**Unit – 4**

**Hire Purchase and Installment System**

Hire purchase system – Definition – Main features – Installment purchase system – Distinction between hire purchase and installment system – Accounting treatment for hire purchase system – Installment purchase system – Meaning- Accounting treatment

**Meaning of Hire Purchase:**

Hire purchase and installment 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 revolutionized 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 installments.

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

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

**Main features of Hire purchase system:**

• The hirer or buyer gets possession of the goods on signing the hire purchase agreement and he has the right to use them-

• 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 installment.

• The hirer has the duty to keep the goods in good condition and take reasonable precautions for their safety till the last installment is paid.

• Each installment is treated as hire charges.

• The hirer has the option to return the goods before the last installment is paid.

• The hire vendor can repossess the goods if the buyer fails to pay any installment on the due date. However, permission of the court is needed for repossession, depending on the value of the goods and number of installments paid.

• If goods are repossessed, the value of goods on that date and the installments paid are added and the total hire purchase price is reduced. The balance is payable by the hire vendor to the hirer.

**Some important terms in the hire purchase system:**

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

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

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

**4. Hire or Installment:** This is the amount payable by the buyer periodically. The installments may be equal or different, depending on agreement.

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

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

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

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Basis** | **Hire purchase System** | **Installment 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 installment. | 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 installment 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 installments are paid. |
| **7** | Repossession of goods | The Hire vendor can repossess the goods if installment 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** | Installment | Each installment includes hire charges and part payment of the cash price. | Each installment includes interest and part payment of cash price. |
| **10** | Governing | Hire purchase Act 1972 governs the Hire Purchase Agreement | Installment 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 thé 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** Asset A/c Dr.  To Hire vendor's A/c [Being down payment payable]  **2. For paying down payment**  Hire vendor's A/c Dr.  To Cash A/c [Being payment of down payment] | **1. For cash price of asset purchased**  Asset A/c  To Hire Vendor's A/c  [Being cash price of asset purchased on hire purchase agreement]  **2. For paying down payment:**  Hire Vendor's A/c  To cash A/c  [Being payment of down payment] |
| On the date of 1st installment | **3. For the amount of first installment:**  Asset A/c (Cash price in the installment) Dr.  Interest A/c (Interest in 1st installment) Dr.  To Hire Vendor's A/c [Being 1st installment payable]  **4. For payment of 1st installment**  Hire Vendor's A/c Dr.  To Cash A/c  Being payment of installment) (For 2nd, 3rd etc., installments also, entries 3 and 4 are repeated.) | **3. For interest included in first installment**  Interest A/c  To Hire Vendor's A/c  [Being interest payable with 1st installment]  **4. For payment of 1st installment**  Hire Vendor's A/c  To Cash A/c [Being payment of installment] (For 2nd, 3rd installment) |
| At the end of the Accounting year | **5. For Depreciation of the asset** Depreciation A/c Dr.  To Asset A/c  [Being depreciation on the asset]  **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] | **5. For Depreciation of the asset** Depreciation A/c Dr.  To Asset A/c  [Being depreciation on the asset]  **6. For closing depreciation and interest accounts.**  Profit & loss A/c Dr.  To Depreciation A/c  To Interest A/c [Being transfer of depreciation and interest] |

**Problems:**

**1.** On 1.1.2019, Mr. X Bought some trucks under Hire-Purchase system for Rs. 51,000 payable by Three Equal Installments 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:**The Present value of an Annuity of one rupee for three years at 5% is Rs. 2.72325

Installment = 51,000 / 3

=17,000

The present value of annuity = Installment X Annuity factor

= 17,000 X 2.72325

= 46,295.25

**Cash price = Rs.46,295.25**

2. Linda Purchased a Motor Car on Hire Purchase System Payable Rs. 40,000 annually for 10 Years. The Rate of Interest is 5%. Given the Present Value of an Annuity of Rs. 1 for 10 Years at 5% is Rs. 7.7217, Calculate Cash Price.

**Solution:** The Present value of an Annuity of one rupee for three years at 5% is Rs. 7.7217

Installment = 40,000

The present value of annuity = Installment X Annuity factor

= 40,000 X 7.7217

**Cash price = Rs. 3,08,868**

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

**Solution: Table showing calculation of interest**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Particulars (1)** | **Total Cash price (2)** | **Installment paid (3)** | **Interest paid (4)** | **Cash price paid (5 = 3 – 4)** |
| Cash price | 2,27,000 |  |  |  |
| (-) Down payment | 70,000 | 70,000 | - | 70,000 |
|  | **1,57,000** |  |  |  |
| 1st installment | 53,000 | 68,700 | 15,700  (1,57,000 \*10/100) | 53,000 |
|  | **1,04,000** |  |  |  |
| 2nd installment | 49,000 | 59,400 | 10,400 (1,04,000\*10/100) | 49,000 |
|  | **55,000** |  |  |  |
| 3rd installment | 55,000 | 49,500 | 5,500  (55,000 \*10/100) | 55,000 |
|  | **55,000** |  |  |  |
|  | **Nil** | **2,47,600** | **31,600** | **2,16,000** |

4. Raman Purchases a motor car from Bharathan whose cash price is Rs. 56,000 on 1.1.2013. Rs. 15,000 is paid on signing the contract and the balance is to be paid in three equal installments of Rs. 15,000 each. The rate of interest is 5% p.a. Calculate the amount of interest included in each installment.

**Solution: Table showing calculation of interest**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Particulars (1)** | **Total Cash price (2)** | **Installment paid (3)** | **Interest paid (4)** | **Cash price paid (5 = 3 – 4)** |
| Cash price | 56,000 |  |  |  |
| (-) Down payment | 15,000 | 15,000 | - | 15,000 |
|  | **41,000** |  |  |  |
| 1st installment | 12,950 (15,000 – 2,050) | 15,000 | 2,050  (41,000 \* 5/100) | 12,950 |
|  | **28,050** |  |  |  |
| 2nd installment | 13,597 (15,000 – 1,403) | 15,000 | 1,403  (28,050 \*5/100) | 13,957 |
|  | **14,453** |  |  |  |
| 3rd installment | 14,453 | 15,000 | 547  (15,000 – 14,453) | 14,453 |
|  | **Nil** | **60,000** | **4,000** | **56,360** |

5. 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 installments 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 Installment Amount.

**Solution: Table showing calculation of interest**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Particulars (1)** | **Total Cash price (2)** | **Installment paid (3)** | **Interest paid (4)** | **Cash price paid (5 = 3 – 4)** |
| Cash price | 1,40,000 |  |  |  |
| (-) Down payment | 40,000 | 40,000 | - | 40,000 |
|  | **1,00,000** |  |  |  |
| 1st installment | 25,000 | 45,000 | 20,000  (1,00,000 \*20/100) | 25,000 |
|  | **75,000** |  |  |  |
| 2nd installment | 25,000 | 40,000 | 15,000 (75,000\*20/100) | 25,000 |
|  | **50,000** |  |  |  |
| 3rd installment | 25,000 | 35,000 | 10,000  (50,000 \*20/100) | 25,000 |
|  | **25,000** |  |  |  |
| 4th installment | 25,000 | 30,000 | 5,000  (25,000 \*20/100) | 25,000 |
|  | **25,000** |  |  |  |
|  | **Nil** | **1,90,000** | **50,000** | **1,40,000** |

6.Sundar Sells goods on H.P. System at Cost Plus 60%. From the Following Prepare Hire-Purchase Trading A/c. Jan 1, Goods out on H.P.System at H.P. Price -Rs. 32,000; Dec 31, Installments not due and unpaid -Rs. 72,000 and Installment due and Unpaid -Rs.4,000. The following transactions took place during the Year:- a) Goods Sold on H.P. Price -Rs. 1,60,000 b) Cash Received from Customers at H.P. Price -Rs. 1,12,000 c) Goods received bank on default valued at Rs. 800 (Instalment due Rs. 4,000)

**Solution: Hire Purchase Trading A/c for the year ending**

|  |  |  |  |
| --- | --- | --- | --- |
| **Particulars** | **Rs** | **Particulars** | **Rs** |
| To goods out on H.P (opening stock) | 32,000 | By cash | 1,12,000 |
| To goods sold during the year | 1,60,000 | By goods repossessed | 800 |
| To stock reserve  (72,000 \* 60/160) | 27,000 | By installment due (closing debtors) | 4,000 |
| To P& L A/c (Profit) | 41,800 | By Stock reserve  (32,000 \*60/160) | 12,000 |
|  |  | By installment not due and unpaid (closing stock) | 72,000 |
|  |  | BY loading on goods sold (1,60,000 \* 60/160) | 60,000 |
|  | **2,60,800** |  | **2,60,800** |

7. On 1-1-2006, 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 Installment

**Solution: Table showing calculation of interest**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Particulars (1)** | **Total Cash price (2)** | **Installment paid (3)** | **Interest paid (4)** | **Cash price paid (5 = 3 – 4)** |
| Cash price | 14,900 |  |  |  |
| (-) Down payment | 4,000 | 4,000 | - | 4,000 |
|  | **10,900** |  |  |  |
| 1st installment | 3,455 | 4,000 | 545  (10,900 \* 5/100) | 3,455 |
|  | **7,445** |  |  |  |
| 2nd installment | 3,627 | 4,000 | 372.25  (7,445 \* 5/100) | 3,627.75 |
|  | **3,817.25** | 4,000 | 182.75 (4,000 – 3,817.25) | 3,817.25 |
| 3rd installment | 3,817.25 |  |  |  |
|  | **Nil** | **16,000** | **1,100** | **14,900** |

8. Mr.X Purchased a Machine on Hire Purchase System Rs. 3,000 being paid on delivery and the balance in five installments 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:**

1st year = Amount outstanding for interest after down payment Rs.30,000

2nd year = Amount outstanding for interest after 1st installment Rs.24,000

3rd year = Amount outstanding for interest after 2nd installment Rs.18,000

4th year = Amount outstanding for interest after 3rd installment Rs.12,000

5th year = Amount outstanding for interest after 4th installment Rs.6,000

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

Hire purchase price = Total of all installments

Total interest = Hire purchase price – Cash price

= 33,000 - 30,000 = 3,000

|  |  |  |  |
| --- | --- | --- | --- |
| **Installments** | **No of outstanding installments** | **Ratio of interest** | **Interest** |
| 1st Installment | 5 | 5/15 | 3,000 \* 5/15 = 1,000 |
| 2nd Installment | 4 | 4//15 | 3,000 \* 4/15 = 800 |
| 3rd Installment | 3 | 3/15 | 3,000 \* 3/15 = 600 |
| 4th Installment | 2 | 2/15 | 3,000 \* 2/15 = 400 |
| 5th Installment | 1 | 1/15 | 3,000 \* 1/15 = 200 |