	<u>(10,000)</u>	90,000

Balance Sheet of HP M/s as at 31st December, 2011

Liabilities		₹	Assets		₹
FM M/s	21,200		Pick-up Van	90,000	
Less: H.P. Interest Suspense	<u>(1,200)</u>	20,000	Less: Depreciation	<u>(10,000)</u>	80,000

Balance Sheet of HP M/s as at 31st December, 2012

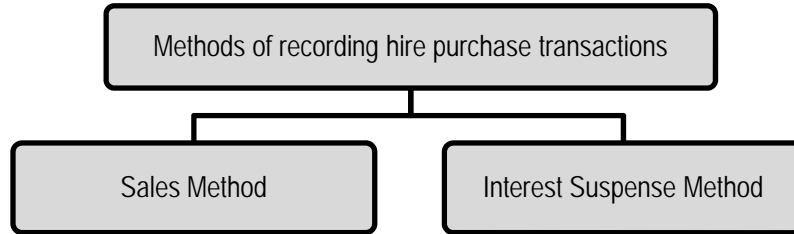
Liabilities		₹	Assets		₹
			Pick-up Van	80,000	
			Less: Depreciation	<u>(10,000)</u>	70,000

Working Note:

Total Interest = ₹ 3,600 + ₹ 2,400 + ₹ 1,200 = ₹ 7,200.

7.2 In the books of the Hire Vendor

There are different methods of recording hire purchase transactions in the books of the hire vendor. It is selected according to the type and value of goods sold, volume of transactions, the length of the period of purchase, etc. The different methods are



Sales Method

A business that sells relatively large items on hire purchase may adopt this method. Under this method, hire purchase sale is treated as a credit sale. The only exception is that the vendor agrees to accept payments in instalments and for that he charges interest. Generally, a special Sales Day Book is maintained for recording all sales under hire purchase agreement. The amount due from the hire purchaser at the end of the year is shown in the Balance sheet on the assets side as Hire Purchase Debtors.

Journal Entries

1.	<i>When goods are sold and delivered under hire purchase</i> Hire Purchaser Account To H.P. Sales Account	Dr. [Full cash price]
2.	<i>When the down payment is received</i> Bank Account To Hire Purchaser Account	Dr.
3.	<i>When an instalment becomes due</i> Hire Purchaser Account To Interest Account	Dr.
4.	<i>When the amount of instalment is received</i> Bank Account To Hire Purchaser Account	Dr.
5.	<i>For closing interest Account</i> Interest Account To Profit and Loss Account	Dr.
6.	<i>For closing Hire Purchase Sales Account</i> H.P. Sales Account To Trading Account	Dr.

11.20 Accounting

It is worth noting that

- (i) *The entire profit on sale under hire purchase agreement is credited to the Profit and Loss account of the year in which the sale has taken place; and*
- (ii) *Interest pertaining to each accounting period is credited to the Profit and Loss Account of that year.*

Interest Suspense Method

This method is almost similar to the sales method, except the accounting for interest. Under this method, the hire purchaser is debited with full cash price and interest (total) included in the hire selling price. Credit is given to the H.P. Sales Account and Interest Suspense Account. When the instalment is received, the Bank Account is debited and the Hire Purchaser Account is credited. At the same time an appropriate amount of interest (i.e., interest for the relevant accounting period) is removed from the Interest Suspense Account and credited to the Interest Account. At the time of preparation of Final Accounts, interest is transferred to the credit of the Profit and Loss Account. The balance of the Interest Suspense Account is shown in the Balance Sheet as a deduction from Hire Purchase Debtors.

Journal Entries

1.	When goods are sold and delivered under hire purchase Hire Purchase Account To H.P. Sales Account To Interest Suspense Account	Dr. [Full cash price + total interest] [Full cash price] [Total Interest]
2.	When down payment/instalment is received Bank Account To Hire Purchaser Account	Dr.
3.	For interest of the relevant accounting period Interest Suspense Account To Interest Account	Dr.
4.	For closing interest Account Interest Account To Profit and Loss Account	Dr.
5.	For closing Hire Purchase Sales Account H.P. Sales Account To Trading Account	Dr.

The disclosure in balance sheet of the respective parties will be:

Balance Sheet of Hire Purchaser

Assets

Balance Sheet of Vendor

Assets

Fixed assets :	Current assets :
Asset on Hire purchase	Hire purchase debtors
<i>Add</i> : Balance in Interest suspense A/c	<i>Less</i> : Balance in Interest suspense A/c
<i>Less</i> : Depreciation	

Illustration 8

M/s Delhi Electronics sells colour TVs., on hire purchase basis. Cost per set is ₹ 14,000, Cash sale price ₹ 15,500 and hire purchase sale price is ₹ 16,800 for 12 monthly instalments payable by 10th of every month. However, the buyer has to make cash down ₹ 1,800 at the time of purchase.

Hire Purchase transactions (No. of sets) in 2012 - Jan. 10, Feb. 12, March 10, April 12, May 10, June 10, July 10, August 15, Sept. 11, Oct. 20, Nov. 20, Dec. 10.

Let us suppose all instalments are duly collected. Show necessary Journal Entries.

Solution

Various relevant accounting information in relation to hire purchase transactions are computed as follows :

Total No. of Transactions	:	150
Cash down	:	₹ 1,800 × 150 = ₹ 2,70,000

Installments Collected/Due

Transactions	No. of Installments collected			No. of Installments Due		
Jan.	10 × 11	=	110	10 × 1	=	10
Feb.	12 × 10	=	120	12 × 2	=	24
March	10 × 9	=	90	10 × 3	=	30
April	12 × 8	=	96	12 × 4	=	48
May	10 × 7	=	70	10 × 5	=	50
June	10 × 6	=	60	10 × 6	=	60
July	10 × 5	=	50	10 × 7	=	70
Aug.	15 × 4	=	60	15 × 8	=	120
Sept.	11 × 3	=	33	11 × 9	=	99
Oct.	20 × 2	=	40	20 × 10	=	200
Nov.	20 × 1	=	20	20 × 11	=	220
Dec.	10 × 0	=	—	10 × 12	=	120
	<u>150</u>		<u>749</u>	<u>150</u>		<u>1051</u>

Check:

Total Instalments for 150 hire purchase transactions are 1800 (150×12) of which 749 instalments fell due and collected and the balance 1051 instalments are not yet paid.

Amount collected for 749 instalments

11.22 Accounting

$$\frac{\text{₹ } 16,800 - \text{₹ } 1,800}{12} \times 749 = \text{₹ } 9,36,250$$

Amount not yet due

$$\frac{\text{₹ } 16,800 - \text{₹ } 1,800}{12} \times 1,051 = \text{₹ } 13,13,750$$

Cash Down = ₹ 2,70,000

Total (₹ 16,800 × 150) = ₹ 25,20,000

Hire Vendor should recognise the amount of instalments collected and cash down value (i.e. ₹ 2,70,000 + ₹ 9,36,250) ₹ 12,06,250 as sale. Balance ₹ 13,13,750 is value of goods lying with the customer at hire purchase price. Stock Reserve should be computed and deducted from such amount to show the Hire Purchase Stock at cost.

Goods lying with Hire Purchaser at Hire Purchase Price × $\frac{\text{Cost}}{\text{Hire Purchase Price}}$

$$\text{Stock at cost} = \text{₹ } 13,13,750 \times \frac{\text{₹ } 14,000}{\text{₹ } 16,800}$$

$$= \text{₹ } 10,94,792$$

$$\text{Stock Reserve} = (\text{₹ } 13,13,750 - 10,94,792) = \text{₹ } 2,18,958$$

Journal Entries

			₹	₹
(1) For Cash down at the time of hire transaction	Cash/Bank A/c	Dr.	2,70,000	
	To Hire Purchase Sale A/c			2,70,000
(2) When instalments fall due	Instalment Due A/c	Dr.	9,36,250	
	To Hire Purchase Sales			9,36,250
(3) On collection of instalments	Cash/Bank A/c	Dr.	9,36,250	
	To Instalment Due A/c			9,36,250
(4) For instalment not due at the year	Hire Purchase Stock A/c	Dr.	13,13,750	
	To Trading A/c			13,13,750
(5) For Stock Reserve	Stock Reserve A/c	Dr.	2,18,958	
	To Hire Purchase Stock A/c			2,18,958

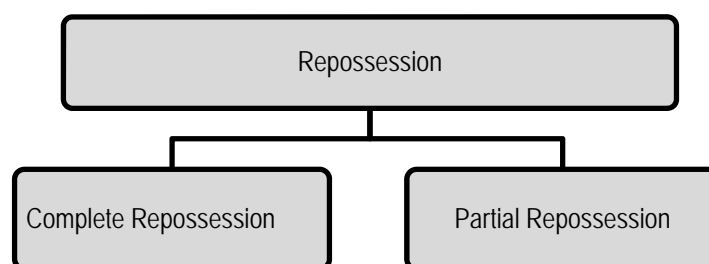
If some instalments become due but not collected at the year end, then they would appear in the Balance Sheet as an asset just like Sundry Debtors.

8. Repossession

In a hire purchase agreement the hire purchaser has to pay up to the last instalment to obtain the ownership of goods. If the hire purchaser fails to pay any of the instalments, the hire vendor takes the asset back in its actual form without any refund of the earlier payments to the hire purchaser. The amounts received from the hire purchaser through down payment and instalments are treated as the hire charges by the hire vendor. This act of recovery of possession of the asset is termed as **repossession**.

Repossessed assets are resold to any other customer after repairing or reconditioning (if necessary). Accounting figures relating to repossessed assets are segregated from the normal hire purchase entries. Repossessions are then accounted for in a separate "Goods Repossessed Account".

So far as the repossession of assets are concerned, the hire vendor can take back the whole of the asset or a part thereof depending on the agreement between the parties. The former is called "Complete Repossession" and the latter "Partial Repossession".



8.1 Complete Repossession

The hire vendor closes Hire Purchaser's Account by transferring balance of Hire Purchaser Account to Goods Repossessed Account.

The hire purchaser closes the Hire Vendor's Account by transferring the balance of Hire Vendor Account to Hire Purchase Asset/Trading Account and then finding the profit and loss on repossession in Asset Account.

Particulars	Books of hire purchaser	Books of hire vendor
Purchase/Sales	Asset A/c ...Dr. To Hire Vendor A/c	Hire Purchaser A/c ...Dr. To Sales A/c
Installment	Hire Vendor A/c ...Dr. To Cash A/c	Cash A/c ...Dr. To Hire Purchaser A/c
Interest	Interest A/c ...Dr. To Hire Vendor	Hire Purchaser A/c ...Dr. To Interest A/c
Repossession	Hire Vendor A/c ...Dr. To Asset A/c	Goods Repossessed A/c Dr. To Hire Purchaser

8.2 Partial Repossession

In case of a partial repossession, only a part of the asset is taken back by the hire vendor and other part is left with the hire purchaser. The Journal Entries are as usual up to the date of default (excepting entry for payment) in the books of both the parties. As a portion of the asset is still left with the hire purchaser, neither party closes the account of the other in their respective books.

Assets are repossessed at a mutually agreed value (based on agreed rate of depreciation which is an enhanced rate). The hire vendor debits the Goods Repossessed Account and credit the Hire Purchaser Account with the value as agreed upon on the repossession. Similarly, the hire purchaser debits the Hire Vendor Account and credits the Assets Account with the same amount. If the repossessed value is less than the book value of the asset, the difference is charged to the Profit and Loss Account of the hire purchaser as 'loss on surrender'.

For the remaining portion of the asset lying with the hire purchaser, the (Hire Purchaser) applies the usual rate of depreciation and shows the Asset Account at its usual written-down value.

Miscellaneous Illustrations

Illustration 9

X Ltd. purchased 3 milk vans from Super Motors costing ₹ 75,000 each on hire purchase system. Payment was to be made: ₹ 45,000 down and the remainder in 3 equal instalments together with interest @ 9%. X Ltd. writes off depreciation @ 20% on the diminishing balance. It paid the instalment at the end of the 1st year but could not pay the next. Super Motor agreed to leave one milk van with the purchaser, adjusting the value of the other two milk vans against the amount due. The milk vans were valued on the basis of 30% depreciation annually on written down value basis. X Ltd. settled the seller's dues after three months.

You are required to give necessary journal entries and the relevant accounts in the books of X Ltd.

Solution

In the Books of X Ltd. Journal Entries

		Dr. (₹)	Cr. (₹)
I Year			
Milk Vans purchased:			
Milk Vans A/c	Dr.	2,25,000	
To Vendor A/c			2,25,000
On down payment:			
Vendor A/c	Dr.	45,000	
To Bank			45,000
I Year end			
Interest A/c (₹ 1,80,000 @ 9%)	Dr.	16,200	

Hire Purchase and Instalment Sale Transactions 11.25

To Vendor A/c				16,200
Vendor A/c	Dr.	76,200		
To Bank A/c				76,200
Depreciation @ 20%				
Depreciation A/c	Dr.	45,000		
To Milk Vans A/c				45,000
Profit & Loss A/c	Dr.	61,200		
To Depreciation				45,000
To interest all				16,200
II Year end				
Depreciation @ 20%				
Depreciation A/c	Dr.	36,000		
To Milk Vans A/c				36,000
Interest A/c	Dr.	10,800		
(1,20,000 @ 9%)				
To Vendor A/c				10,800
Return of goods to vendor A/c	Dr.	73,500		
To Milk Vans A/c				73,500
For Loss in Repossession:				
Profit/Loss A/c	Dr.	22,500		
To Milk Vans A/c				22,500
IIIrd Year Depreciation				
Depreciation A/c	Dr.	9,600		
To Milk Vans A/c				9,600
Settlement of A/cs				
Vendor A/c	Dr.	57,300		
To Bank				57,300

Milk Vans Account

Year		₹	Year		₹
1	To Super Motors A/c	2,25,000	1 end	By Depreciation A/c	45,000
		<u> </u>	"	By Balance c/d	<u>1,80,000</u>
		<u>2,25,000</u>			<u>2,25,000</u>
2	To Balance b/d	1,80,000	2 end	By Depreciation	36,000
				Super Motors (value of 2 vans after depreciation for 2	73,500

11.26 Accounting

			years @ 30%)	
			By P & L A/c (balancing figure)	22,500
			By Balance c/d (one van less depre- ciation for 2 years) @ 20%	<u>48,000</u>
		<u>1,80,000</u>		<u>1,80,000</u>

Super Motors Account

Year		₹	Year		₹
1	To Bank A/c	45,000	1	By Milk Vans A/c	2,25,000
	To Bank A/c	76,200		By Interest @ 9% on ₹ 1,80,000	16,200
	To Balance c/d	<u>1,20,000</u>			<u>2,41,200</u>
		<u>2,41,200</u>			
2	To Milk Van A/c	73,500	2	By Balance b/d	1,20,000
	To Balance c/d	<u>57,300</u>		By Interest A/c	<u>10,800</u>
		<u>1,30,800</u>			<u>1,30,800</u>
3	To Bank A/c	57,300	3	By Balance b/d	57,300

Illustration 10

A firm acquired two tractors under hire purchase agreements, details of which were as follows:

Date of Purchase	Tractor A	Tractor B
	1st April, 2011	1st Oct., 2011
	₹	₹
Cash price	14,000	19,000
Deposit	2,000	2,680
Interest (deemed to accrue evenly over the period of agreement)	2,400	2,880

Both agreements provided for payment to be made in twenty-four monthly instalments, commencing on the last day of the month following purchase, all instalments being paid on due dates.

On 30th June, 2012, Tractor B was completely destroyed by fire. In full settlement, on 10th July, 2012 an insurance company paid ₹ 15,000 under a comprehensive policy out of which ₹ 10,000 was paid to the hire purchase company in termination of the agreement. Any

balance on the hire purchase company's account in respect of these transactions was to be written off.

The firm prepared accounts annually to 31st December and provided depreciation on tractors on a straight-line basis at a rate of 20 per cent per annum rounded off to nearest ten rupees, apportioned as from the date of purchase and up to the date of disposal.

You are required to record these transactions in the following accounts, carrying down the balances on 31st December, 2011 and 31st December, 2012:

- (a) Tractors on hire purchase.
- (b) Provision for depreciation of tractors.
- (c) Disposal of tractors.
- (d) Hire purchase company.

Solution

Hire Purchase accounts in the buyer's books

(a) **Tractors on Hire Purchase Account**

2011				₹	2011			₹
April 1	To	HP Co. - Cash price			Dec. 31	By	Balance c/d	
		Tractor A		14,000			Tractor A	14,000
Oct. 1	"	HP Co. - Cash price					Tractor B	<u>19,000</u>
		Tractor B		<u>19,000</u>				<u>33,000</u>
				<u>33,000</u>				<u>33,000</u>
				₹				₹
2012					2012			
Jan. 1	To	Balance b/d			June 30	By	Disposal of Tractor A/c - Transfer	19,000
		Tractor A	14,000			By	Balance c/d	<u>14,000</u>
		Tractor B	<u>19,000</u>		Dec. 31			<u>33,000</u>
				<u>33,000</u>				<u>33,000</u>
2013								
Jan. 1	To	Balance b/d		14,000				

(b) **Provision for Depreciation of Tractors Account**

2011				₹	2011			₹
Dec. 31	To	Balance c/d		3,050	Dec. 31	By	P & L A/c:	
							Tractor A	2,100
							Tractor B	<u>950</u>
				<u>3,050</u>				<u>3,050</u>

11.28 Accounting

2012		₹	2012		₹
June 30	To Disposal of Tractor account—Transfer	2,850	Jan. 1	By Balance b/d	3,050
Dec. 31	To Balance c/d	4,900	Jun. 30	By P & L A/c (Depn. for Tractor B)	1,900
		<u>7,750</u>	Dec. 31	By P & L A/c (Depn. for Tractor A)	<u>2,800</u>
					<u>7,750</u>
			2013		₹
			Jan. 1	By Balance b/d	4,900

(c) Disposal of Tractor Account

2012		₹	2012		₹
June 30	To Tractors on hire purchase—Tractor B	19,000	June 30	By Provision for Depn. of Tractors A/c	2,850
			July 10	By Cash : Insurance	15,000
		<u>19,000</u>	Dec. 31	By P & L A/c : Loss	<u>1,150</u>
					<u>19,000</u>

Hire Purchase Co. Account

2011		₹	2011		₹
April 1	To Cash (deposit for Tractor A)	2,000	April 1	By Tractors on Hire Purchase A/c - Tractor A	14,000
April	To Cash—6 instalments @ ₹ 600	3,600	Oct. 1	By Tractors on Hire Purchase A/c —Tractor B	19,000
Sept.			Dec. 31	By Interest A/c : For Tractor A @ ₹ 100 for 9 months ₹ 900 For Tractor B @ ₹ 120 for 3 months ₹ 360	<u>1,260</u>
Oct. 1	To Cash—deposit for Tractor B	2,680			<u>34,260</u>
Oct. - Dec.	To Cash—3 instalments @ ₹ 600 for Tractor A	1,800			
	To Cash—3 instalments @ ₹ 800	2,400			
Dec. 31	To Balance c/d	21,780			
		<u>34,260</u>			
2012			2012		
Jan.	To Cash—6 instalments		Jan. 1	By Balance b/d	21,780

	@ ₹ 600 for Tractor A	3,600	Jun. 30	By Interest A/c—for	
June	To Cash—6 instalments			Tractor B @ ₹ 120	
	@ ₹ 800 for Tractor B	4,800		for 6 months	720
July 10	To Cash - final instalment		Dec. 31	By Interest - for	
	for Tractor B	10,000		Tractor A @ ₹ 100	
July-Dec.	To Cash - 6 instalments @			for 12 months	1,200
	₹ 600 for Tractor A	3,600			
31 Dec.	To Balance c/d	1,500			
	To P & L A/c—unpaid				
	amount	<u>200</u>			
		<u>23,700</u>			<u>23,700</u>

Illustration 11

A machinery is sold on hire purchase. The terms of payment is four annual instalments of ₹ 6,000 at the end of each year commencing from the date of agreement. Interest is charged @ 20% and is included in the annual payment of ₹ 6,000.

Show Machinery Account and Hire Vendor Account in the books of the purchaser who defaulted in the payment of the third yearly payment whereupon the vendor re-possessed the machinery. The purchaser provides depreciation on the machinery @ 10% per annum. All workings should form part of your answers.

Solution

Machinery Account

		₹			₹
I Yr.	To Hire Vendor A/c	15,533	I Yr.	By Depreciation A/c	1,553
		<u>15,533</u>		By Balance c/d	<u>13,980</u>
II Yr.	To Balance b/d	13,980	II Yr.	By Depreciation A/c*	1,398
		<u>13,980</u>		By Balance c/d	<u>12,582</u>
III Yr.	To Balance b/d	12,582	III Yr.	By Depreciation A/c*	1,258
		<u>12,582</u>		By Hire Vendor	11,000
				By Profit & Loss A/c (Loss on Surrender)	324
					<u>12,582</u>

*It has been assumed that depreciation has been written off on written down value method. Alternatively straight line method may be assumed.

Depreciation has been directly credited to the Machinery Account; it could have been accumulated in provision for depreciation account.

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Hire Vendor Account

		₹			₹
I Yr.	To Bank A/c	6,000	I Yr.	By Machinery A/c	15,533
	To Balance c/d	<u>12,639</u>		By Interest A/c	<u>3,106</u>
		<u>18,639</u>			<u>18,639</u>
II Yr.	To Bank A/c	6,000	II Yr.	By Balance b/d	12,639
	To Balance c/d	<u>9,167</u>		By Interest A/c	<u>2,528</u>
		<u>15,167</u>			<u>15,167</u>
III Yr.	To Machinery A/c (transfer)	11,000	III Yr.	By Balance b/d	9,167
		<u>11,000</u>		By Interest A/c	<u>1,833</u>
					<u>11,000</u>

Note : Alternatively, total interest could have been debited to Interest Suspense A/c and credited to Hire Vendor A/c with consequential changes.

Working Notes:

		<i>Instalment Amount</i>	<i>Interest</i>	<i>Principal</i>
4th Instalment		6,000	₹	₹
Interest	$6,000 \times \frac{20}{120}$	<u>1,000</u>	1,000	5,000
		5,000		
<i>Add</i> : 3rd Instalment		<u>6,000</u>		
		11,000		
Interest	$11,000 \times \frac{20}{120}$	<u>1,833</u>	1,833	4,167
		9,167		
<i>Add</i> : 2nd Instalment		<u>6,000</u>		
		15,167		
Interest	$15,167 \times \frac{20}{120}$	<u>2,528</u>	2,528	3,472
		12,639		
<i>Add</i> : 1st Instalment		<u>6,000</u>		
		18,639		
Interest	$18,639 \times \frac{20}{120}$	<u>3,106</u>	<u>3,106</u>	<u>2,894</u>
		<u>15,533</u>	<u>8,467</u>	<u>15,533</u>

Illustration 12

X Transport Ltd. purchased from Delhi Motors 3 Tempos costing ₹ 50,000 each on the hire purchase system on 1-1-2010. Payment was to be made ₹ 30,000 down and the remainder in 3 equal annual instalments payable on 31-12-2010, 31-12-2011 and 31-12-2012 together with interest @ 9%. X Transport Ltd. write off depreciation at the rate of 20% on the diminishing balance. It paid the instalment due at the end of the first year i.e. 31-12-2010 but could not pay the next on 31-12-2011. Delhi Motors agreed to leave one Tempo with the purchaser on 1-1-2012 adjusting the value of the other 2 Tempos against the amount due on 31-12-2011. The Tempos were valued on the basis of 30% depreciation annually. Show the necessary accounts in the books of X Transport Ltd. for the years 2010, 2011 and 2012.

Solution

**X Transport Ltd.
Tempo Account**

2010		₹	2010		₹
Jan. 1	To Delhi Motors	1,50,000	Dec. 31	By Depreciation A/c:20% on 1,50,000	30,000
				By Balance c/d	<u>1,20,000</u>
		<u>1,50,000</u>			<u>1,50,000</u>
2011			2011		
Jan. 1	To Balance b/d	1,20,000	Dec.31.	By Depreciation A/c	24,000
				By Delhi Motors A/c (Value of 2 tempos taken away)	49,000
				By Profit and Loss A/c (balancing figure)	15,000
				By Balance c/d (Value of one tempo left)	<u>32,000</u>
		<u>1,20,000</u>			<u>1,20,000</u>

2012			2012		
Jan. 1	To Balance b/d	32,000	Dec. 31	By Depreciation A/c	6,400
				By Balance b/d	<u>25,600</u>
		<u>32,000</u>			<u>32,000</u>

Delhi Motors Account

2010		₹	2010		₹
Jan. 1	To Bank (Down Payment)	30,000	Jan. 1	By Tempos A/c	1,50,000
Dec. 31	To Bank	50,800	Dec. 31	By Interest (9% on ₹ 1,20,000)	10,800

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	To Balance c/d	<u>80,000</u>			<u>1,60,800</u>
		<u>1,60,800</u>			<u>1,60,800</u>
2011			2011		
Jan. 1	To Tempo	49,000	Jan. 1	By Balance b/d	80,000
Dec. 31	To Balance c/d	38,200	Dec. 31	By Interest (9% on ₹ 80,000)	<u>7,200</u>
		<u>87,200</u>			<u>87,200</u>
2012		₹	2012		₹
Dec. 31	To Bank	41,638	Jan. 1	By Balance b/d	38,200
		<u>41,638</u>	Dec. 31	By Interest (9% on ₹ 38,200)	<u>3,438</u>
					<u>41,638</u>

Working Notes :

(1) Value of a Tempo left with the buyer:

	₹
Cost	50,000
Depreciation @ 20% p.a. under WDV method for 2 years [i.e. ₹ 10,000 + ₹ 8,000]	<u>(18,000)</u>
Value of the Tempo left with the buyer at the end of 2nd year	<u>32,000</u>

(2) Value of Tempos taken away by the seller:

No. of tempos Two	
	₹
Cost ₹ 50,000 × 2 =	1,00,000
Depreciation @ 30% Under WDV method for 2 years [i.e. ₹ 30,000 + ₹ 21,000]	<u>(51,000)</u>
Value of tempos taken away at the end of 2nd year	<u>49,000</u>

9. Instalment Payment System

In instalment payment system the ownership of the goods is passed immediately to the buyer on the signing the agreement. Because of this basic difference the accounting entries under instalment payment system are slightly different from those passed under the hire-purchase system. The scheme of entries is as under:

Books of buyer: Buyer debits asset account with full cash price, credits vendor's account with full instalment price and debits interest suspense account with the difference between full cash

price and full instalment price. Interest is debited to interest suspense account (not interest account) because it includes interest in respect of a number of years. Every year interest account is debited and interest suspense account is credited with the interest of current year. Interest account, at the end of the year, is closed by transferring to profit and loss account. The balance of interest suspense account (this is a debit balance) is shown in the balance sheet on the asset side. Vendor is paid the instalment due to him and entry for the depreciation is passed in the usual way.

Books of Seller: The seller debits the purchaser with the full amount (instalment price) payable by him and credits sales account by the full cash price and credits interest suspense account by the difference between the total instalment price and total cash price. Seller, like the buyer, also transfers the amount of interest due from the interest suspense account interest account every year. Interest account is closed by transferring to profit and loss account and the balance of interest suspense account is shown in the balance sheet on the liability side. On receiving the instalment the vendor debits cash/bank account and credits purchaser's account.

10. Difference of Hire Purchase Agreement and Instalment Payment Agreement

A hire purchase agreement is a contract of bailment coupled with an option to the hire purchaser to acquire the goods delivered to him under such an agreement. By the delivery of goods to the hire purchaser, the hire vendor merely pass with their possession, but not the ownership. The property or title to the goods is transferred to the hire-purchaser, on his paying the last instalment of the hire price or complying with some other conditions stipulated in the contract. At any time before that the hire-purchaser has the option to return the goods and, if he does so, he has only to pay the instalments of price that by then have fallen due. The right or option to purchase is the essence of hire-purchase agreement. In the event of a default by the buyer (hire purchaser) in the payment of any of the instalments of hire price, the vendor can take back the goods into his possession. This is legally permissible since the property in the goods is still with the vendor.

On the other hand, it may have been agreed between the buyer and the seller that the price of the goods would be payable by instalments and the property would immediately pass to the buyer; in the event of a default of instalments, it would not be possible for the vendor to recover back the goods. He, however, would have the right to bring an action against the purchaser for the recovery of the part of the price that has not been paid to him.

Analysis of the hire purchase price : The hire purchase price is always greater than the cash price, since it includes interest payable over and above the price of the goods to compensate the seller for the sacrifice he has made by agreeing to receive the price by instalments and the risk that he thereby undertakes. It is thus made up of following elements:

- (a) cash price;
- (b) interest on unpaid instalments; and

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- (c) a charge to cover the risk involved in the buyer defaulting to pay one or more of instalments of price or that of his returning the goods in a damaged condition.

Interest is the charge for the facility to pay the price for the goods by instalments after they have been delivered. The rate of interest is generally higher than that payable in respect of an advance or a loan since it also includes a charge to cover the risk that the hirer may fail to pay any of the instalments and, in such an event, the goods may have to be taken back into possession in whatever condition they are at the time. A separate charge on this account is not made as that would not be in keeping with the fundamental character of the hire-purchase sale.

Summary

- **Under Hire Purchase System**, hire purchaser will pay cost of purchased asset in installments. The ownership of the goods will be transferred by the Hire Vendor only after payment of outstanding balance.
- **Under installment system**, ownership of the goods is transferred by owner on the date of delivery of goods.
- **Accounting Method**
 - ✓ Cash price Method
 - ✓ Interest suspense method