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MENTORING
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CA FOUNDATION | CA INTERMEDIATE | CA FINAL

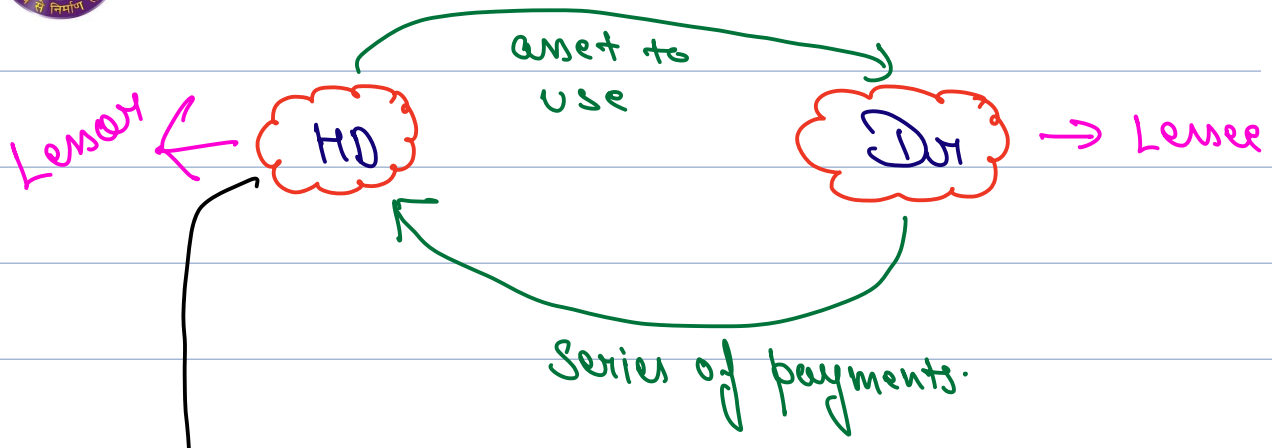
AS-19

Leases.

#1 use of asset by making

- Purchase
  - Single payment
    - Acquire.
      - a) Control
      - b) Risk & Reward.
- Lease.
  - Series of payment
    - Acquire Risk & Reward.
      - with control → F.L.
      - W/O control → O.L.

#2 Definitions



if he gets the asset back from lessee then Q. of Sales & lease back would arise.

{it will be discussed after understanding of FL & D.2.}

Lease is an agreement b/w 2 parties one gets Right of use of asset & another party gets Consideration or series of payments for Specific period of time.

#3 Types of Lease :- Right of use of asset

Without control

↓

O.L.

↓

lease which is not a F.L. is O.L.

With Control

↓

F.L.

↓

There are 5 indicators

① lessee becomes owner of asset automatically at the end of lease term.

② lessee becomes owner of asset at the end of lease term by making nominal payment. (Bargain price)

③ useful life of asset is almost equal to economic life.

↓

major life of asset.

(i.e. ≥ 75%)

④ PV of lease payments is almost equal to FV of asset.

↓

means ≥ 90%.

⑤ Asset is of specialised nature & has no use for any party other than lessee.

I → independently.

↓

if satisfied.

↓

F.L.

#4. Scope :- Asig applies to all leases other than

i) Natural Resources.
ii) Intangibles.
iii) Land.
iv) 3rd party software.

#5 Financial Lease

i) Residual Value. :- estimated f.v. at the end of lease term.

- GRV
  - ↓
  - Guaranteed R.V.
  - ↓
  - Amount committed by lessee to pay lessor at the end of lease term.
- UGRV
  - ↓
  - R.V. — GRV
  - ⇒ UGRV.

ii) Alcing :-

Lessee Pov.

i) pays. → Lease Rentals
↳ G.R.V.

ii) minimum lease payments.
(MLP) → P.V. of L.R
+
P.V. of GRV

iii) if = $\frac{\text{PV of MLP.}}{\text{FV}} \times 100$

= ---- % ≥ 90%

then it is F.L.

Lessor. Pov.

→ Should get
↳ L.R.
↳ GRV
↳ UGRV

→ Gross investment. ....
(L.R. + GRV + UGRV)

— net investment ----
{P.V. of (L.R. + GRV + UGRV)}

UFI (Unearned finance income) xxx

iii) To calculate P.V., which int. Rate is to be considered ??

The rate when P.V. of (MLP + UGRV) = F.V.

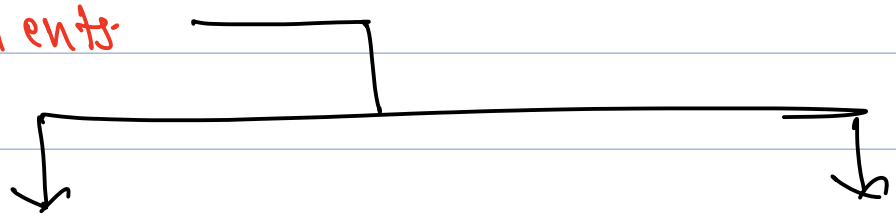
↓

Such Int. rate is known as I.R.R. s.

if I.R.R. is not there, then consider
I.B.R (Incremental borrowing rate)

(of lessee)

iv) Treatments



	Lessee	Lessor
Inception	Asset Dr ××× To L.L. ××× (FV or PV of MLP↓)	L.R. Dr To Asset
Subsequently	Fin. Ch. (P12) Dr To L.L.	L.R. Dr. To Fin. Ch. (P12) receiv.
	L.L. Dr To Bank.	Bank Dr To L.R.

v) Items required to Solve Q. {HD Gift}.

i) L.R.
ii) IRR
} may be missing & can be calculated.

iii) GRV
iv) UGRV
} if not given then assume = 0

v) FV → always given in Q.

Illustration 1

S. Square Private Limited has taken machinery on finance lease from S.K. Ltd. The information is as under:

Lease term = 4 years

Fair value at inception of lease = ₹ 20,00,000

Lease rent = ₹ 6,25,000 p.a. at the end of year

Guaranteed residual value = ₹ 1,25,000

Expected residual value = ₹ 3,75,000

Implicit interest rate = 15%

Discounted rates for 1st year, 2nd year, 3rd year and 4th year are 0.8696, 0.7561, 0.6575 and 0.5718 respectively.

Calculate the value of the lease liability as per AS-19 and disclose impact of this on Balance sheet and Profit & loss account at the end of year 1

Do accing treatment as per As-19. from pov of Lessee & Lessor.

Soln :-

a) value of L.L.

years	M.L.P.	D.f.	P.V.
1	625000	0.8696	
2	625000	0.7561	
3	625000	0.6575	
4	625000	0.5718	
4	125000	0.5718	

⇒ 1855850

Asset Dr 1855850

To L.L. 1855850

(lower of PV of MLP & FF)

B) Cal^{n} of finance charges for lessee (LAT)

year	op bal.	Int@15%	Rep./ install.	Cl. bal
1	1855850	278377	625000	1509227
2	1509227	226384	625000	1110611
3	1110611	166591	625000	652202
4	652202	97798	625000 +125000	—

Bif.

C) J.E. in books of lessee.

		Yr 1	Yr 2	Yr 3	Yr 4.
F.C.	Dr	278377	226384	166591	97798
	To L.L.	278377	226384	166591	97798
L.L.	Dr	625000	625000	625000	750000
	To Bank.	625000	625000	625000	750000

D) In the books of Lessee

Year	Particulars	amount	D.F.	P.V.
1	L.R.	625000	0.8696	
2	L.R	625000	0.7561	
3	L.R.	625000	0.6575	
4	L.R.	625000	0.5718	
4	GRV	125000	0.5718	
		2625000		1855850
4	UGRV	250000	0.5718	142950
(3750000 - 1250000)		2875000		1998800
		↓		↓
		Gr.I.		N.I.

U.F.I = Gr.I - N.I.
= 2875000 - 1998800
= 876200

Lessee

Impact on SOPL.

Exp.
F.C. 278377

Impact on BS.

Eq. & Li.
C.L. 625000

Assets.

NCA.

ROU

150227

Q.2. FV = 7 lacs., L.T = 3 years, PV @ DF ⇒ 10%.

UGRV = 75000 for 3rd DF. = 0.7513

IRR = 10%. PVAF for 3 years = 2.4868

Check whether above mentioned lease is F.L. or not ?

Soln :- ∵ PV of (MLP + UGRV) = FV

L.R. × PVAF + GRV × DF + UGRV × DF = FV

L.R × 2.4868 + 0 × 0.7513 + 75000 × 0.7513 = 700000

2.4868 L.R. + 56347.5 = 700000

2.4868 L.R = 700000 − 56347.5

$$L.R = \frac{643651}{2.4868}$$

L.R. = 258827

Now to check whether this Lease is F.L.

PV of MLP = L.R. × PVAF

= 258827 × 2.4868

= 643651

So $\frac{\text{PV of MLP}}{\text{FV}} \times 100$

$= \frac{643651}{700000} \times 100$

= 91.95%

∵ it is more than 90%.

∴ it is F.L.

Prakash Limited leased a machine to Badal Limited on the following terms:

		(₹ In lakhs)
(i)	Fair value of the machine	28.3
(ii)	Lease term	5 years
(iii)	Lease rental per annum	8.00
(iv)	Guaranteed residual value	1.60
(v)	Expected residual value	3.00
(vi)	Internal rate of return	15%

Discounted rates for 1st year to 5th year are 0.8696, 0.7561, 0.6575, 0.5718, and 0.4972 respectively.

Ascertain Unearned Finance Income. (Similar to Nov 19) (similar to July 21)

Solution

Solution :- Unearned finance income.

₹ in Lacs

year	Particulars	amount	DF	P.V.
1	L.R.	8	0.8696	6.9568
2	L.R.	8	0.7561	6.0488
3	L.R.	8	0.6575	5.26
4	L.R.	8	0.5718	4.5744
5	L.R.	8	0.4972	3.9776
5	GRV	1.6	0.4972	0.79552
		41.6		27.61312
5	UGRV	1.4	0.4972	0.69608
		43		28.3092

UFI = G.I − N.I

= 43 − 28.3092

= 14.6908 lakhs

B&P Ltd. availed a lease from N&L Ltd. The conditions of the lease terms are as under:

(i) *Lease period is 3 years, in the beginning of the year 2009, for equipment costing ₹ 10,00,000 and has an expected useful life of 5 years.*

(ii) *The Fair market value is also ₹ 10,00,000*

(iii) *The property reverts back to the lessor on termination of the lease.*

(iv) *The unguaranteed residual value is estimated at ₹ 1,00,000 at the end of the year 2011.*

(v) *3 equal annual payments are made at the end of each year.*

(vi) *Consider IRR = 10%.*

The present value off ₹ 1 due at the end of 3rd year at 10% rate of interest is ₹ 0.7513. The present value of annuity of ₹ 1 due at the end of 3rd year at 10% IRR is ₹ 2.4868.

State whether the lease constitute finance lease and also calculate unearned finance income.

PV of MLP + PV of UGRV = FV.

PV of L.R + PV of GRV + PV of UGRV = FV

L.R x PVAf + GRV x Df + UGRV x Df = FV

L.R x 2.4868 + 0 + 100000 x 0.7513 = 1000000

L.R x 2.4868 + 75130 = 1000000

LR x 2.4868 = 1000000 − 75130

LR = 371911

∴ PV of MLP = 371911 x 2.4868

$= 924867$

$\therefore \frac{PV \text{ of } MLP}{FV} \times 100$

$\Rightarrow \frac{924867}{1000000} \times 100 = 92.48\%$

$\therefore$ it is F.L.

UFI

⇒ Lease Rentals (371911 × 3 yrs) 1115733
+ UGRV 100000
1215733
Gross investment
− Net investment {924867+75130} 999997
Unearned finance income 215736

#6 Operating Lease

a) it is a lease which is not a F.L.
b) It does not satisfy any indicators of f.L.
c) lessee does not have control over asset but control lies with lessor only.
∴ leased asset will be disclosed as PPE by lessor & lessee will not show any asset/

Liability.

d) Dep. will be charged by lessor.

e) lease rent will be treated as expense. by lessee & income by lessor.

f) lease rent should be charged to PIL every year on SLM basis. or in ratio of output.

↓ equally.

g) Lease rentals should be equalised.

h) Diff. b/w actual rent & Lease rent (equalise) should be t×f. to Lease equalisation.

↓ will appear in BS as NCA. or NCL as the case may be.

eg-3. Suppose L.R. = 30000, 40000 & 50000
L.P. = 3 years.

$$\therefore \text{Avg L.R.} = \frac{30000 + 40000 + 50000}{3}$$

$$= 40000$$

I L.R. Dr. 40000

To Bank. 30000

To L. Eq. (Bif) 10000

II L.R. Dr 40000

To Bank 40000

III L. R. Dr 40000

L. Eq. Dr 10000 (Bif)

To Bank 50000

11. *A machine was given on 3 years operating lease by a dealer of the machine for equal annual lease rentals to yield 30% profit margin on cost ₹ 1,50,000. Economic life of the machine is 5 years and output from the machine are estimated as 40,000 units, 50,000 units, 60,000 units, 80,000 units and 70,000 units consecutively for 5 years. Straight line depreciation in proportion of output is considered appropriate. Compute the following:*

✓ *(i) Annual Lease Rent*

✓ *(ii) Lease Rent income to be recognized in each operating year and*

✓ *(iii) Depreciation for 3 years of lease.*

Soln

$$L.R. \Rightarrow \frac{150000 \times 130\cdot1 \times (40k + 50k + 60k)}{40k + 50k + 60k + 80k + 70k}$$

$$\Rightarrow \frac{195000 \times 150000}{300000}$$

⇒ 9750

A.L.R. = $\frac{9750}{3} \times 1 = 3250$.

ii) Lease Rent income to be recognized.

it should be recognized in 4:5:6 (ratio of output)

∴ Lease Rent

year 1 $9750 \times \frac{4}{15} = 2600$

year 2 $9750 \times \frac{5}{15} = 3250$

year 3 $9750 \times \frac{6}{15} = 3900$

iii) Dep. for 3 years of lease.

Dep. amount = 150000

L.T. = 3 yrs

Output = 5 yrs.

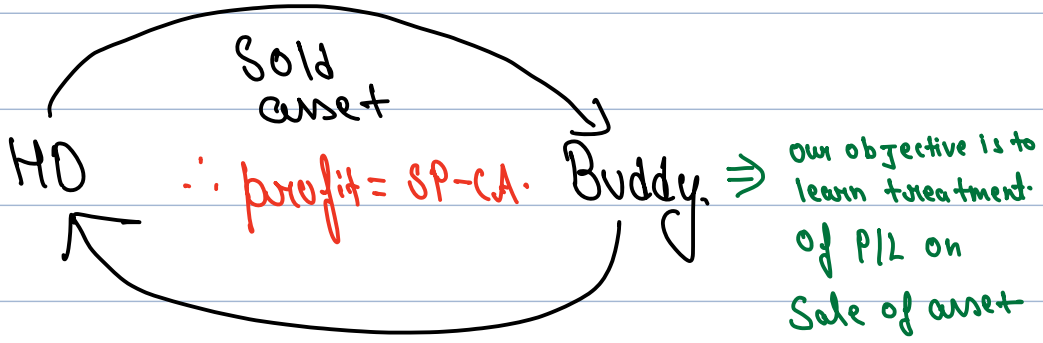
ratio of output. = 4:5:6:8:7.

yr 1 = $150000 \times \frac{4}{30} = 20000$

yr 2 = $150000 \times \frac{5}{30} = 25000$

$$y_{M3} = 15000 \times \frac{6}{30} = 3000$$

#7 Sales & leave back



Buddy leaved back asset to HO

F.L.

profit/loss on sale should be amortised over leave term.

O.L.

SP ≤ FV

Profit/loss on sale should be recognised immediately in P/L.

SP > FV

Profit = SP − C.A.

- FV − C.A. → immediately in P/L
- SP − FV → should be amortised over L.T.

eg → C.A = 30, FV = 50, Lease is 0.2.

SP = 45

45 − 30 = 15

immediately in PIL

SP = 62.

profit = 62 − 30 = 32.

FV − C.A. (diff)

50 − 30 ⇒ 20

immediately in PIL

SP − FV

= 62 − 50

= 12

↓

amortise over L.T.

14. *X Ltd. sold machinery having WDV of ₹ 300 lakhs to Y Ltd. for ₹ 400 lakhs and the same machinery was leased back by Y Ltd. to X Ltd. The lease back arrangement is operating lease.*

Give your comments in the following situations:

(i) *Sale price of ₹ 400 lakhs is equal to fair value.* (loss 2. immin PIL)

(ii) *Fair value is ₹ 450 lakhs.* (loss immedi in PIL)

(iii) *Fair value is ₹ 350 lakhs and the sale price is ₹ 250 lakhs.* → loss in PIL

(iv) *Fair value is ₹ 300 lakhs and sale price is ₹ 400 lakhs.* loss over L.T.

(v) *Fair value is ₹ 250 lakhs and sale price is ₹ 290 lakhs.*

WDV = 300 } → loss = 50
FV = 250 }

→ 40 amortise over

Accounting Treatment:

S. No.	Particulars	Accounting Treatment
(i)	When sale price of ₹ 400 lakhs is equal to fair value	X Ltd. should immediately recognize the profit of ₹ 100 lakhs (i.e. 400 – 300) in its books.
(ii)	When fair value is ₹ 450 lakhs	Profit of ₹ 100 lakhs should be immediately recognized by X Ltd.
(iii)	When fair value of leased machinery is ₹ 350 lakhs & sales price is ₹ 250 lakhs	Then loss of ₹ 50 lakhs (300 – 250) to be immediately recognized by X Ltd. in its books provided loss is not compensated by future lease payment.
(iv)	When fair value is ₹ 300 lakhs & sales price is ₹ 400 lakhs	Then, profit of ₹ 100 lakhs is to be deferred and amortized over the lease period.
(v)	When fair value is ₹ 250 lakhs & sales price is ₹ 290 lakhs	Then the loss of ₹ 50 lakhs (300-250) to be immediately recognized by X Ltd. in its books and profit of ₹ 40 lakhs (290-250) should be amortized/ deferred over lease period.