

## PROBLEMS UNDER HIRE PURCHASE SYSTEM

Illustration: United Publishers purchased a machinery on the Hire purchase system costing Rs.3,00,000 on 1<sup>st</sup> Jan 2013 from Epson Ltd and paid Rs.60,000 immediately. The balance was to be paid by the annual instalment of Rs.80,000 plus interest at 5% p.a. They depreciate the machinery at 10% on original cost method. Prepare ledger accounts in the books of United Publishers and Epson Ltd.

Note: in the absence of any instruction regarding the method to be followed, Cash Price method is followed.

The question has the following information: cash price- Rs.3,00,000; Down payment- Rs.60,000; rate of interest- 5% p.a.

The question does not have the following elements: Hire purchase price, Instalment amount. So given that the 'balance was to be paid by the annual instalment of Rs.80,000 plus interest at 5% p.a.' it means that interest is not included in the instalment amount of Rs.80,000. Interest is calculated on the unpaid balance of cash price every year. Interest is added with the instalment amount to ascertain the total amount of each instalment.

Calculation of Total number of Instalments:

Balance of cash price after down payment = Cash price of the machinery - Rs.3,00,000 -  
Down payment Rs.60,000 = Rs.2,40,000.

Net instalment amount = Rs.80,000

∴ No of instalments =  $\text{Rs.}2,40,000 \div \text{Rs.}80,000 = 3$

Statement showing interest and gross instalment amount

|              | Cash price on 1 <sup>st</sup> Jan [Rs.] | Interest for the year [Rs.]    | Instalment           |                    |                       |
|--------------|---|--------------------------------|----------------------|--------------------|-----------------------|
|              |   |                                | Cash price [Rs.] (a) | Interest [Rs.] (b) | Total [Rs.] (c = a+b) |
| 2013<br>- DP | 3,00,000<br>60,000<br>2,40,000          |                                |                      |                    |                       |
|              |   | $2,40,000 \times 5\% = 12,000$ | 80,000               | 12,000             | 92,000                |
| 2014         | $2,40,000 - 80,000 = 1,60,000$          | $1,60,000 \times 5\% = 8,000$  | 80,000               | 8,000              | 88,000                |
| 2015         | $1,60,000 - 80,000 = 80,000$            | $80,000 \times 5\% = 4,000$    | 80,000               | 4,000              | 84,000                |

### Ledger accounts in the books of United Publishers [Hire Purchaser]

Dr. Machinery a/c  
Cr.

| Year    | Particulars           | Rs.      | Year     | Particulars         | Rs.      |
|---------|-----------------------|----------|----------|---------------------|----------|
| 1/01/13 | To Epson Ltd a/c (CP) | 3,00,000 | 31/12/13 | By Depreciation a/c | 30,000   |
|         |                       |          | 31/12/13 | By Balance c/d      | 2,70,000 |
|         |                       | 1,40,000 |          |                     | 1,40,000 |
| 1/01/14 | To Balance b/d        | 2,70,000 | 31/12/14 | By Depreciation a/c | 30,000   |
|         |                       |          | 31/12/14 | By Balance c/d      | 2,40,000 |
|         |                       | 2,70,000 |          |                     | 2,70,000 |
| 1/01/15 | To Balance b/d        | 2,40,000 | 31/12/15 | By Depreciation a/c | 30,000   |
|         |                       |          | 31/12/15 | By Balance c/d      | 2,10,000 |
|         |                       | 2,40,000 |          |                     | 2,40,000 |
| 1/01/16 | To Balance b/d        | 2,10,000 |          |                     |          |

Dr. Epson Ltd a/c [Hire Vendor]  
Cr.

| Year | Particulars | Rs. | Year | Particulars | Rs. |
|------|-------------|-----|------|-------------|-----|
|------|-------------|-----|------|-------------|-----|

|          |                          |          |          |                  |          |
|----------|--------------------------|----------|----------|------------------|----------|
| 1/01/13  | To Bank a/c (DP)         | 60,000   | 31/12/13 | By Machinery a/c | 3,00,000 |
| 31/12/13 | To Bank a/c (Instalment) | 92,000   | 31/12/13 | By Interest a/c  | 8,000    |
| 31/12/13 | To Balance c/d           | 1,60,000 |          |                  |          |
|          |                          | 3,12,000 |          |                  | 3,12,000 |
| 1/01/14  | To Bank a/c              | 88,000   | 31/12/14 | By Balance c/d   | 1,60,000 |
| 31/12/14 | To Balance c/d           | 80,000   | 31/12/14 | By Interest a/c  | 8,000    |
|          |                          | 1,68,000 |          |                  | 1,68,000 |
| 1/01/15  | To Bank a/c              | 84,000   | 31/12/15 | By Balance c/d   | 80,000   |
|          |                          |          | 31/12/15 | By Interest a/c  | 4,000    |
|          |                          | 84,000   |          |                  | 84,000   |

Dr. Interest a/c  
Cr.

| Year     | Particulars      | Rs.    | Year     | Particulars | Rs.    |
|----------|------------------|--------|----------|-------------|--------|
| 31/12/13 | To Epson Ltd a/c | 12,000 | 31/12/13 | By P/L a/c  | 12,000 |
|          |                  | 12,000 |          |             | 12,000 |
| 31/12/14 | To Epson Ltd a/c | 8,000  | 31/12/14 | By P/L a/c  | 8,000  |
|          |                  | 8,000  |          |             | 8,000  |
| 31/12/15 | To Epson Ltd a/c | 4,000  | 31/12/15 | By P/L a/c  | 4,000  |
|          |                  | 4,000  |          |             | 4,000  |

Dr. Depreciation a/c  
Cr.

| Year     | Particulars      | Rs.    | Year     | Particulars | Rs.    |
|----------|------------------|--------|----------|-------------|--------|
| 31/12/13 | To Machinery a/c | 30,000 | 31/12/13 | By P/L a/c  | 30,000 |
|          |                  | 30,000 |          |             | 30,000 |
| 31/12/14 | To Machinery a/c | 30,000 | 31/12/14 | By P/L a/c  | 30,000 |
|          |                  | 30,000 |          |             | 30,000 |
| 31/12/15 | To Machinery a/c | 30,000 | 31/12/15 | By P/L a/c  | 30,000 |
|          |                  | 30,000 |          |             | 30,000 |

Ledger accounts in the books of Epson Ltd. [Hire Vendor]

Dr. United Publishers a/c  
Cr.

| Year     | Particulars       | Rs.      | Year     | Particulars    | Rs.      |
|----------|-------------------|----------|----------|----------------|----------|
| 1/01/13  | To Hire Sales a/c | 3,00,000 | 1/01/13  | By Bank a/c    | 60,000   |
| 31/12/13 | To Interest a/c   | 12,000   | 31/12/13 | By Bank a/c    | 92,000   |
|          |                   |          | 31/12/13 | By Balance c/d | 1,60,000 |
|          |                   | 3,12,000 |          |                | 3,12,000 |
| 1/01/14  | To Balance b/d    | 1,60,000 | 31/12/14 | By Bank a/c    | 88,000   |
| 31/12/14 | To Interest a/c   | 8,000    | 31/12/14 | By Balance c/d | 80,000   |
|          |                   | 1,68,000 |          |                | 1,68,000 |
| 1/01/15  | To Balance b/d    | 80,000   | 31/12/15 | By Bank a/c    | 84,000   |
| 31/12/15 | To Interest a/c   | 4,000    |          |                |          |
|          |                   | 84,000   |          |                | 84,000   |

Dr. Hire Sales a/c  
Cr.

| Year     | Particulars    | Rs.      | Year     | Particulars              | Rs.      |
|----------|----------------|----------|----------|--------------------------|----------|
| 31/12/13 | To Trading a/c | 3,00,000 | 31/12/13 | By United Publishers a/c | 3,00,000 |
|          |                | 3,00,000 |          |                          | 3,00,000 |

Dr. Interest a/c  
Cr.

| Year     | Particulars | Rs.    | Year     | Particulars              | Rs.    |
|----------|-------------|--------|----------|--------------------------|--------|
| 31/12/13 | To P/L a/c  | 12,000 | 31/12/13 | By United Publishers a/c | 12,000 |

|          |            |        |  |                          |        |
|----------|------------|--------|--|--------------------------|--------|
|          |            | 12,000 |  |                          | 12,000 |
| 31/12/14 | To P/L a/c | 8,000  |  | By United Publishers a/c | 8,000  |
|          |            | 8,000  |  |                          | 8,000  |
| 31/12/15 | To P/L a/c | 4,000  |  | By United Publishers a/c | 4,000  |
|          |            | 4,000  |  |                          | 4,000  |