Chapter Overview (AS 19 Leases)

1. Definition of lease
2. Scope
3. Important Terms
   a) lease Term
   b) lease Payments
4. Types of lease
   a) Operating lease
   b) Finance lease
5. Indicators of Finance lease
6. Accounting for Finance lease
   a. Lessee Books
   b. Lessor Books
   c. Special Cases
      Lease Rent missing
      IRR missing
7. Accounting for Operating lease
   a. Lessee Books
   b. Lessor Books
   c. Special Books
      Lease Rent in Proportion of output
8. Sale & lease Back
9. Other Misc Points
   a. Contingent Rent
   b. Initial Direct Cost
   c. Lease Rent @ Beginning of the year

AS 19 - Leases (V. Imp)

1] Definition of lease

A lease is an agreement whereby the lessor (legal owner) conveys to the lessee the right to use an asset for a period of time (lease term) in return for a payment or series of payment (lease Rentals)

Eg: BB Sir (Owner) → lessor gives studio on rent to AK Sir (tenant) → lessee for 5 years (lease term) @ ₹ 5,00,000 per annum.

- lease Rentals / (or)
- lease Payments / (OR)
- Minimum lease Payments

Chapter overview

Two types of leases
- Operating lease (More like a normal Rental agreement)
- Finance lease

a] Operating lease (More like a Rental agreement) → (Jisne rent pe diya uske liye Income & jisne asset rent pe liya uske liye expense)

Journal Entries

lessor (BB Sir) (owner)	lessee (AK Sir)
Day ① No entry	Day ① No entry
1 yr lend CIB A/c Dr xx	1 yr lend Lease Rent Exp (P/L) Dr.
To Lease Rent Income (P/L) xx	To CIB A/c.
Asset BB Sir ke books mein he hai	
1 yrend → Depn (P/L) xx	
To PPE xx	

(b) Finance lease (More like BB Sir selling the asset to AK on loan/EMI Basis. Matlab BB Sir will not receive full money upfront. He will receive in installment [lease Rentals]

Journal Entries

Lessor (BB Sir)	Lessee (AK Sir)
Day ① Lease Receivable A/c Dr xx To Asset (Studio) A/c xx	Day ① Asset A/c Dr (Studio) xx To Lease Liability (Payable) xx
4 years end Lease Receivable A/c Dr To Interest Income A/c 4 years end CIB A/c Dr A/c To Lease Receivable A/c.	4 years end Interest Exp A/c Dr To Lease Liability 4 years end lease liability A/c Dr. To CIB
OR	(OR)
4 years end CIB A/c Dr → lease Rentals To Int Income (P/L) To Lease Receivable A/c	Int Expense A/c Dr lease Liab A/c Dr To CIB
	4 years end Asset is now in AK Sir Books in case of Finance lease Depr xx To PPE xx

2] Scope

This standard applies to all leases other than:

(a) lease agreements to explore or use natural resources such as oil, gas, metals, minerals etc.

(b) licensing agreements for items such as motion picture films, video recordings, plays, manuscripts, patents & copyright

(c) lease agreement to use Lands.

3] Important Definitions

(a) Lease Term

It includes Non cancellable period (+) Renewal period (if reasonably certain to exercise)

Day (1) → Total lease Term

Eg: BB Ltd ⟶ AK Ltd
(lessor) (lessee)

5yrs lease (non cancellable)
(+)
3yrs (option to renew)

- I am reasonably certain to exercise the option ⟶ 5yrs + 3yrs = 8yrs.
- I am not reasonably certain to exercise the option ⟶ 5yrs

⑥ Lease Payments / Lease Rentals / Minimum lease Payments

Lessor	Lessee
① Fixed lease Rentals (Eg 1)	① Fixed lease Rentals
② Guaranteed Residual value (GRV) (Eg ②) ↳ GRV given by lessee (MSW) ↳ GRV given by independent 3rd party (Eg ③)	② Guaranteed Residual value (GRV) ↳ GRV given by lessee (MSW)
③ Renewal option / Purchase option payment (Eg ④ / Eg ⑤)	③ Renewal option / Purchase option payment

Eg ① Fixed lease Rentals

BB Sir gave studio on lease to AK Sir for 3yrs.

Rentals every year were as follows.

Yr	lease Rent
1	10L
2	11L
3	13L

Fixed lease → Isko Amount Day ① se he pata hai Rentals.

Eg ② GRV

AK Sir (lessor) gives Ferrari (car) on lease to MSW Ltd (lessee) for ₹ 30L p.a. for 3 years.

Guarantee for a Residual value → (15L) @ the end of 3rd year (To ensure proper usage)

Yr	lease Rent
1	30L
2	30L
3	30L + 15L (GRV)

lease Rent

Day ① → Buy Back offer (After 3yrs Flipkart will Buy Back @ ₹ 18K) Iphone.

Eg: Iphone purchased by AK from Flipkart

AK (lessor) gave Iphone on lease to Aadit (lessee) → L·R

Yr	Lease Rentals
1	30k
2	30k
3	30k

No GRV promised by Aadit (lessee)

AK has received a GRV But from 3rd party (Flipkart) & not from lessee.

Lease Rentals

AK (lessor)

Yr	L·R
1	30k
2	30k
3	30k + GRV (3rd party) 18k

Aadit (lessee)

Yr	L·R
1	30k
2	30k
3	30k ~~18k~~

Eg:④ BB Sir gave his studio on lease to AK for 5yrs @ ₹ 5L p.a.

BB Sir also gave an option to renew for 3yrs @ ₹ 4L p.a for the renewal period.

It is reasonably certain that renewal option will be excercised.

Calculate L·R for each year.

Yr	Lease Rentals
1	5L
2	5L
3	5L
4	5L
5	5L
6	4L
7	4L
8	4L

} It is part of lease Rentals only if it is reasonably certain to renew for 3yrs.

Eg 5 BB Sir gave studio on lease to AK Sir for 5yrs @ ₹ 5L p.a.

BB Sir also gave an option to purchase the studio @ the end of 5yrs @ ₹ 18L

AK Sir is reasonably certain to exercise the purchase option		AK Sir is NOT reasonably certain to exercise the purchase option	
Yr	L.R	Yr	L.R.
1	5L	1	5L
2	5L	2	5L
3	5L	3	5L
4	5L	4	5L
5	5L + 18L (Purchase option payment)	5	5L

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④ Types of lease

- Operating lease → ① Does not trf the risk & reward of the asset.
  ② Like a normal Rental agreement
- Finance lease → ① Transfer the risk & reward of the asset
  ② like a loan agreement.

⑤ Indicators of Finance lease

(There are 5 conditions. If Any 1 is met, then it is a Finance lease)

ⓐ Ownership

If lease transfers ownership of the asset to the lessee @ the end of lease term.

(eg: BB Sir gave studio on rent for 5yrs & @ the end of 5yrs ownership of asset will be transferred to AK Sir) → Fin. lease.

ⓑ Purchase option:

If lessee has an option to purchase the asset at a price which is expected to be lower than Fair value & it is reasonably certain that the option will be exercised.

(eg: BB Sir gave studio on lease for 5yrs & at the end of 5th yr AK Sir has option to purchase the asset @ 18L (Fair value / MKT value of which is 40L). It is reasonably certain that purchase option will be exercised) → It is a Fin lease.

ⓒ Lease Term

If lease term is for major part (75%) of economic life of the asset.

Eg (AK Sir gave Ferrari on lease to Ram for 8yrs (Total life of Ferrari is 10yrs).
Lease Term covers 80% of life $\left(\frac{8\text{yrs}}{10\text{yrs}} \times 100\right)$ → It is Fin lease

Eg (BB Sir gave studio on lease for 10yrs (Total life of studio is 40yrs)
Lease Term covers 25% of life $\left(\frac{10\text{yrs}}{40\text{yrs}} \times 100\right)$ → It is Not a Fin lease (as per 3rd condition)

ⓓ PV of Minimum Lease Payments

At inception of the lease, if present value of MLP substantially (90% or more.) covers the fair value of asset, then it is Fin. lease.

Eg① Ak Sia Ferrari ⟶ 1 cr. (Fair value)
(Owner / lessor)

Ak Sia gives on lease (Ferrari) to Maruti Ltd for ₹40L p.a for 3 years.

D.F @ 10% (Given)

Yr end	Lease Rent	DF @ 10%	PV
1	40L	0.909	36,36,000
2	40L	0.826	33,04,000
3	40L	0.751	30,04,000
		PV of MLP	99,44,000 approx.
		Fair Value	1,00,00,000

% of money recovered in rentals = $\frac{9944000}{1,00,00,000} \times 100 = 99.44\%$

Eg② Everything is same as above except lease Rentals is 30L p.a for 3 yrs.

DF @ 10% → $\frac{1}{1.10}$

Yr end	Lease Rent	DF @ 10%	PV
1	30,00,000	0.909	27,27,000
2	30,00,000	0.826	24,78,000
3	30,00,000	0.751	22,53,000
		PV of MLP	74,58,000
		Fair Value	1,00,00,000

% of money recovered in rentals = $\frac{74,58,000}{1,00,00,000} \times 100 = 74.58\%$

∴ Not a Fin lease

Eg. (3) AK —Ferrari, 3 yrs.→ MRU Ltd (Fair value = 1 cr)

L·R = 30L p.a.

GRV = 25L

DF @ 10%

Check whether PV of MLP substantially covers Fair value of Asset or not?

Yr end	Lease Rent	DF @ 10%	PV
1	30,00,000	0·909	2727000
2	30,00,000	0·826	2478000
3	30,00,000	0·751	41,30,500
	+ 25,00,000 (GRV)	PV of MLP	93,35,500
		Fair Value	1,00,00,000

% of money recovered in rentals = $\frac{93,35,500}{1,00,00,000} \times 100 = 93.35\%$

↓

PV of MLP substantially covers Fair value

∴ It is a Fin. Lease.

(e) Specialised Nature

The leased asset is of a specialised nature such that only lessee can use it without major modifications being made

eg. BB Sir —studio (↓ Modifications)→ AK Sir

All within my studio.
- King size Bed
- Swimming Pool
- water Proof fishes
- Multiplex for movies

Because asset is of specialised Nature (only useful for lessee)

∴ It is a Fin. lease.

If none of the above 5 indicators are met, then it is an operating lease.

⑥ Accounting for Finance Lease → Lessee Books
→ Lessor Books

ⓐ Lessee Books

Journal Entries

ⓐ Asset A/c Dr. xx
To lease liab^y xx

} Lower of: PV of MLP → [Lease Rent + GRV]
(or)
Fair value of Asset → [Given in ques]

Yrend

ⓑ Int Exp
To lease liab^y

ⓒ Lease liab^y
To CLB

ⓓ Deprn
To PPE

} Depreciation over the Lease term or useful life whichever is lower

ⓔ Extra Entry
PL A/c Dr.
To Deprn A/c
To Int Exp A/c

Eg ① Dhruv (lessee) took an asset on lease from Rahul (lessor) for 5yrs.

Assets Fair Value is ₹ 10,00,000.

Lease Rentals are ₹ 250000 p.a. (payable @ the end of each Year)

GRV @ the end of lease term promised by lessee is ₹ 50,000.

D.F @10%.

Calculate lease liability in the Books of Dhruv & also calculate Interest (Finance) charges for each year end. (Assume Fin. lease)

Sol^n: In the Books of Dhruv ltd (lessee)

Day ① Asset A/c Dr 978550
To lease liability 978550 } WN ①

Yr 1 end Int Exp/Fin. charges A/c Dr 97855
To Lease liab A/c 97855

Yr 1 end Lease liab A/c Dr 250000
To CIB 250000

Yr 1 end Depr 195710
To PPE 195710
[978550 / 5yrs]

Yr 1 end P/L A/c Dr 293565
To Depr 195710
To Int Exp 97855

Yr 2 end

Yr 2 end Int Exp/Fin. charges A/c Dr 82641
To Lease liab A/c 82641

Yr 2 end Lease liab A/c Dr 250000
To CIB 250000

Yr 2 end Depr 195710
To PPE 195710
[978550 / 5yrs]

Yr 2 end P/L A/c Dr 278351
To Depr 195710
To Int Exp 82641

WN ① Calculation of Lease Liability

lower of : Fair value = 10,00,000

PV of MLP = 978550 ↓

Yr end	Lease Rent	DF @10%	PV
1	250000	0.909	227250
2	250000	0.826	206500
3	250000	0.751	187750
4	250000	0.683	170750
5	250000 + 50000 (GRV)	0.621	186300

PV of MLP 978550 approx

WN ② Calculation of Interest (Finance) charges for each yr end (Jut & Repayment Table)

Yr end	Opening of lease liab	Finance charges (Exp.) @ 10% → same as Disc. Factor	Repayment / Instalment / Lease Rent payment	Closing Bal of lease liab
1	978550	97855	(250000)	826405
2	826405	82641	(250000)	659046
3	659046	65905	(250000)	474951
4	474951	47495	(250000)	272446
5	272446	27245	(250000) (only lease Rent)	49691 (Approx GRV (due to rounding off this is not coming to exact 50,000))

Illus 1 In the Books of lessee

Calculation of lease liability : lower of Fair value 20,00,000
or
PV of MLP 1855850

Year end	L.R	D.F@15%	PV
1	625000	0.8696	543500
2	625000	0.7561	472563
3	625000	0.6575	410937
4	625000 + 125000 (GRV)	0.5718	428850
			18,55,850

Day ① Journal Entry

Asset A/c Dr 1855850
To lease liab[y] 1855850

4r/end Int Exp 278378
To lease liab[y] 278378

4r/end Lease liab 625000
To CIB 625000

4r/end (SLM Assume) Deprn 463963
To PPE 463963
(1855850/4yrs)

OR (1855850 - 125000) / 4yrs = 432713
Cost GRV
can also take 375000 as Res. value (given in ques)

PIC 742341
To Deprn 463963
To Int Exp 278378

WN Calculation of Interest / Finance charges for each yr end. (Lease Rent)

Yr end	Opening	Finance charges @ 15%	Repayment	Cls
1	1855850	278378	(625000)	1509228
2	1509228	226384	(625000)	11,10,612
3	11,10,612	166592	(625000)	652204
4	652204	97831	(625000)	125035

125035 ⇓ GRV approx

Illus 10 (LDR)

In the Books of lessee Ltd.

① Value of Machinery

Lower of fair value 7,00,000

(or)

PV of MLP 699054 ↓

Yr end	Lease Rent	D.F @ 15%	PV
1	300000	0.869	260700
2	300000	0.756	226800
3	300000 + 22000 (GRV)	0.657	211554
			699054

Day ① J.E.

Machinery A/c Dr	699054	
To lease Liab^{y}		699054

(ii) Calculation of Finance charges for each yr end

Yr end	Opening	Finance charges @ 15%	Repayment	CLB
1	699054	104858	(300000)	503912
2	503912	75587	(300000)	279499
3	279499	41925	(300000)	21424

↓ GRV approx

Ques 2 → lessee – Finance lease (H.W) QOTD.

Ques 5 → lessee - Finance lease (Refer Q.B)

(b) Lessor Accounting

Hint: Its calculation is different from lessee. So don't try to mix it up.

Journal Entries (In the Books of lessor) Finance lease

Day① Lease Re'able A/c Dr xx } @ Net Investment
TO PDE xx }

Yr end No Deprn (Asset bahar chala gaya)

Yr end Lease Rebable xx
TO Interest Income xx

Yr end CLB A/c Dr. xx
TO Lease Re'able xx

4 year end Int Income xx } Income Being trf to P/L.
TO P/L xx

Important terms

1] **Gross Investment** = Minimum lease Payments (+) UGRV (Unguaranteed Residual Value)
(without Present value) — lease Rent + GRV

Residual Value = GRV + UGRV
100 = 20 + 80

2] **Net Investment** = PV of Minimum lease Payments (+) PV of UGRV
(PV of Gross Investment)

3] **Unearned Finance Income** = Gross Investment (-) Net Investment

Eg ① Aadit took an asset on lease from Naman
(lessee) (lessor)

lease Rentals = 10 L p.a. (excluding GRV)
Residual value = 1,00,000, GRV = 80000, UGRV = 20,000
lease Term = 5 years, D.F @ 10%.

Pass J.E on Day ① & 4 year end in the Books of Naman assuming it is a Fin. lease
Also calculate the amount of unearned Finance Income.

Soln: Lessor Books

Day ① Lease Receivable A/c Dr 3852100 } @ Net Investment
To PPE 3852100 }

1] Gross Investment = Minimum Lease Payment (+) UGRV
(without Present value) Lease Rent GRV
= $1,00,000

2] Net Investment = PV of Gross Investment
= 3852100

3] Unearned Finance Income = Gross Investment (-) Net Investment
= $1.00,000 (-) 3852100
= 1247900
↑ upcoming 5 years ka Interest
This is Not Booked on 1st day
This is computed for disclosure purpose.

Year1 Journal Entries

Lease Receivable 385210
To Interest Income 385210

CIB A/c Dr 10,00,000
To Lease Receivable 10,00,000

Int Income 385210
To PIL 385210

WN (1)

Yr end	Lease Rentals		DF @ 10%	PV
1	10,00,000		0.909	909000
2	10,00,000		0.826	826000
3	10,00,000		0.751	751000
4	10,00,000		0.683	683000
5	10,00,000	+80000 (GRV) +20000 (UGRV)	0.621	683100
	51,00,000			3852100

51,00,000 → Gross Investment

3852100 → Net Investment

WN (2) Calculation of Finance charges (Interest Income) & Installment received.

Yr end	Opn Bal of Lease Rebable	Interest Income @ 10% (Disc. factor)	Repayment (Installment / lease rent received)	Closing Bal
1	3852100	385210	(10,00,000)	3237310
2	3237310	323731	(10,00,000)	25,61,041
3	2561,041	256104	(10,00,000)	1817145
4	1817145	181715	(10,00,000)	998860.
5	998860	99886	(10,00,000)	98746
		1246646		

1246646 → Interest for 5 years.

98746 → GRV + UGRV approx.

Illus 2 (lessee) → Fin lease (Unearned Fin. Income was asked)

∴ It is a hint that Alc'ing in the Books of lessee is asked under Finance Lease.

(₹ in lakhs)

1] Gross Investment = Minimum lease Payments (+) UGRV (without PV)

= 43 lakhs

2] Net Investment = PV of Gross Investment

= 28.31 lakhs

3] Unearned Finance Income = Gross Invst (−) Net Invst

= 14.69 lakhs

WN①

Yr end	Lease Rent	D.F @ 15%	PV
1	8	0.8696	6.96
2	8	0.7561	6.05
3	8	0.6575	5.26
4	8	0.5718	4.57
5	8 + 1.6 + 1.4	0.4972	5.47
	⇓ GRV ⇓ UGRV		
	43		28.31 approx
	⇓ Gross Invst		⇓ Net Invst

Day① Lease Rentable 28·31 } @ Net Invst.
TO PPE 28·31 }

Calculation of Finance charges for each yr

yr end	Opn	Int Income @15% (DF)	Repayment	Closing
1	28·31	4·25	(8)	24·56
2	24·56	3·68	(8)	20·24
3	20·24	3·04	(8)	15·28
4	15·28	2·29	(8)	9·57
5	9·57	1·44	(8)	3·01 approx.

3·01 approx. = GRV + UGRV

* Special case is lessee Accounting (Fin. lease)

∫ Annual lease Rent is Not given in the ques?

Q4 (UDR)

Whenever Lease Rentals are missing we assume that we want to recover the Fair value of asset through PV of MLP & PV of UGRV

Imp Fair Value / Cost of Asset = PV of MLP + PV of UGRV

16,99,999.50 = PV of MLP + 100258.5
(133500 × 3rd year Disc factor @ 10% (0·751))

16,99,999.50 (-) 100258.5 = PV of MLP

PV of MLP = 1599741

i] Annual lease Rent = 1599741 / ~~3yrs~~ = PV of MLP / Annuity factor of 3yrs (10%) = 1599741 / 2.486 = 643500.6

Extra Part

Yr	L·R	(x) D·F(@10%) = PV	L·R (x) D·F = PV
1		0.909	? (x) 2.486 = 1599741
2		0.826	
3		0.751	
		2.486	1599741

2.486 = Total of 3years Discount factor (Pet Name: Annuity factor)

L·R = PV / D·F of 3yrs (Annuity factor)

= 1599741 / 2.486

= 643500.6

ii] Unearned Finance Income

(a) Gross Investment = MLPs + UGRV (without PV) = 2064001.8

(b) Net Investment = PV of G·I = 17,00,000.9

(c) Unearned Finance Income = G·I (-) N·I = 364000.8

WSN

Yr	L·R	D·F @ 10%	PV
1	643500.6	0.909	584942
2	643500.6	0.826	531531.5
3	643500.6 + 133500	0.751	583527.4
	2064001.8 (Gross Invst)		17,00,000.9 → approx (Net Invst)

Illus 11 (LOR)

① L.R.p.a. ② Check ⑤ Condition ③ UFI (GI - NI) Steps to Solve

Assumption (i)

Fair value of Asset = PV of MLP + PV of UGRV

10,00,000 = PV of MLP + 75130

(1,00,000 × 0.7513)

PV of MLP = 10,00,000 (-) 75130

= 924870

Annual Lease Rent = PV of MLP / Annuity factor of 3yrs (10%) = 924870 / 2.4868

= 371911.7

(ii) Check whether Finance lease or Operating lease

5 conditions (Any 1 is to be met)

(i) Ownership transferred @ the end of lease term → No

(ii) Purchase option @ the end of lease term → No

(iii) Lease term covers major part of life (75%): lease term (3yrs) / Life (5yrs) × 100 = 60%. → No

If I consider 60% to be major part for this ques.

(iv) PV of MLP covers substantial Fair value of Asset (90%) = YES →

(PV of MLP 924870, Fair value = 10,00,000, 924870 / 1000000 × 100 = 92.48%

(v) Specialised Nature Asset → No.

4th condition met ∴ It is a Finance lease

(iii) Unearned Finance Income

Gross Invst = 12,15,735.1

Net Invst = 10,00,000

Unearned Fin. Income : 2,15,735.1

WN	Yr	L.R	D.F @ 10%	PV
	1	371911.7	0.909	
	2	371911.7	0.826	
	3	371911.7 + 100000 UGRV	0.751	
		12,15,735.1		10,00,000

Qus 3 → Q.O.T.D

(i) Annual L.R (ii) Check 5 conditions (iii) UFI (GI - NI)

2] Special case 2

Interest Rate is missing → will be discussed in detail in FM Subject alongwith logics.

In this case we will find Internal Rate of Return (IRR). → Interest Rate for lease.

It is a rate where your Cost / Fair of Asset on Day ① = PV of Future lease Rentals & PV of UGRV.

Eg① To Calculate IRR

Annual lease Rentals = ₹ 1,00,000 @ the end of each year.

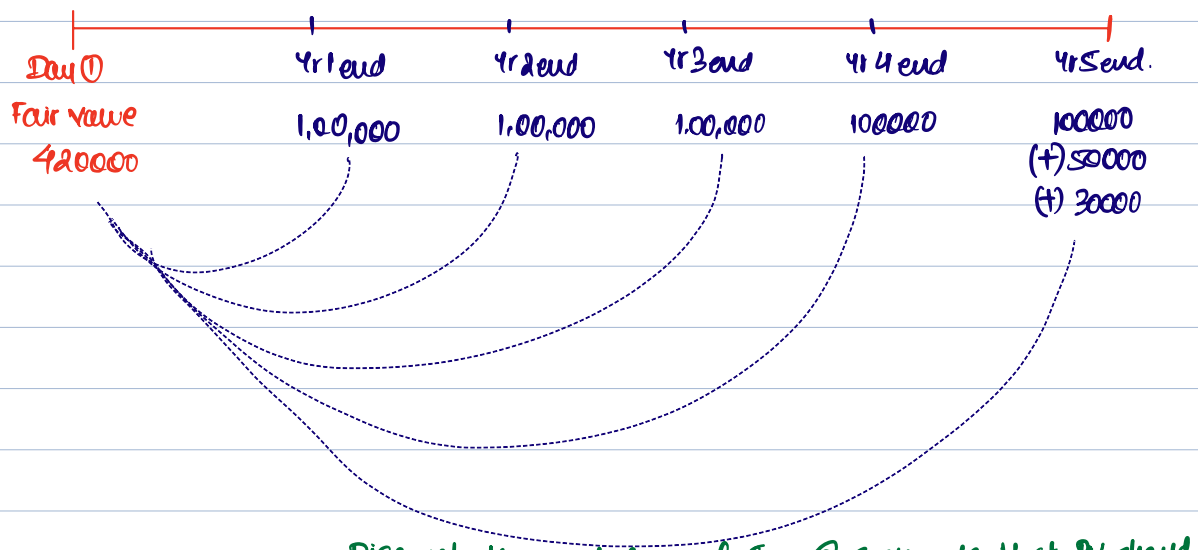
Lease Term = 5yrs.

GRV = 50,000

UGRV = 30,000

Fair value @ Beginning of lease : 4,20,000

Find Interest rate / Internal rate of return / Interest Rate implicit in lease.



Discount the cash flows of 5yrs @ such rate that PV should come to Day ① Fair value i.e. 420000

Now we will start trial & error

Assume DF @ 10%	Yr	Lease Rent	DF @ 10%	PV
	1	100000	0.909	90900
	2	100000	0.826	82600
	3	100000	0.751	75100
	4	100000	0.683	68300
				111780
	5	100000 + 50000 + 30000 (GRV) (UGRV)	0.621	428680 → 420000 nahi aaya

Assume DF @ 12%	Yr	Lease Rent	DF @ 12%	PV
	1	100000	0.893	89300
	2	100000	0.797	79700
	3	100000	0.712	71200
	4	100000	0.636	63600
	5	100000 + 50000 + 30000 (URV) (UGRV)	0.567	102060
				405860

420000 nahi aaya

By using interpolation = $10\% + \frac{428680 - 420000}{428680 - 405860} (x) (12\% - 10\%)$

ek PV 420000 se zyada aaya

ek PV 420000 se kum aaya

$= 10\% + \frac{8680}{22820} \times 2\%$

$= 10\% + 0.380 \times 2\%$

$= 10\% + 0.76$

$= 10.76\%$ IRR approx

1st divide

2nd multiply 0.380 by 2 (Dont press %)

3rd then add 10% (Dont press %)

= 10.76%

Eg 2 Annual lease Rentals 25000

Lease Term = 5 yrs.

GRV 12500

UGRV 7500

Fair value 1,00,000

Compute IRR?

Soln: Discount all Rentals, GRV & UGRV such that its PV should come to 1,00,000

Trial & Error

Assume D.F @ 12%.

Yr	L.R	D.F @ 12%	PV
1	25000	0.893	
2	25000	0.797	
3	25000	0.712	
4	25000	0.636	
5	25000 + 12500 + 7500	0.567	
		PV	101465 → Nahi aaya 100000

D.F @ 14%.

Yr	L.R	D.F @ 14%
1	25000	0.877
2	25000	0.769
3	25000	0.675
4	25000	0.592
5	25000 + 12500 + 7500	0.519
	PV	96180 approx → Nahi aaya 100000

By using interpolation = $12\% + \frac{101465 - 100000}{101465 - 96180} \times (14\% - 12\%)$

one PV should be more than 1L

one PV → less than 1L

$= 12\% + \frac{0.277}{} \times 2\%$

$= 12\% + 0.554$

IRR = 12.55% approx

10% →

? 12.768%

14% →

Solved Example 1

Discount lease Rent, GRV & URV @ such rate that present value should come to 2,00,000 (Fair value)

Assume 10%.

Yr	L.R	D.F @ 10%	PV
1	50000		
2	50000		
3	50000		
4	50000		
5	50000 + 25000 + 15000		

PV = 214340 → nahi aaya 200000 ☹

Assume 12%.

Yr	L.R	D.F @ 12%	PV
1	50000	0.893	
2	50000	0.797	
3	50000	0.712	
4	50000	0.636	
5	50000 + 25000 + 15000	0.567	

PV 202780 → nahi aaya 200000 ☹

Interpolation nahi chalega → Kyu? ek 2L se upar } yaha dono 2L se
& ek 2L se niche } upar hai

Assume 14%.

Yr	L.R	D.F @ 14%	PV
1	50000	0.877	
2	50000	0.769	
3	50000	0.675	
4	50000	0.592	
5	50000 + 25000 + 15000	0.519	PV = 192360

10% → 21340 → Ignore

12% - 202780

14% - 192360

By using interpolation: $12\% + \frac{202780 (-) 200000}{202780 (-) 192360} \times (14\% - 12\%)$

$= 12\% + (0.267 \times 2\%)$

$= 12\% + 0.533$

$= 12.53\%$ approx

---

7. Accounting for operating lease → lessee Books
   ⇓ Normal Rental agreement → lessor Books

Lessor Books	Lessee Books
Day ① No entry	Day ① No entry
4rend CIB A/c Dr lease Equilisation (BIF) To Least Rent Income (PL) To lease Equilisation (BIF) [AS 19 suggests to Book lease rent on SLM Basis unless any other Basis is more appropriate]	4rend lease Rent Exp (PL) lease Equilisation (BIF) To CIB To lease Equilisation (BIF) [. same]
4rend Deprn (PL) To PPE	4rend No Deprn.

Eg: AK Sir took studio on lease from BB Sir for 5yrs. It is an operating lease.
(lessee) (lessor)

Lease Rent	yr	L.R.
	1	100000
	2	110000
	3	120000
	4	130000
	5	140000
		600000

Avg Rent p.a. (SLM Basis) = $\frac{600000}{5yrs}$ = 120000 p.a.

In the Books of BB Sir (Lessor)

4r 1end C|B A/c Dr. 1,00,000
Lease Equilisation A/c Dr. 20,000
To lease Rent 120000

Current Asset (B/S)

4r 2end C|B A/c Dr. 110000
Lease Equilisation Dr. 10000
To lease Rent (P|L) 120000

4r 3end C|B A/c Dr. 120000
To lease Rent (P|L) 120000

4r 4end CIB A/c Dr. 120000

To Lease Rent (PL) 120000

To lease Equilisation 10000

4r 5end CIB A/c Dr. 140000

To lease Rent (PL) 120000

To lease Equilisation 20000

---

lessee Books (AK Sir) Avg Rent Exp 1.2L p.a.

4r 1end Lease Rent Exp (PL) 120000

To CIB 100000

To lease Equilisation 20000 → current liab

4r 2end Lease Rent Exp (PL) 120000

To CIB 110000

To lease Equilisation 10000

4r 3end Lease Rent Exp (PL) 120000

To CIB 120000

4r 4end Lease Rent Exp (PL) 120000

lease Equilisation Dr. 10000

To CIB 130000

4r Send Lease Rent Exp (P/L) 120000

Lease Equalisation A/c. 20000

TO CIB 140000

---

* Special case in operating lease

Sometimes we have to Book Lease Rent not in the ratio of SLM But in the ratio of output that is expected to be derived from leased asset.

Eg: Suppose a machine is taken on lease by AK Ltd (lessee) for 3yrs (Op. lease). The output estimated from the machine is 10000 units in Year1, 20000 units in Yr2, 30000 units in Year3. The annual agreed lease Rentals is ₹ 40,000 per annum. Calculate lease Rent Exp each Yr & Pass J.E.

Soln: Total lease Rent for 3years = 40000 × 3yrs = 120000

~~SLM~~

Book in ratio of output

120000

	Yr1	Yr2	Yr3
output	10000 units	20000 units	30000 units
L.R to be Booked in P/L	20000	40000	60000

$\left(120000 \times \frac{10000}{60000}\right)$ $\left(120000 \times \frac{20000}{60000}\right)$ $\left(120000 \times \frac{30000}{60000}\right)$

J.E (In the Books of lessee)

Year1	Lease Rent Exp (P/L)	20000	
	Lease Equilisation A/c		20000
	To CIB		40000
Year2	Lease Rent Exp (P/L)	40000	
	To CIB		40000
Year 3	Lease Rent Exp (P/L)	60000	
	To CIB		40000
	To Lease Equilisation		20000

Hint: lessee Books Opposite Entries

Illus 9 UDR

Op lease (3yrs) life of Asset (5yrs). A/c'ing in the Books of lessee.

(a) Annual Lease Rent

Cost of Machine	150000
(+) Profit margin (30%)	45000
	195000

The life of Asset is 5yrs But we are giving on lease only for 3yrs. ∴ Proportionate Rent will be recovered. Output of each year is also given ∴ we will use the output to calculate Annual lease Rentals.

Yr	Output	
1	40000	} lease Period.
2	50000	
3	60000	
4	80000	
5	70000	
	300000 units	

Total lease Rent = 195000 × $\frac{\text{output of 3yrs}}{\text{Total output}}$

= 195000 × $\frac{150000 \text{ units}}{300000 \text{ units}}$

= 97500

Annual lease Rent (Equal) = $\frac{97500}{3\text{yrs}}$ = **32500** → Itna har saal paisa aayega.

(b) Lease Rent Income to be Booked each yr ~~(SLM~~ Ratio of output)

Total lease Rent 32500 × 3yrs

= 97500

	Yr 1	Yr 2	Yr 3
output	40000 units	50000 units	60000 units
lease Rent Income (Trf to PIL)	₹ 26000 (97500 × 40000/150000)	₹ 32500 (97500 × 50000/150000)	₹ 39000 (97500 × 60000/150000)

Extra Journal Entries (lessor) → Not asked

Year 1	Year 2	Year 3
CIB A/c Dr. 32500	CIB A/c Dr. 32500	CIB A/c Dr. 32500
To lease Rent Income 26000	To lease Rent (PIL) 32500	lease Equilisation 6500
To lease Equilisation 6500		To lease Rent (PIL) 39000

(c) Depreciation for 3years

Depreciation is always charged on the cost of machine (i.e. ₹ 150000) over useful life i.e. 5yrs. By lessor. It should be allocated in ratio of output.

Yr	Deprn	
1	20000	$(150000 \times \frac{40000 \text{ units}}{300000 \text{ units}})$
2	25000	$(150000 \times 50000/300000)$
3	30000	$(150000 \times 60000/300000)$
4	40000	$(150000 \times 80000/300000)$
5	35000	$(150000 \times 70000/300000)$

Extra

I.E. (Extra)

Yr 1 Deprn 20000

To PPE (Machine) 20000

LDR

8. Sale & lease Back

Treatment of Profit/loss on this sale Transaction is also discussed in AS 19.

1] Sale Done & lease back results in Finance lease

Profit/loss on sale → It is to be amortised over the lease term in the proposition of Deprn.

IMP

7] Sale Done & leaseback results in Operating lease

⇓

How to treat Profit/loss on Sale

[B.V/C.A/WDV] ①
Selling Price ②
Fair value ③

Case ① Sale Price = Fair value	Case ② Sale Price is less than Fair value (Sp < FV)	Case ③ Sale Price is more than Fair value (Sp > FV)
Profit/loss on sale can be recognised immediately	Profit/loss on sale can be recognised immediately However, if there loss & such loss is compensated by future lease Payments @ Below Market Rate, then such loss should be deferred & Booked in proportion of future lease payments.	• Profit/loss upto Fair value can be Booked immediately • Excess selling Price over Fair value should be deferred & Booked over the period for which asset is expected to be used.

Hint/shortcut:

F.V (-) B.V/WDV = +ve (Profit) / -ve loss → Book immediately

S.P (-) F.V = +ve (Profit) → Defer (cheating)

In case 1 & 2 Compare S.P with B.V to calculate Profit

written down value / Book value / Carrying Amt.

Eg: Asset → WDV/BV/CA = 100

i) S.P 120, F.V = 120

Ans: Case ① FV = S.P, Profit = S.P (-) B.V = 20 → Book immediately

ii) S.P. 120, FV = 130

Ans: Case ② SP < FV, Profit S.P (-) B.V = 20 → Book immediately

iii) S.P. 90, FV = 110

Ans: Case ② SP < FV, Profit S.P (-) B.V = (10) loss → Book immediately
90 (-) 100
However, upar wala gyan

iv) S.P 150, FV = 130

Ans: Case ③ FV (-) WDV = 30 → Profit Book immediately
130 (-) 100

Cheating → S.P (-) FV = 20 Profit → Defer.
150 (-) 130
Book in future over lease term of Asset.

Total Profit 50

Illus 3 (CEDR)

(i) Case ① (FV = SP) S.P (-) B.V (WDV) = 50 lakh (-) 40 lakhs
= 10 lakhs profit, Book immediately

(ii) Case ② (S.P < FV) S.P (-) B.V (WDV) = 50 lakh (-) 40 lakh
= 10 lakhs profit → Book immediately

(iii) Case ② (SP < FV) S.P (-) B.V (WDV) = 38 lakh (-) 40 lakh
= 2 lakh loss → Book immediate
However if loss is compensated by Below market future lease payments, then defer & amortise.

(iv) Case ③ (SP > FV) FV (-) WDV = 40 (-) 40 = 0 → Book immediately
S.P (-) FV = 50 (-) 40 = 10 Profit (Defer over two lease period)

(v) Case (3) FV (-) BV (WDV) → 46 (-) 40 = 6 lakhs Profit (Book immediately)

SP > FV S.P (-) FV → 50 (-) 46 = 4 lakhs Profit (Defer over the lease period)

creating

June

(vi) Case (3) FV (-) BV → 35 (-) 40 = (5) loss Book immediately

SP > FV S.P (-) F.V → 39 (-) 35 = 4 Profit (Defer over the lease period)

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9. Other Miscellaneous Points

(a) Contingent Rent

If lease rent is based on future sales, future profits etc, such rentals will be Booked in PIL as & when received / paid.

(b) Initial Direct Cost

Cost which are incurred for entering into lease. Generally they are incurred by lessor in most of the cases.

Accounting treatment → If incurred by lessor → Generally taf to PIL. (all other cases)

→ Rare (If incurred by lessee under Finance lease) → Capitalise to the cost of Asset.

Extra Part

(c) Normally lease Rentals are paid @ the end of the year.

(eg. L.R = 1L L.T = 3yrs D.F @ 10%)

Yr	Lease Rent	D.F@10%	PV
1	100000	0.909	
2	100000	0.826	
3	100000	0.751	

If Rentals are paid @ the Beginning of the year.

Yr Begn	Lease Rent	D.F@ 10%	PV
1	100000	~~0.909~~ 1	
2	100000	0.909	
3	100000	0.826	