## Chapter 12 Accounting for Hire Purchase and Installment Purchases

## Accounting for Hire Purchase and Installment Purchases

## Introduction

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 installments if the vendor agrees. This enables the purchaser to use the asset while paying for it in installments over an agreed period of time. This type of a business deal is known as hire purchase transaction.

## Accounting for Hire Purchase and Installment Purchases

## 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 installments 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 installments.

## Accounting for Hire Purchase and Installment Purchases

## Nature of Hire Purchase Agreement

Each installment paid by the hire purchaser is treated as hire charges for using the asset. In case he fails to pay any of the installments (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 installments till the date of default from the buyer.

## Accounting for Hire Purchase and Installment Purchases

## 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. Down Payment: The hire purchaser generally makes a down payment on signing the agreement.
3. Repossession: In case of default in respect of payment of even the last installment, the hire vendor has the right to take the goods back without making any compensation.

## Accounting for Hire Purchase and Installment Purchases

Hire-purchase meant for transactions where goods are purchased or sold with the following features:
(a) Payment would be made in installments.
(b) Each installment will be treated as i.e rental hire so that if default is made in the payment of even the last installment, the seller will be entitled to take away the goods without compensating the hire-purchaser.
(c) If all the installments are paid, the goods will be treated as sold and the property will pass on to purchaser.

## Accounting for Hire Purchase and Installment Purchases

Methods of Recording;
(i) Cash Price Method: Asset account is debited with cash price included in each installments. Initial or down payments are fully adjusted towards cash price.
(ii) Interest Suspense Method: Buyer debits the asset with total cash price at the time of signing the contract under this method at the time of transfer of possession of asset; the total interest unaccrued is transferred to interest suspense account.

## Accounting for Hire Purchase and Installment Purchases

## Default and Repossession:

When the hirer is not able to make the payment in time then default is committed by and the owner take back the possession of goods.

## Possession can be in two ways :-

(i) When seller takes possession of complete goods Complete Repossession
(ii) When seller takes possession of only part of total goods sold to the buyers - Partial Repossession

## Accounting for Hire Purchase and Installment Purchases

## Complete Repossession:

1. Hire vendor Debits goods Repossessed A/c and Credit Hire Purchaser A/c with the agreed value.
2. Hire Purchaser closes the Hire vendor's A/c by transferring the balance of Hire Purchase Asset A/c to Hire Vendor A/c.

## Accounting for Hire Purchase and Installment Purchases

## Partial Repossession:

1. Hire Vendor Debit goods Repossessed A/c and Credit Hire Purchaser A/c and Credit Hire Purchaser $\mathrm{A} / \mathrm{c}$ with the agreed value.
2. Hire purchaser debits the Hire Vendor A/c and Credit Asset $\mathrm{A} / \mathrm{c}$ with the agreed value.

Note: If agreed Value < Book Value
The difference is charged to Profit \& Loss A/c of Hire Purchaser.

## Accounting for Hire Purchase and Installment Purchases

## ACCOUNTING RECORD

There are two parties in the hire purchase agreement i.e. Buyer and seller. The method recording hire purchase transactions in the account books depends upon the nature of goods, i.e. whether they are of considerable value or of comparatively small value.

## Accounting for Hire Purchase and Installment Purchases

## Accounting Arrangements of hire purchase transaction

The method of accounting for hire purchase transactions depends on the value of sales.

In the Books of Purchaser If the goods have substantial sales value the accounting methods adapted may be:-
(i) Cash price method otherwise
(ii) Interest suspense method.

In the Books of Seller Hire purchase accounting methods for goods of small sales value may be
(i) Debtors method otherwise
(ii) Stock and debtor's method.

## Accounting for Hire Purchase and Installment Purchases

## Cash price method

## Buyer's Books:-

Goods purchased on hire purchase system should be treated as property of the business on the assumption that asset has been purchased with the tension of paying all the installments on the due dates to acquire the assets for the business. Under this method, the following entries are to be passed in the books of the buyer:

## Accounting for Hire Purchase and Installment Purchases

i. When an asset is purchased on hire purchase system Asset Account Dr.(With cash price)

To Hire Vendor Account
ii. For cash down payment $6 n$ delivery Hire Vendor Account

To Cash/Bank
iii. For interest due at the end of the year Interest Account

Dr.
To Hire Vendor Account

## Accounting for Hire Purchase and Installment Purchases

iv. For the payment of the first installment Hire Vendor Account Dr. To Bank
v. For depreciation charge Depreciation Account

Dr.
To Asset Account
vi. For transfer of interest and depreciation to profit and loss account
Profit \& Loss Account
Dr.
To Interest Account
To Depreciation Account

## Accounting for Hire Purchase and Installment Purchases

## Disclosure in the balance sheet

## Assets

Fixed Assets :

| Asset (at cash price) | xxxx.xx |
| :--- | :--- |
| Less : Depreciation | xxxx.xx |

## Creditors:

Hire Purchase Creditors:
Balance in hire vendor's A/c xxxxx.xx
Installment due xxxxx.xx
Installment not yet due xxxxx.xx XXXX.XX

## Accounting for Hire Purchase and Installment Purchases

## Vendor's Book:

The following entries are passed in the books of vendor:
(i) When goods are sold on hire purchase
Hire Purchaser's Account Dr.

To Hire Sales Account
Hire Sales Account is ultimately closed by transfer to trading account.
(ii) For cash received on delivery

Cash/Bank Account
Dr.
To Hire Purchaser's Account
(iii) For interest due on installment at the end of the year Hire Purchaser's Account

Dr.
To Interest Account

## Accounting for Hire Purchase and Installment Purchases

Note. Interest in the last installment will be difference between the installment payable and amount remaining unpaid by way of principal.
iv. For receipt of the amount of installment Cash/Bank Account Dr.

To Hire Purchaser's Account
v. For transferring the balance of interest to profit and loss account Interest Account Dr.

To Profit and Loss Account
Note. Entries (iii) to (v) will be repeated in subsequent years.

## Accounting for Hire Purchase and Installment Purchases

## Accounting Treatment:

Calculation of Interest: Following are the cases stating the method of segregating interest from installments in different situations.
Q. 1 When rate of interest, total cash price and installments are given.

## Accounting for Hire Purchase and Installment Purchases

Q.1. On January 1, 2010 HP and Co. acquired a pick-up Van on hire purchase from FM \& Co. Ltd. The terms of the contract were as follows:
a) The cash price of the van was Rs.1,00,000.
b) Rs.40,000 were to be paid on signing of the contract.
c) The balance was to be paid in annual installments of Rs.20,000 plus interest.
d) Interest chargeable on the outstanding balance was $6 \%$ p.a.
e) Depreciation at $20 \%$ p.a. is to be written-off using the straightline method.

## Accounting for Hire Purchase and Installment Purchases

## You are required to:

a) Give Journal Entries and show the relevant accounts in the books of HP and Co. 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.

## Accounting for Hire Purchase and Installment Purchases

## Accounting Treatment:

When total cash price and installments are given but rate of interest is not given.

Q 2. On Ist Jan. 20X1,A Ltd. purchased a machine from B Ltd. on hire purchase basis on the following terms:
(a) Cash-Price-Rs. 7,92,500 (b) Cash Down Payment-20\%
(c) Four annual equal installments of Rs. 2,00,000 each to be paid at the end of each year.

Required: Compute the amount of interest pertaining to each accounting year assuming
(a) That the sales were made at the beginning of the year, and
(b) That the sales were made uniformly throughout the year.

## Accounting for Hire Purchase and Installment Purchases

## Solution

(i) Hire Purchase Price = Down Payment + Installments
$=$ Rs. $1,58,500+$ Rs. $8,00,000$
$=$ Rs. 9,58,500
(ii) Total Interest = H.P. Price - Cash Price
= Rs. 9,58,500-Rs. 7,92,500
= Rs. 1,66,000

## Accounting for Hire Purchase and Installment Purchases

(a) If the sales were made at the beginning of the year
iii. Statement showing the Calculation of Ratio of Hire Purchase Price Outstanding in the Beginning of each year

| Year | Amount Due in the <br> Beginning of each <br> year | Installment <br> paid | Amount Due at <br> the <br> End of each <br> year | Ratio of <br> Amount Due <br> in Begging | Interest <br> (Total Interest X <br> Ration / Total Ratio) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1st |  |  |  |  |  |
| 2nd |  |  |  |  |  |
| 3 rd |  |  |  |  |  |
| 4 th |  |  |  |  |  |

## Accounting for Hire Purchase and Installment Purchases

## Accounting Treatment:

When only installments are given but cash price and rate of interest is not given

Q 3. A Ltd. purchased a machine on hire purchase basis from B Ltd. on the following terms:
a) Cash Down Payment - Rs. 1,58,500
b) Four Installments of Rs. 2,21,900, Rs. 2,06,050, Rs. 1,90,200 \& Rs. 1,74,350 at the end of the 1st year, 2nd year, 3rd year and 4th year respectively.
c) The payment of the cash price in each installment - Uniform.

## Accounting for Hire Purchase and Installment Purchases

## Solution

Difference between any two successive installments represents the least amount of interest charged in the last year i.e.
Rs. 2,21,900-Rs. 2,06,050 = Rs. 15,850
Thus, Interest for 3rd year = Least amount of Interest x $2=31,700$
Thus, Interest for 2nd year = Rs. 15,850 x $3=47,550$
Thus, Interest for 1st year $=$ Rs. $15,850 \times 4=63,400$
Thus, the allocation of installment between cash price and interest is at under:

## Accounting for Hire Purchase and Installment Purchases

| Installment | Interest | Cash Price | Installment <br> Interest |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## Accounting for Hire Purchase and Installment Purchases

## Accounting Treatment:

When rate of interest and installments are given but total cash price is not given
Q.4. On 1st April, 2011, Globe Press purchased a printing machine on hire purchase system from Modern Manufacturing Co. The payment was to be made as Rs. 30,000 down and the balance in three equal annual installments of Rs. 20,000 each payable on 31st March. The vendor company charged interest @ 8\% p.a. Globe Press provided depreciation @ $10 \%$ on the diminishing balances and paid all the installments. It closed its books on 31st March every year.

Required: Prepare Modern Manufacturing Co. Account and Printing Machine Account in the books of Globe Press for 3 years to 31st March, 2014.

## Accounting for Hire Purchase and Installment Purchases

| Year | Amount outstanding <br> at the end | Interest included in it | Amount outstanding <br> at the Beginning of |
| :--- | :---: | :--- | :--- |
| $3^{\text {rd }}$ Year |  |  |  |
| $2^{\text {nd }}$ Year |  |  |  |
| $1^{\text {st }}$ Year |  |  |  |

## Accounting for Hire Purchase and Installment Purchases

Q.7.Rapid Engineering Works sold to CSFIE Ltd. a machine on the cash value of Rs. 31,360 on hire purchase basis on $1^{\text {st }} \mathrm{A}$ pirl, 2011. A sum of Rs. 9,000 was paid at the time of delivery. The balance was payable in three equal annual installments of Rs. 9,000 each payable on $31^{\text {st }}$ March of every year. Interest was charged at the rate of $10 \%$ per annum.The purchaser charged $10 \%$ depreciation per annum on the diminishing balances on the machine. Hire purchaser failed to pay the installmentdueon31 ${ }^{\text {st }}$ March, 2013. Rapid Engineering Works obtained the permission of the court to repossess the machine as a result of default by the purchaser and having completed all the statutory requirements took possession of the machine on 31 ${ }^{\text {st }}$ May, 2013. Prepare the necessary ledger accounts in the books of hire purchaser.

## Ans. Profit and Loss A/c (balancing figure) Rs. 7537.

## Accounting for Hire Purchase and Installment Purchases

Q.8. X Ltd. purchased 3 milk vans from Super Motors costing Rs. 75,000 each on hire purchase system. Payment was to be made: Rs. Rs. 45,000 down and the remainder in 3 equal installments together with interest @ 9\%. X Ltd. writes off depreciation @ 20\% on the diminishing balance. It paid the installment 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.

Ans. P \& L A/c =22,500

## Accounting for Hire Purchase and Installment Purchases

Q.9. Banerjee \& Co. purchased seven trucks on hire purchase on $1^{\text {st }}$ July, 2011.The cash purchase price of each truck was Rs. 50,000. The company has to pay $20 \%$ of the cash purchase price at the time of delivery and the balance in five half yearly installments starting from $31^{\text {st }}$ December, 2011 with interest at $5 \%$ per annum at half yearly rest. On the Company's failure to pay the installment due on $30^{\text {th }}$ June, 2012, it was agreed that the company would return three trucks to the vendor and the remaining four would be retained. The vendor agreed to allow him a credit for the amount paid against these three trucks less $25 \%$. Show the relevant accounts in the books of the purchaser and the vendor assuming the books are closed in June every year and depreciation @ 20\% p.a. is charged on trucks. Vendor after spending Rs.1,000 on repairs sold away all the three trucks for Rs. 40,000.

# Accounting for Hire Purchase and Installment Purchases 

Ans. Credit allowed by Vendor
(Rs. 54,000-25\% of Rs. 54,000) 40,500
Loss on return of three Trucks 79,500

## Accounting for Hire Purchase and Installment Purchases

## Accounting Treatment

When reference to annuity table rate of interest and installments are given total cash price is not given.
Miscellaneous.

## Illustration 3

On 1st April, 20X1 a manufacturing company buys on Hirepurchase system a machinery for `90,000, payable by three equal annual instalments combining principal and interest, the rate of interest was \(5 \%\) per annum. Calculate the amount of cash price and interest. Assume that the present value of an annuity of one rupee for three years at 5\% interest is`2.723.

## Accounting for Hire Purchase and Installment Purchases

## Solution

Calculation of Cash Price - The present value of an annuity of Re. 1 paid for 3 year @ $5 \%=` 2.723$. Hence, the present value of $` 30,000$ for 3 years $=2.723 \times 30,000=` 81,690$.
Thus, Cash Price will be computed as `81,690. Cash price may also be calculated using the annuity formula discussed above: Cash price \(=\) Annual instalment \(\times \frac{(1+r) n-1}{r(1+r) n}\) \(=30,000 \times\left[(1+0.05)^{3}-1\right] / 0.05(1+0.05)^{3}\) = ` 81697 .
Note- The difference in cash price of ` 7 is on account of approximation.

## Accounting for Hire Purchase and Installment Purchases

## Question 1

Kamal purchased a Bus on hire purchase system. As per terms he is required to pay $2,80,000$ down, $2,12,000$ at the end of first year, $1,96,000$ at the end of second year and 2,20,000 at the end of the third year. Interest is charged @ 10\% p.a.

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

## Accounting for Hire Purchase and Installment Purchases

Calculation of Interest and Cash Price

| No. of <br> installments | Amount due at the <br> time of installment | Interest | Cash <br> price |
| :---: | :---: | :---: | :---: |
| $[1]$ | $[2]$ | $[3]$ | $[4]$ |
| 3rd | $2,20,000$ | $1 / 11$ of $2,20,000=20,000$ | $2,00,000$ |
| 2nd | $* 3,96,000$ | $1 / 11$ of $3,96,000=36,000$ | $3,60,000$ |
| 1st | $* * 5,72,000$ | $1 / 11$ of $5,72,000=52,000$ | $5,20,000$ |

## Accounting for Hire Purchase and Installment Purchases

Total cash price $=5,20,000+2,80,000$ (down payment) $=8,00,000$.

* 2,00,000 + 2nd installment of $1,96,000=3,96,000$.
** $3,60,000+1$ st installment of $2,12,000=5,72,000$.


## Accounting for Hire Purchase and Installment Purchases

## Question 2

The following particulars relate to hire purchase transactions:
(i) $\quad R$ (hire purchaser) purchased three machineries from $S$ on hire purchase system. The cash price of each machinery being ₹ $3,00,000$.
(ii) The hire purchaser charged depreciation @ $20 \%$ on written down value method.
(iii) Two machineries were seized by hire vendor when second installment was not paid at the end of the second year. The hire vendor valued the two machineries at cash price less $30 \%$ depreciation charge for each of the years under written down value method.
(iv) The hire vendor spent ₹ 15,000 on repairs of the machineries and then sold them for a total amount of $₹ 2,55,000$. You are required to compute:
(1) Agreed value of two machineries taken back by the hire vendor.
(2) Book value of one machine left with the Hire purchaser.

# Accounting for Hire Purchase and Installment Purchases 

## Question 2

(3) Profit or loss to hire purchaser on two machineries taken, back by the hire vendor.
(4) Profit or loss on machineries repossessed, when sold by the hire vendor.

