

TOPIC

DISCOUNTING METHODS ⇒

* Actual Value of outflow

PV of

① Net Present Value = " PVIF - PV of " ⇒ Best Method for Capital Investment

Eg:- Project A ⇒ outflow = 10,00,000,
Y CFAT PVAF@10% PVIF
1-5Y 3,00,000 x 3.79 = 11,37,000

$$\begin{aligned} NPV &= PVIF - PV of \\ &= 11,37,000 - 10,00,000 \\ NPV &\Rightarrow +1,37,000 \end{aligned}$$

Select if only 1 Project is Available

Discounting Rate (Interest Rate) (Expected Rate) = 10%
 $\frac{1}{1+r} \Rightarrow \frac{1}{1.10} \leq \frac{1}{1+0.10}$

$$\begin{aligned} NPV_B &= 12,09,000 \\ &- (10,00,000) \\ NPV &+ 2,09,000 \end{aligned}$$

Select Project B
 $NPV_A < NPV_B$

Project B
outflow = 10,00,000
Mutually exclusive

Y	CFAT	PVF	PV
1	5L	x 0.909	4,54,500
2	4L	x 0.826	3,30,400
3	3L	x 0.751	2,25,300
4	2L	x 0.683	1,36,600
5	1L	x 0.621	62,100
		PVIF ⇒	12,09,000

Short cut:

⇒ Same Cash flow := $\frac{1}{1.10} = m+ = m+ = m+ = m+ = m+ = m+ = MRC = 3.79$

⇒ When diff. Cash flow := $\frac{5L}{1.10} = m+ 4L = m+ 3L = m+ 2L = m+ 1L = m+ 5times = 12,09,000 \in MRC$

TOPIC

② Profitability Index Method \Rightarrow "Ranking Method" \Rightarrow

$$\frac{PVIF}{PVOF} \geq 1 \Rightarrow \text{Select}$$

By using P.I we can select multiple project

\Downarrow
Best Method for multiple Project Selection

eg:-1 Project A

$$\Rightarrow PVIF = 11,37,000$$

$$\Rightarrow PVOF = 10,00,000$$

$$P\text{-Index} = \frac{11,37,000}{10,00,000} = 1.14 \text{ times}$$

\Rightarrow if Single Project \Rightarrow Select

Project B

$$\Rightarrow PVIF = 12,09,000$$

$$\Rightarrow PVOF = 10,00,000$$

$$P\text{-Index} = \frac{12,09,000}{10,00,000} = 1.21 \text{ times}$$

Rank \Rightarrow I = B
II = A $\Leftarrow P_{IB} > P_{IA}$

eg:-
imp.

Projects \rightarrow

A	B	C	D	E	F
1.2	0.9	1.9	1.7	1.4	1.1

P-Index

Rank \Rightarrow

IV	\downarrow Reject \downarrow P.I < 1	I	II	III	V
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C D E A F

TOPIC

Golden Rule: D.R. ↓ \Rightarrow PV ↑

- ③ Internal Rate of Return (IRR) \Rightarrow Decision making \Rightarrow IRR > $K_0 \Rightarrow$ Select
- \rightarrow Rate at which NPV = 0 \Rightarrow Disc. Rate
- \rightarrow Rate at which $PVIF = PVOF$
- \rightarrow Rate at which $PVIF - PVOF = 0$
- \rightarrow Rate at which P-Index = $\frac{1}{1} = \frac{PVIF}{PVOF}$
- Compute IRR through Trial & Error
Use formula of Interpolation
- eg: $15.1 > 12.1 =$ Select
 $12.1 < 15.1 =$ Reject

eg: Project A \Rightarrow outflow = 10,00,000
Inflow 1-5y = 3,00,000

10% $\Rightarrow 3,00,000 \times 3.79 = 11,37,000$

12% $\Rightarrow 3,00,000 \times 3.60 = 10,80,000$

14% $\Rightarrow 3,00,000 \times 3.43 = 10,29,000$

16% $\Rightarrow 3,00,000 \times 3.27 = 9,81,000$

$\Rightarrow 14 + \frac{10,29,000 - 10,00,000}{10,29,000 - 9,81,000} (16 - 14) = 15.21\% > 12.1 \Rightarrow$ Select

IRR

Given that:

PvIF	Value
10%	3.79
12%	3.60
14%	3.43
16%	3.27

* Cost of Capital = 12%

$LR + \frac{PV_{LR} - \text{outflow}}{PV_{LR} - PV_{HR}} \times (HR - LR)$

\Rightarrow Project B \Rightarrow IRR 14%

$\rightarrow 14.1 > 12.1 \Rightarrow$ Select

In Case of mutually exclusive Choose Project A

$IRR_A > IRR_B$

$15.21\% > 14.1\%$

TOPIC

Term Loan

⇒ Fixed Period Repay
⇒ Long term loan

⇓
Asset Creation

⇓
Fixed Capital loan ✓

⇓
Long Period ✓

⇓
Conservative Approach ✓

⇓
Day to day Exp.
(Routine Exp)

⇓
Working Capital
Loan

⇓
= Short time Period

⇓
= Aggressive Approach

- a) 11.1. x
b) 13.1. x
c) 15.1.
d) 17.1. x

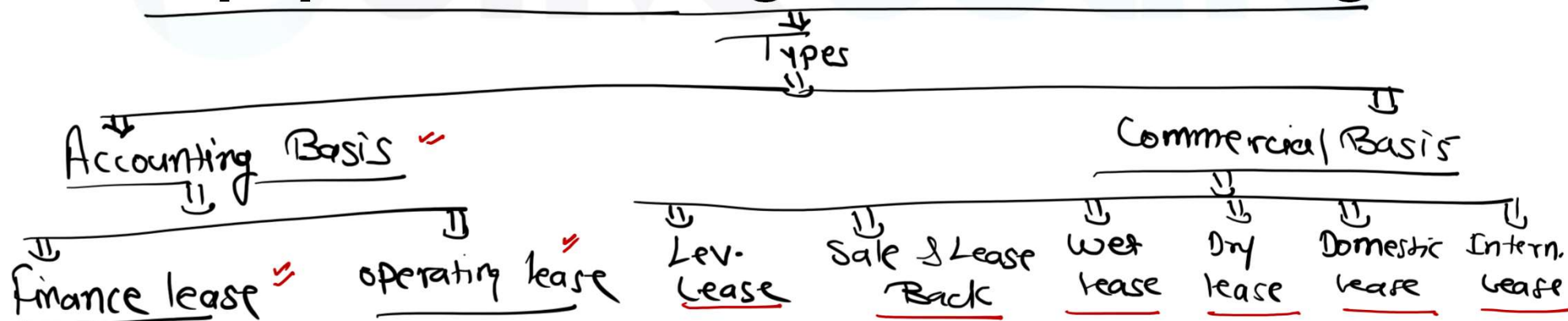
LR 14.1. ← | → 16.1. HR

TOPIC

"Asset taken on Rent for Commercial Purpose" \Rightarrow lease Agreement

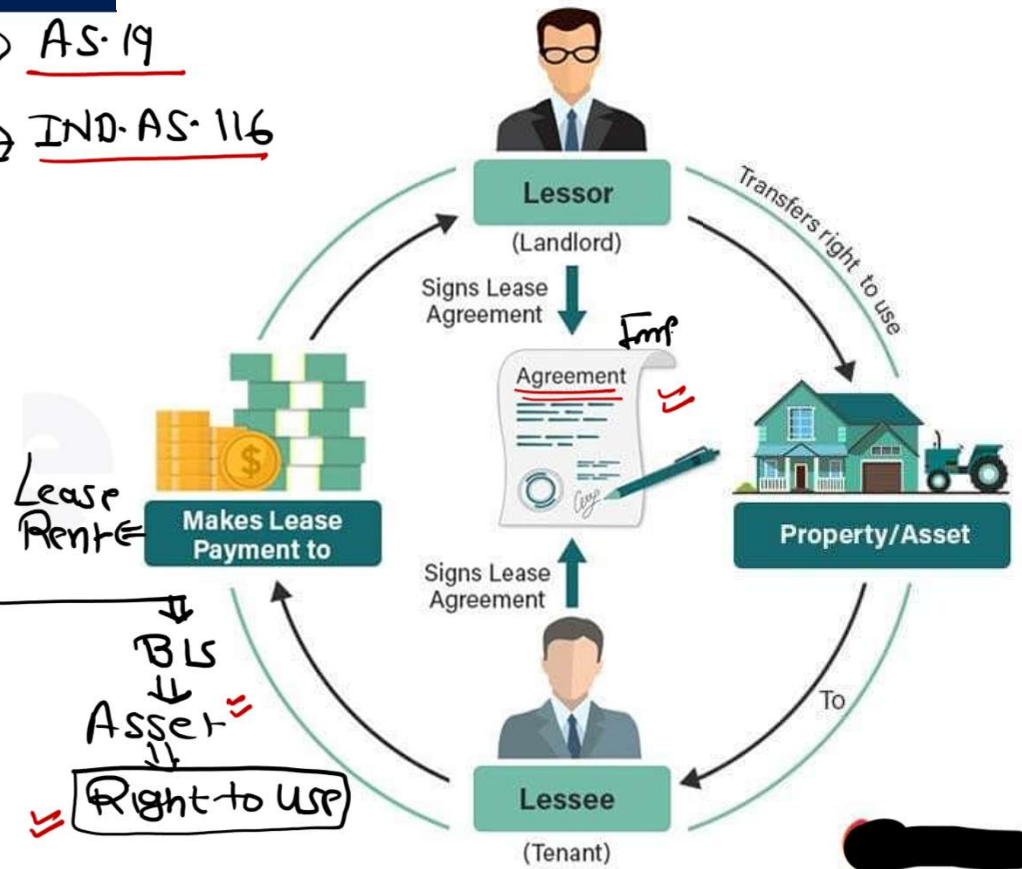
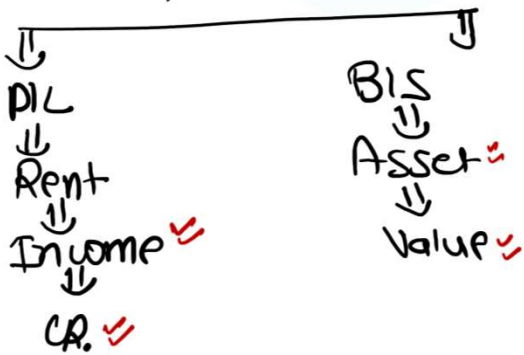
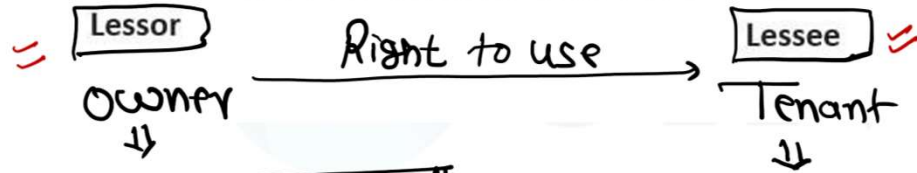
Unit 8

Equipment Leasing/ Lease Financing



TOPIC

Lease \Rightarrow Accounting = $\begin{cases} \Rightarrow \text{AS-19} \\ \Rightarrow \text{IND-AS-116} \end{cases}$



Types Of Leases

As per Accounting Standard Ind AS 116, "A lessor shall classify each of its leases as either an operating lease or a finance lease".

Accounting Perspective

⇒ AS-19

⇒ IND-AS-116

Operating Lease

Finance Lease

↳ Lease which is not Finance lease

↳ Use and return

⇒ All Exp in lessor P/L

⇒ Tax benefit to lessor

⇒ Option to buy at end of lease period

⇒ Lessee will use Asset for majority of Asset's life (eg:- life 10y lease = 9y)

⇒ All Risk by lessee

⇒ All Exp related to repair & maint. by lessee

⇒ All Admin. Exp. by lessee

⇒ Tax benefit on Dep to lessee

Imp ⇒ P/LR = Fair value of Asset

Imp ⇒ Lease period can be extended for Secondary period

* Classification of lease depends on its execution and not on written document

Imp

Imp

Imp

eg: Cost = 10,00,000
Rent = 3,00,000
P/LR = $\frac{10,00,000}{3.35}$

Disc. Rate 15%
P/LR 3.35

TOPIC

Commercial Perspective

Leveraged

Sale and leaseback

Non-cancellable

International

Domestic

Cancellable

Wet

DRY

Can't be Cancelled

Lessor
Lessee
Asset

All three in India

Can be Cancelled anytime

Asset + Human Resource to use Asset

Asset (No HR)
Aircraft

Anyone
Outside India

eg: Aircraft + Crew

* Sale and lease Back

Asset sold to X Ltd.
Leased to X Ltd.
SOL Pa. for 10y

Need Immediate money and Asset both.

Leveraged lease

LENDER

Loan

Buy Asset
LESSOR

Rent
LEASE

Asset
LESSEE

EMI

Rent Pay

TOPIC

	<u>Operating Lease</u>	<u>Financial Lease</u>
Ownership	<u>With the lessor</u> ✓	<u>Transfer option</u> at the end of the lease period is there with the lessee. ✓
Risks and rewards related to asset	<u>With the lessor</u> ✓	<u>With the lessee</u> ✓
Purchase Option	<u>Does not have</u> any option ✓	The lessee <u>have a purchase option</u> ✓
Expenses Borne	<u>By lessor</u> ✓	<u>By lessee</u> ✓
Running Cost to <u>lessee</u>	No running or administration costs <u>by lessor</u> ✓	Running cost and administration expenses are higher <u>lessee</u> ✓
Tax Benefit to lessee	No depreciation can be claimed <u>to lessor</u> ✓	Interest and depreciation both claimed <u>to lessee</u> ✓

GST on all type of lease

As per Sec 7 of the CGST Act, 2017,

lease is covered within the meaning & scope of "supply" and it is taxable.

GST does not differentiate between a Finance lease and an Operating Lease.

→ of Service

* $P_{VLR} = \text{Fair Value of Asset}$

eg:- Asset Cost = 10,00,000, Rate of Int @ 15%
Lease Rent = ₹ 3,00,000

Tenure = 5y

$$\frac{1}{1.15} = m+ = m+ = m+ = m+ = m+ \frac{MRC}{3.35}$$

$$P_{VLR} = 3,00,000 \times 3.35 = 10,05,000$$

$$P_{VLR} = \text{Asset Cost} \Rightarrow 10,05,000 = 10,00,000$$

Finance lease

* lease can be extended for Secondary Period

Primary Period 3y Secondary Period 3y

proof

Lease agreement by Banker for office purpose ⇒ Operating lease

TOPIC



TOPIC



TOPIC

"Money req. for day to day Exp." \Rightarrow

Sources:

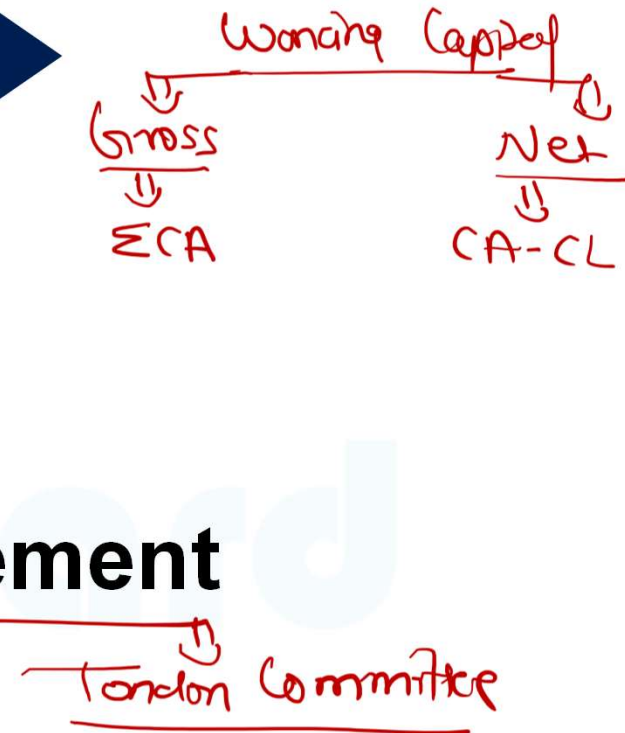
- \Rightarrow Reserve
- \Rightarrow cly Profit
- \Rightarrow OD / CC
- \Rightarrow Supplier Credit
- \Rightarrow Comm. Paper
- \Rightarrow loan

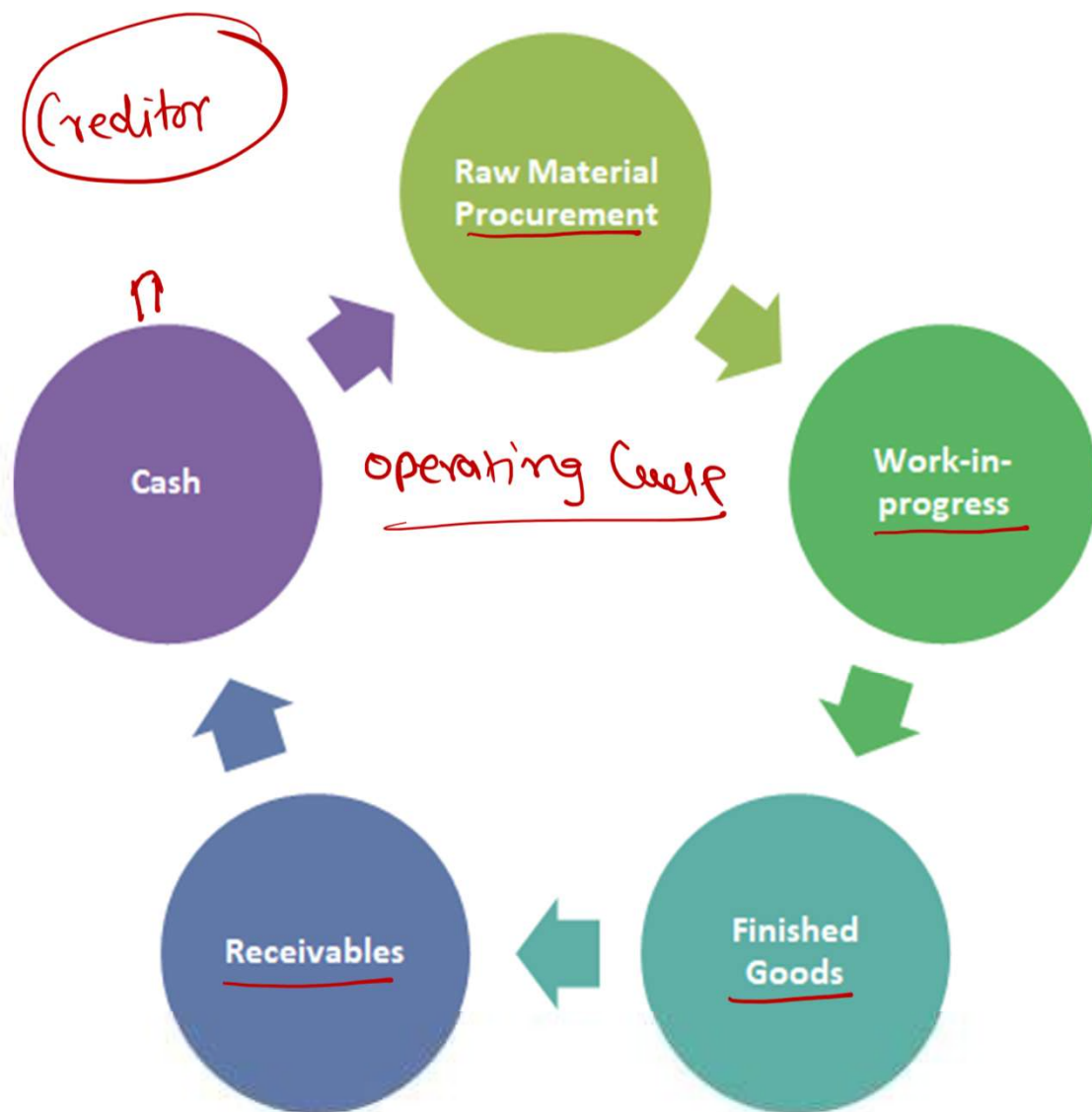
- \Rightarrow Raw Material
- \Rightarrow labour
- \Rightarrow Direct Exp
- \Rightarrow FG Stock
- \Rightarrow Debtors

Unit 9

Working Capital Management

\Downarrow
Operating Cycle





eg: Component + days

Component	days
Raw material	20 day
W.I.P.	20 day
FG	30 day
Debtors	20 day
Creditor	30 day

* No. of day in a operating cycle (Gross) / (Net)

* No. of cycle in Year (360 days)

* if 1 cycle require ₹ 80,000, Total working Capital Req.?

— x — x — x — x —

⇒ Gross O. Cycle = RM + WIP + FG + Debtors

⇒ $20 + 20 + 30 + 20 = 90 \text{ days}$

⇒ Net O. Cycle ⇒ Gross - Creditor

⇒ $90 - 30 \text{ day} = 60 \text{ days}$

⇒ No. of Cycle ⇒ $360 / 60 = 6 \text{ Cycle}$

⇒ W. Capital = $6 \text{ Cycle} \times 80,000 = 4,80,000$

TOPIC



SOURCES OF FINANCE FOR CURRENT ASSETS

- ✓ Firm's own working capital funds
- ✓ Accruals
- ✓ Trade Credit
- ✓ Working Capital Advance by Commercial Banks/ Financial Institutions
- ✓ Public Deposits
- ✓ Inter-Corporate Deposits
- ✓ Debentures for Working Capital

TOPIC

Short term = $\frac{\text{min. 7}}{\text{max. 1 year}}$

- Commercial Paper: - Commercial Paper (CP) is an unsecured money market instrument
- Eligibility for Issue of CP
 - Companies, including NBFCs and AIFs are permitted
 - Any other body corporate with a minimum net worth of 100 crore or higher
 - Any other entity specifically permitted by the Reserve Bank
 - Co-operative societies/unions and limited liability partnerships with a minimum net worth of 100 crore or higher
- Other important points
 - CP are issued in the form of a promissory note
 - CP should be issued in denominations of 5 lakh and multiples thereof.
 - CP are issued at a discount to face value as may be determined by the issuer.
 - No issuer should have the issue of CP underwritten or co-accepted.
 - CP should be issued for maturities between a minimum of 7 days and a maximum of up to one year

min. NW \geq 100 cr.

Face Value = 5L, 10L, 15L, 20L
Issue = 4L, 8L, 12L, 16L