



- The depreciation on asset is provided by any of the following two methods :

1. **Straight Line Method** : The same amount is charged as depreciation every year. E.g. if the cash price is Rs. 50,000 and if depreciation is charged at 10 % p.a. , then Rs. 5,000 would be charged as depreciation every year.
2. **Reducing Balance Method** : Depreciation is charged at a fixed percentage on the written down value of the asset every year. E.g. If depreciation is charged at 10 % on asset of Rs. 50,000 under this method, then the depreciation is calculated as follows :

Cash price of asset	Rs. 50,000
Depreciation of the first year at 10 % is	Rs. 5,000
Written down value is	Rs. 45,000
Depreciation of the second year at 10 % is (10 % on Rs. 45,000)	Rs. 4,500

## JOURNAL ENTRIES

### BOOKS OF HIRER

### BOOKS OF VENDOR

- [1] On signing the Hire Purchases agreement :

No entry	Hire's A/c                      Dr. To Sales A/c (Cash price of Asset)
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- [2] When payment is made on signing the agreement :

Asset A/c                      Dr. To Bank A/c	Bank A/c.                      Dr. To Hirer's A/c
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- [3] When instalment becomes due :

Asset A/c                      Dr. Interest A/c                      Dr. To Vendor's A/c	Hirer's A/c                      Dr. To Interest A/c
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- [4] When payment of instalment is made :

Vendor's A/c                      Dr. To Bank A/c	Bank A/c                      Dr. To Hirer's A/c
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- [5] For providing depreciation on the Asset :

Depreciation A/c                      Dr. To Asset A/c	No Entry
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- [6] For transferring depreciation and interest to P & L A/c:

Profit and Loss A/c                      Dr. To Interest A/c To Depreciation A/c	Interest A/c                      Dr. To P & L A/c
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⇒ **Note :** Entries nos. 3 to 6 would be made on payment of each Instalment at the end of each year.

## Various Methods of Interest Calculation

1. General
2. Interest is not included in the amount of instalment
3. Rate of interest is not given
4. Calculation of interest when cash price is not given
5. Rate of interest and cash price are not given
6. Finding out cash price from Annuity Tables
7. Missing instalment
8. Calculation of Compound Interest

### 1. General Example

**[1]** Aman purchased a machine from Aum on hire purchase system on 1<sup>st</sup> January, 1993. The cash price of the machine was Rs. 47,500. Rs.20,000 were to be paid immediately on signing the contract. The installments were to be paid as follows:

	Rs.
On 31-12-93	10,000
On 31-12-94	10,000
On 31-12-95	10,309

Interest at 5 % p.a. has been charged on the balance of cash price remaining outstanding. Depreciation has been provided at 10 % p.a. on original cash price of the machine every year.

- Draft Journal entries in the books of Aman.
- Prepare Machine Account and Vendor's Account in the books of Aman.

**[2]** Raja purchased from Rani a Mobile on hire purchase system on 1-1-2000. The cash price of the Mobile was Rs. 5,000. Total payment was made as under :

On 1-1-2000	Rs. 2,000
On 31-3-2000	Rs. 1,060
On 30-6-2000	Rs. 1,040
On 30-9-2000	Rs. 1,020

Raja charged 20 % depreciation p.a. as per straight method. Interest was to be Paid at 8 % per annum on remaining balance of cash price.

Accounting year of both the parties ends on 30<sup>th</sup> June each year.

You are required to show necessary calculations as a part of the answer.

- Draft Journal entries in the books of Raja.
- Prepare The Machine Account and Rani's Account in the books of Raja.

### 2. Interest is not included in the amount of instalment

**[3]** Kumar purchased from Kunal a Machine on hire purchase system on 1-1-1990. The terms of the contract were as under.

[1] The cash price of the Plant was Rs. 1,00,000.

[2] On signing the contract, 20 % of cash price is to be paid.

[3] The balance amount of the cash price is to be paid in four half yearly instalments of Rs. 20,000 each together with the interest on 30<sup>th</sup> June and 31<sup>st</sup> December every year.

[4] The interest is to be charged at 12 % p.a. on the amount of the balance of the Cash price outstanding.

[5] The machine is to be depreciated at 10 % p.a. as per Reducing balance method.

Accounting year of both the parties Kumar and Kunal, ends on 31<sup>st</sup> December.

**Prepare :**

1. The Machine Account and Kunal's Account in the books of Kumar.
2. Kumar's Account in the books of Kunal.

- You are required to show necessary calculations as part of the answer.

[Guj. Uni. F.Y. April, 1992]

**[4] Ramdev & Co.** acquired a machine on hire-purchase on 1<sup>st</sup> April, 2000. The terms of contract was as follows :

1. The cash price of the machine was Rs. 10,000.
2. Rs. 4,000 was to be paid on signing of the contract.
3. The balance was to be paid in annual instalments of Rs. 2,000 **Plus Interest**.
4. Interest chargeable on outstanding balance was 6 % per annum.
5. Depreciation @ 10 % per annum is to be written off on the Straight Line Method.

You are required to show the relevant account from 1<sup>st</sup> April, 2000 to 31<sup>st</sup> March, 2002 in the books of Ramdev Co.

**3. Rate of interest is not given**

**[5] Ambuja Co. Ltd.** purchased a machine on hire purchase from **Bharat Co. Ltd.** The Cash price Rs. 80,000. Rs. 20,000 is payable on signing the agreement and the balance in three annual instalments of Rs. 24,000 each. Calculate the amount of Interest to be paid by Ambuja Co. Ltd.

**[6] Bharat Bros.** purchased a machine on 1-4-1999 through hire-purchase systems from **Ram Ltd.** Cash price of the machine was Rs. 1,00,000. Total payments was made as under :

On	1-4-1999	Rs. 20,000
On	31-3-2000	Rs. 25,000
On	31-3-2001	Rs. 25,000
On	31-3-2002	Rs. 25,000
On	31-3-2003	Rs. 25,000

Bharat Bros. Charged 10 % depreciation p.a. on straight line method. From the given particulars :

1. Give the calculation of interest allocation.
2. Prepare charts for instalment and depreciation allocation.
3. In the books of Bharat Bros. Prepare Machine Account for all the four years.
4. In the books of Ram Ltd. prepare Bharat Bros. Account.

[Sau. Uni., F.Y. April, 1986]

**4. Calculation of interest when cash price is not given**

**[7] Komal** Purchased a machine on 1<sup>st</sup> April, 1999 from **Sonal** on hire-purchase system. Terms of payments were as under :

On	1-4-1999	10,000
On	31-3-2000	9,000
On	31-3-2001	8,000
On	31-3-2002	7,000
On	31-3-2003	6,000

Interest is charged at 20 % p.a. on opening balance of each year. Depreciation is charged at 10 % p.a. on machine as per reducing balance method.

[Sau. Uni., F.Y. April, 1985]

- [8]** Shree Shah purchased a Mini-computer on Hire purchase system on 1<sup>st</sup> April, 1999. Rs. 3,000 is to be paid on delivery and the remaining amount is to be paid in four instalments at the end of each year on 31<sup>st</sup> March, including interest at 10 % per annum on cash price as follows :

Date	Rs.
31-3-2000	6,400
31-3-2001	4,900
31-3-2002	3,500
31-3-2003	2,200

Computer is to be depreciated at 10 % per annum on reducing balance method.

**Show Mini-Computer's Account and Vendor's Account in the books of Shah.**

[N.G.Uni.,F.Y.April, 1989]

- [9]** On 1-1-1987, Chandubhai purchased a machine from Jayantibhai on Hire-purchase system. Rs. 20,000 is to be paid on delivery and the remaining amount is to be paid in annual instalments at 15 % interest as follows :

Dt. 31-12-1987	Rs. 32,000	Dt. 31-12-1989	Rs. 26,000
Dt. 31-12-1988	Rs. 29,000	Dt. 31-12-1990	Rs. 23,000

Machine is to be depreciated at 10 % per annum on reducing balance method.

Show Machine's Account and Vendor's Account in the books of Chandubhai.

- You are required to show necessary calculations as part of the answer.

### 5. Rate of interest and cash price are not given

- [10]** Shree Manoj bought a machine from the Dubai Engineering Co. Ltd. Hire-Purchase System on 1-4-2000. Rs. 2,000 was to be paid on signing the Agreement and balance in three annual instalments as follows:

First instalment	Rs. 2,600
Second instalment	Rs. 2,400
Third instalment	Rs. 2,200

Depreciation is charged @ 10 % per annum on Straight Line Method. The books of the firm is closed on 31<sup>st</sup> December.

- Write up Machine Account in the books of Shree Manoj.

- [11]** Disha bought a Radio from Isha Mfg. Co. Ltd. on Hire-purchase Scheme on 1-4-2003. She paid Rs. 1,800 on signing the agreement and the balance in three annual instalments as follows:

1 <sup>st</sup> instalment	Rs. 2,340	2 <sup>nd</sup> instalment	Rs. 2,160	3 <sup>rd</sup> instalment	Rs. 1,980
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The financial year of Disha closes on 31<sup>st</sup> March; Scooty is to be Radio at 10% p.a. on the Reducing Balance Method.

- Prepare necessary accounts in the books of Disha.

### 6. Finding out cash price from Annuity Tables

- [12]** A Company bought a machine on 1-4-2000 on Hire-Purchase System, payment to Be made in three equal annual instalments of Rs. 20,000 each. The vendor Company charges interest at 5 % per annum. The annuity table's show that the present value of an annuity of Re. 1 for 3 years @ 5 % is Rs. 2,72325. Prepare Machine Account in the books of the company.

[Guj.Uni.,F.Y.April, 2001]

**[13]** A company purchases a machine on Hire-purchase system on 1-4-2001, payable in Five annual instalments of Rs. 1,200 each. The vendor company charges interest at 5 % per annum. Depreciation is written off at 10 % p.a. on Straight line method. The Accounting year of the company ends on 31<sup>st</sup> March. Reference to annuity tables Shows that the present value of annuity of Re. 1 for five years at 5 % is Rs. 4.329477.

Show necessary accounts in the books of the purchaser.

### 7. Missing instalment

**[14]** Kishor purchased a machine from **Prakash** on 1-1-1999 under hire purchase System. Details of the contract were as under :

1. Rs. 10,000 was to be paid on signing the Contract.
  2. Annual instalments were paid on 31<sup>st</sup> December ;
 

First instalment (2000-2001)	Rs. 16,500
Second instalment (2001-2002)	Rs. 12,700
Third and final instalment (2002-2003)	remaining amount
  3. Interest was to be paid at 15 % p.a. on out standing balance of cash price.
  4. Machine is to be depreciated at 20 % per annum on reducing balance method.
  5. The accounting year of both the parties ends on 31<sup>st</sup> December each year.
- The following journal entry was passed in the books of Kishor on 31-3-2002.

	Rs.		Rs.
Profit & Loss Account	Dr.	9,100	
To Interest Account			2,700
To Depreciation Account			6,400

**Prepare :**

**(a) In the books of Kishor:**

1. Machine Account,
2. Show the relevant data in Final Accounts of the year 2000-2001.

**(b) In the books of Prakash :**

1. Kishor's Account,
2. Journalise the transactions of last year (2002-2003)

(c) All calculations are to be considered as part of the answer.

*[Guj.Uni.,F.Y.April,1990]*

**[15]** Hiren purchased a machine from **Hitesh** on 1-1-1992 under hire purchase System. Details of the contract were as under :

1. Rs. 40,500 was to be paid on signing the Contract.
2. Outstanding balance of cash price is paid by three equal instalments on 31<sup>st</sup> December.
3. Interest was to be paid at 10 % p.a.
4. Machine is to be depreciated at 10 % per annum on reducing balance method.
5. The Machine Account in the Balance Sheet of Hiren as on 31-12-1994.

#### Balance-Sheet as on 31<sup>st</sup> December, 1994

Liabilities	Rs.	Assets	Rs.
		Machinery	1,64,025-00
		-Depreciation	<u>16,402-50</u>
			1,47,622-50

**Prepare :**

**In the books of Hiren**

1. Machine Account
2. Hitesh's Account

**In the books of Hitesh**

1. Hiren's Account

**[16]** Rajesh purchased a machine On 1-4-2002 from Vivek under hire purchase system. He paid Rs. 1,27,500 on signing the contract. Outstanding amount to be paid in Four-yearly instalments including 10 % interest on 31 March on diminishing balance of cash price as below :

31-3-2003	Rs. 1,89,125
31-3-2004	?
31-3-2005	Rs. 80,750
31-3-2006	Rs. 1,68,300

Depreciation on machine for the year ended on 31-3-2005 was written off Rs. 63,750 at the rate of 12 % by straight line method.

Prepare the necessary accounts in the books of Rajesh.

[Sau.Uni.,T.Y.March, 2007]

### **8. Calculation of Compound Interest**

**[17]** On 1-4-'97 Pitter Trending Company purchased a machine on hire purchase System. The cash price of machine is Rs. 2,00,000. Rs. 50,000 was to be paid on Signing of the agreement and the balance was to be paid in **three two yearly instalments.** The vendors charge compound interest at 10 % p.a.

The instalments were paid as under :

On 31-3-1999	Rs. 81,500
On 31-3-2001	Rs. 71,000
On 31-3-2003	Rs. 60,500

The books of the firm are closed on 31<sup>st</sup> March.

From the above particulars show the amount of interest included in the instalments.