

HIRE PURCHASE SYSTEM

Weightage of the Unit:

Six Marks theory/problem

Twelve Marks Problem

Twenty Four marks Problem

Meaning:

Purchase is the system under which the property is acquired by payments made in instalments, during the period of which title in the property remains with the hire vendor.

Features of hire purchase:

- 1. There is an Agreement between seller and the buyer***
- 2. The possession of the goods will be immediately passes from seller to buyer on signing the agreement.***
- 3. The buyer will make payment in instalments.***
- 4. The ownership of the goods remains with the seller till the payment of last installment.***
- 5. The buyer can terminate the agreement if he does not want to pay the rest of the instalments.***
- 6. The seller has a right to forfeit the instalment amount already paid, and reposes the goods in case of default of payment.***
- 7. The total amount payable by the purchaser to the seller is called Hire purchase price which is always more than the cash price.***

Differences between Sale and Hire purchase system:

<i>SALE</i>	<i>HIRE PURCHASE</i>
<i>Ownership passes from seller to buyer</i>	<i>Passes only after the last instalment is paid</i>
<i>No Take back of goods by the seller if the buyer fails to pay money</i>	<i>Seller can take back the goods if buyer fails to pay the instalments.</i>
<i>Generally, No return of goods</i>	<i>Buyer can return the goods</i>
<i>Price is paid in lump sum</i>	<i>In Instalments</i>
<i>Purchaser is to pay only Cash price</i>	<i>Cash price plus Interest he has to pay</i>
<i>Buyer's position is like owner</i>	<i>Is like bAilee till the ownership of goods is passed on to him.</i>

Some important terms:

- 1. CASH PRICE: It means price of goods at which buyer can buy goods from the seller***
- 2. HIRE PURCHASE PRICE: cash Price PLUS Interest***
- 3. Down Payment: Initial Amount payable by the buyer at the time of signing the agreement.***
- 4. Hire Purchaser: Person who purchases the asset under Hire Purchase System***
- 5. Hire Vendor: Who sells goods to the hire purchaser.***

ACCOUNTING ENTRIES:

1. ENTRIES IN THE BOOKS OF HIRE PURCHASER:

Asset accrual method/Actual cash price/Proportional Capitalization Method		Credit purchase with Interest/ Full capitalization/Full cash price method	
1	If any Down payment is Made: Asset a/c Dr To cash/Bank A/C		For recording Purchase of an asset: Asset a/c Dr To hire Seller's A/c For recording down Payment: Hire seller's A/c Dr To Cash/Bank A/c
2	At the end of each installment: (Due) Asset a/c Dr Interest A/c Dr To hire seller's A/c		At the end of each Instalment: For Interest Due: Interest a/c Dr To hire seller's a/c
3	Paying Instalment Amount: Hire Seller's A/c Dr To Cash/Bank A/C		Instalment Payment: Hire seller's a/c Dr To cash/bank a/c
4	For charging depreciation: Depreciation A/c Dr To Asset A/c		For charging depreciation: Depreciation A/c Dr To Asset A/c
5	For transferring Dep. & Int to P/L A/c P&L a/c Dr To Dep A/c To Int. A/c		For transferring Dep. & Int to P/L A/c P&L a/c Dr To Dep A/c To Int. A/c

Entries in the books of Hire Vendor (Hire Seller)

Only One method: Credit Sale with Interest method.

1. At the time of sale:

- a. For recording the sale: Hire Purchaser's a/c Dr to Sales A/c
- b. For recording the down payment: Cash/Bank a/c Dr To Hire Purchaser's A/c

2. At the end of each instalment:

- a. For recording interest due: Hire Purchaser's A/c Dr to Interest a/c
- b. For recording the receipt of instalment amount: Cash a/c Dr to Hire purchaser's a/c
- c. For transferring interest to P/L a/c: Interest a/c Dr to P/L a/c

DIFFERENCES BETWEEN HIRE PURCHASE & INSTALMENT SYSTEM (IMP)

	<u>HIRE PURCHASE</u>	<u>INSTALMENT PURCHASE</u>
1	<i>It is a contract of Hire</i>	<i>It is a contract of sale</i>
2	<i>On the date purchase, he gets only possession of the goods</i>	<i>He gets both possession as well as ownership of the goods</i>
3	<i>In case of default in payment, the seller can repossess the goods</i>	<i>The seller can sue in the court of law in case of default in payment</i>
4	<i>The Goods can be returned by the buyer to the seller</i>	<i>Can not be returned by the buyer</i>
5	<i>The Position of a buyer is like a bailee till the instalment is paid</i>	<i>Is like owner</i>
6	<i>The buyer cannot sell, destroy, transfer, damage or pledge the goods</i>	<i>The buyer can do all these things</i>
7	<i>The bad debts risk is Less</i>	<i>Bad debts is relatively more</i>

PROBLEMS:

A. CALCULATION OF INTEREST:

Problem 1. A purchased a machine of which price is rs.10000, payment made as below:

Rs.2000 down payment, balance in 3 instalments of rs.3000 each, interest is 6% p.a. Calculate interest payable by the Buyer.

Solution:

Cost price=10000-down payment2000=Balance is rs.8000

*Interest for I instalment: $8000*6\%=480$*

Interest for II instalment= 8000 -first instalment 3000 Less:(interest 480) 2520 =Balance 5480 $8\%=329$

Interest for III instalment: Total interest-Interest of I & II instalments

*Total interest =Hire purchase price-cash price: $3000*3=9000+2000(DP)=11000$ -cash price $10000=1000$
 $1000-(480+329)=191$*

*(*** Note: Instalment amount included interest amount)*

2.X purchased a scooter, cash price 10000, DP 4000, Balance in 3 equal annual instalments plus 10% interest on the outstanding balance. Calculate Interest.

Solution: cash price: 10000 -Dp 4000 =Balance 6000

*Interest: I instalment: $6000*10\%=600$*

*II Instalment= $4000*10\%=400$*

*III instalment: $2000*10\%=200$*

Total Interest: $600+400+200=1200$.

*(*** Note: Instalment amount does not include interest. Interest amount is separate)*

3. (WHEN THE RATE OF INTEREST IS NOT GIVEN)

M purchased a TV, cash price 10000, down payment 2000, & Rs.3000 each in 3 annual instalments. Calculate the interest.

*Solution: Total Interest= $3000*3=9000+2000DP=11000$ -Cash price $10000=1000$*

Bal.at the beginning of I year= $11000-2000DP=9000$

Bal. at beginning of II year: $9000-3000=6000$

Bal.at the beg.of III year: $6000-3000=3000$

So it is in the ratio of $9:6:3$ OR $3:2:1$

*Interest for each instalment: I year: $1000*3/6=500$, II Year: $1000*2/6=333$, III year: $1000*1/6=167$.*

4. (WHEN THE CASH PRICE IS NOT GIVEN)

NOTE: Interest & Cash price of the asset is calculated by "BACK CALCULATION METHOD".

Formula for interest calculation: $\frac{\text{Total amount on last instalment} \times \text{rate of interest}}{100 + \text{rate of interest}}$

Like wise for other years to be calculated.

Problem: A purchased a machine from B on HP system on 1/1/2017 payable 10000 down and the balance as under : Rs 13000 at the end of the I year, Rs 12000 at the end of II year, Rs.11000 at the end of III year, interest charged at 10% p.a. Ascertain the cash price.

Solution:

year	Total amount due at the end of the year	Interest due at the end of the year	Cash price due at the end of each year
2019: I	11000	$11000 \times 10 / 110 = 1000$	$11000 - 1000 = 10000$
2018: II	$10000 + 12000 = 22000$	$22000 \times 10 / 110 = 2000$	$22000 - 2000 = 20000$
2017: III	$20000 + 13000 = 33000$	$33000 \times 10 / 110 = 3000$	$33000 - 3000 = 30000$
			$30000 + DP 10000 = 40000$ is CASH PRICE

Problem 2. X purchased a machine on HP basis from Y. down payment Rs.20000 and 5 annual instalments of rs.11000 each. Y had charged interest @10% p.a. Find out cash price of the machine.

Solution:

year	Total amount due at the end of the year	Interest due at the end of the year	Cash price due at the end of each year
I	11000	$11000 \times 10 / 110 = 1000$	$11000 - 1000 = 10000$
II	$10000 + 11000 = 21000$	$21000 \times 10 / 110 = 1909$	$21000 - 1909 = 19091$
III	$19091 + 11000 = 30091$	$30091 \times 10 / 110 = 2736$	$30091 - 2736 = 27355$
IV	$27355 + 11000 = 38355$	$38355 \times 10 / 110 = 3487$	$38355 - 3487 = 34868$
V	$34868 + 11000 = 45868$	$45868 \times 10 / 110 = 4170$	$45868 - 4170 = 41698$

CASH PRICE = 41698 + 20000 = 61698

Problem: (12 Marks)

Lokesh purchased a car from Mondovi motors on 1.1.15 on HP basis. The payment is to be made as follows.

Rs.40000 on delivery, Rs.76000 at the end of the first year, rs.60000 at the end of the second year, Rs.55000 at the end of the third year. Interest @10%p.a is included in these instalments. Lokesh charged depreciation @20% p.a on the Deminishing balance method.

Prepare Motor car a/c, and Mondovi motors a/c in the books of Lokesh.

Solution:

Calculation of Interest and Cash price.

Year	Total amount due at the end of the year	Interest due at the end of the year	Cash price due at the end of each year
2017	55000	$55000 * 10 / 110 = 5000$	$55000 - 5000 = 50000$
2016	$50000 + 60000 = 110000$	$110000 * 10 / 110 = 10000$	$110000 - 10000 = 100000$
2015	$100000 + 76000 = 176000$	$176000 * 10 / 110 = 16000$	$176000 - 16000 = 160000$
Cash price = $160000 + 40000 = 200000$			

In the Books of Lokesh

Car A/c

Date	particulars	amount	date	particulars	amount
Jan 2015	To Mandovi motrs a/c	200000	2015 dec.31	By dep a/c	40000
		200000		By Balance c/d	160000
2016 Jan	To Bal. b/d	160000	Dec.31 2016	By dep a/c	32000
		160000		By Balance c/d	128000
Jan 2017	To bal b/d	128000	Dec.31 2017	By dep a/c	25600
		128000		By Balance c/d	102400
Jan 2018	To bal b/d	102400			

Mandovi motors A/C

<i>date</i>	<i>Particulars</i>	<i>amount</i>	<i>date</i>	<i>particulars</i>	<i>Amount</i>
Jan/15	To Cash a/c	40000	Jan 1/15	By Car a/c	200000
2015/dec	To cash a/c	76000	dec.31	By Interest a/c	16000
Dec/15	To bal.c/d	100000			
		216000			216000
2016/dec	To cash a/c	60000	2016 Jan1	By bal b/d	100000
Dec/16	To bal.c/d	50000	Dec 31/16	By Interest a/c	100000
		110000			110000
Dec 31	To Cash a/c	55000	2017 Jan	By bal.b/d	50,000
2017			1	By interest a/c	5000
		55000			55000

Problem: Vijaya purchased a computer from Sujaya Ltd under HP basis on 1/1/15 and paid 18000 as down payment and the balance in three equal instalments with interest @10%p.a at the end of each year.

For the third year the instalment amount was 26400 including interest. The dep.was provided @20% on WDV method.

Ascertain the cash price of the computer and prepare computer a/c and sujaya 's a/c in the books of Vijaya.

Solution:

Clculation of cash price and interest:

*Interest of 3rd year=26400*10/110=2400, cash price of 3rd year=26400-2400=24000*

*Here the problem states that the balance is paid in 3 equal instalments with interest @10% p.a is given, so the instalments of 1st and 2nd year also 24000 each. Therefore cash price=24000*3=72000+DP18000=90000.*

*Interest of 1st year: 90000-18000 (DP)=72000*10%=7200*

*2nd year: 72000-24000=48000*10%=4800*

*3rd year: 48000-24000=24000*10%=2400*

In the Books of VIJAYA

Computer a/c

<i>Date</i>	<i>particulars</i>	<i>amount</i>	<i>Date</i>	<i>particulars</i>	<i>amount</i>
Jan 2015	To Sujaya a/c	90000 90000	2015 dec.31	By dep a/c By Balance c/d	18000 72000 90000
2016 Jan	To Bal. b/d	72000 72000	Dec.31 2016	By dep a/c By Balance c/d	14400 57600 72000
Jan 2017	To bal b/d	57600 57600	Dec.31 2017	By dep a/c By Balance c/d	11520 46080 57600

Jan 2018 To bal b/d 46080

SUJAYA'S A/C

<i>date</i>	<i>Particulars</i>	<i>amount</i>	<i>Date</i>	<i>particulars</i>	<i>Amount</i>
Jan/15 2015/dec Dec/15	To Cash a/c To cash a/c (24000+7200) To bal.c/d	18000 31200 48000 97200	Jan 1/15 dec.31	By Computer a/c By Interest a/c	90000 7200 97200
2016/dec Dec/16	To cash a/c (24000+4800) To bal.c/d	28800 24000 52800	2016 Jan1 Dec 31/16	By bal b/d By Interest a/c	48000 4800 52800
Dec 31 2017	To Cash a/c (24000+2400)	26400 26400	2017 Jan 1	By bal.b/d By interest a/c	24000 2400 26400

24 MARKS PROBLEMS

1. Mr X purchased two trucks on HP basis for 11,20,000, DP is 300000 and 3 instalments of Rs.300000 is paid in each year. Rate of interest charged @5% p.a . buyer is sepreciating the asset @10% p.a on WDV method.

Because of financial problems, X after having paid down payment and I instak-lment at the end of first year could not pay the second instalment and seller took possession of the trucks. Seller after spending 7000 on repairs of the asset sold them for Rs.602200.

Show the ledger accounts in the books of both the parties to record the above transactions.

SOLUTION:

Calculation of Interest:

Cash price: $1120000 - \text{Down payment } 300000 = 820000$ Interest for I year = $820000 * 5\% = 41000$ Interest for 2nd year: $(820000 + 41000 - 300000) = 561000 * 5\% = 28050$ Interest for III year: Total interest - Int of I & II Year = $1200000 - 1120000 = 80000 - (41000 + 28050) = 10950$ **In the books of X****Truck's A/C**

I yr	To Hire seller's a/c	1120000	I yr end	By Dep	112000
				By bal. c/d	1008000
		1120000			1120000
II year	To bal b/d	1008000	II yr end	By Dep	100800
				By bal. c/d	589050
				By P/L a/c	218150
		1008000			1008000

Hire Seller's A/C

I yr	To cash a/c	300000	I yr	By Trucks a/c	1120000
I yr	To cash a/c	300000	I Yr	By interest a/c	41000
I Yr	To bal c/d	5 61 000			
		1161000			1161000
II yr	To trucks a/c	589050	II yr	By bal b/d	561000
				By int a/c	28050
		589050			589050

Interest A/C

I yr	To Hire seller's a/c	41000	I yr	By P/L a/c	41000
		41000			41000
II year	To b Hire sellers a/c	28050	II yr	By P/L a/c	28050
		28050			28050

**In the Books of Hire Seller
X A/C**

I yr end	To sales a/c	1120000	I ye end	By cash a/c	300000
	To interest a/c	41000		By cash a/c	300000
				By Bal c/d	561000
		1161000			1161000
II Yr end	By Bal b/d	561000	II ye	By Repossessed stock a/c	589050
	By Interest a/c	28050			
		589050			589050

Re possessed stock A/C

I I yr	To X a/c	589050	II yr	By cash a/c	602200
	To interest a/c	7000			
		6150			
		602200			602200

Problem:

Mr. Prasad purchased a car on 1.1.14 agreeing to pay the price in 4 annual instalments of Rs.28200 at the end of each year. Interest rate is 5% included in the instalment amount. Dep is 10% on WDV of the asset.

The purchaser paid I & II instalments but could not pay III instalment so the vendor re possessed the car, spends Rs.2940 and sells for Rs.65000.

Show the necessary ledger accounts in the books of both the parties. Calculations are made to the nearest rupee.

SOLUTION:

Calculation of cash price & interest.

Year (1)	Total amount at the end of the year (II)	Interest due at the end of the year (III)	Cash price due IV (II-III)
2017	28200	$28200 * 5/105 = 1343$	26857
2016	$26587 + 28200 = 55057$	$55057 * 5/105 = 2622$	52435
2015	$52435 + 28200 = 80635$	$80635 * 5/105 = 3840$	76795
2014	$76795 + 28200 = 104995$	$104995 * 5/105 = 5000$	99995

CASH PRICE: 99995

In the books of Prasad

Motor Car A/C

1.1.14	To Hire seller's a/c	99995	31.12.14	By Dep	10000
				By bal. c/d	89995
		99995			99995
1.1.15	To bal b/d	89995	31.12.15	By Dep	9000
				By bal. c/d	80995
		89995			89995
1.1.16	To bal.b/d	80995	31.12.16	By Dep.a/c	8100
				By Hire sellers a/c	55057
				By P/L a/c	17838
		80995			80995

Hire Seller's A/C

31.12.14	To cash a/c	28200	1.1.14	By Motor car a/c	99995
	To bal c/d	76795	31.12.14	By interest a/c	5000
		104995			104995
31.12.15	To cash a/c	28200	1.1.15	By Bal.b/d	76795
	To bal.c/d	52435	31.12.15	By interest a/c	3840
		80635			80638
31.12.16	To Motor car a/c	55057	1.1.16	By bal b/d	52435
			31.12.16	By interest a/c	2622
		55057			55057

Interest A/C

31.12.14	To Hire seller's a/c	5000	31.12.14	By P/L a/c	5000
		5000			5000
31.12.15	To b Hire sellers a/c	3840	31.12.15	By P/L a/c	3840
		3840			3840
31.12.16	To hire seller's a/c	2622	31.12.16	By P/L a/c	2622
		2622			2622

**In the Books of Hire Seller
Prasad's A/C**

1.1.14	To sales a/c	99995	31.12.15	By cash a/c	28200
31.12.14	To interest a/c	5000		By Bal c/d	76795
		104995			104995
1.1.15	By Bal b/d	76795	31.12.15	By Cash a/c	28200
31.12.15	By Interest a/c	3840	31.12.15	By bal c/d	52435
		80635			80635
1.1.16	To Bal b/d	52435	31.12.16	By repossessed	
31.12.16	To interest a/c	2622		stock a/c	
		55057			55057

Re possessed stock A/C

31.12.16	To Prasad's a/c	55057	31.12.16	By cash a/c	65000
	To cash a/c	2940			
	To P/L a/c	7003			
		65000			65000

