

① Advanced Capital Budgeting

- ① Basics
- ② Inflation in Capital Budgeting
- ③ Risk Analysis in Capital Budgeting
- ④ Replacement decision
- ⑤ Adjusted present Value

1 BASICS

Long Term Investment

↓
Evaluation

↓
Capital Budgeting

Non DCF Techniques

- ① Pay Back period
- ② Accounting Rate of Return

Disc. Cash Flow Techniques.

- ① Discounting PBP
- ② Net present Value
- ③ profitability Index
- ④ IRR

Eg 1

Cost of project = ₹ 125000

Life = 5 years

Salvage = ₹ 35000

Dep. = 25% p.a. WDV

Sales	1	90000
	2	80000
	3	110000
	4	75000
	5	50000

$$NPV = \text{PVC I} - \text{PVC O}$$

VC @ 35%

FC (Excluding Dep) = ₹ 10,000 p.a.

Tax = 30%

Cost of Capital = 10%

Calculate

- ① PBP
- ② ARR
- ③ Disc. PBP
- ④ NPV
- ⑤ PI
- H.W

31250

~~22500~~

W.N.1 Calculation of Cash flows

	1	2	3	4	5
Sales	90000	80000	110000	75000	50000
(-) VC @ 35%	31500	28000	38500	26250	17500
(-) FC	10000	10000	10000	10000	10000
EBITDA/CFBT	48500	42000	61500	38750	22500
(-) Dep.	31250	23437	17578	13184	9888
PBT	17250	18563	43922	25566	12612
Tax @ 30%	5175	5569	13177	7670	3784
PAT	12075	12994	30745	17896	8828
(+) Dep.	31250	23437	17578	13184	9888
CFAT	43325	36431	48323	31080	18716

W.N.2 Terminal Value

$$\text{Sales consideration} = 35000 - \textcircled{I}$$

$$(-) \text{WDV/B.V.} = 29663$$

$$\text{Capital Gain} = 5337$$

$$\text{Tax @ 30\%} = 1601 - \textcircled{II}$$

$$\text{Terminal Value} = 33399$$

(i-ii)

③ Calculation of NPV (Imp)

	YEAR	PVF (10%)	Amount	P.V.
(A) <u>Cash Outflows</u> Cost of Machine (A)	0	1.000	125000	125000
				<u>125000</u>
(B) <u>Cash Inflows</u> CFAT (w.N.1)	1	0.909	43325	39382
	2	0.826	36431	30092
	3	0.751	48323	36291
	4	0.683	31080	21228
	5	0.621	18716	11623
Terminal Value (w.N.2) (B)	5	0.621	33399	20741
				<u>159357</u>
NPV(B-A)				34357

④ PI

$$PI = \frac{PVCI}{PVCO}$$

$$= \frac{159357}{125000}$$

$$= 1.275$$

② Accounting Rate of Return

$$ARR = \frac{\text{Avg PAT}}{\text{Initial Investment}} \times 100$$

$$= \frac{16508}{125000} \times 100 = 13.21\%$$

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