

HW - Chapter 7 - Capital Budgeting- Q13

Calculation of NPV

Yr	Sales	VC	FC	Dep.	Profit	Tax	PAT	Dep.	CI	DF	PV
1	172.8	103.68	36	43.75	-10.63	-	-10.63	43.75	33.12	0.893	29.57
2	259.2	155.52	36	43.75	23.93	3.99*	19.94	43.75	63.69	0.797	50.76
3	624	374.4	36	43.75	169.85	50.955	118.895	43.75	162.645	0.712	115.8
4	648	388.8	36	48.25	174.95	52.485	122.465	48.25	170.715	0.636	108.57
5	648	388.8	36	48.25	174.95	52.485	122.465	48.25	170.715	0.567	96.79
6	432	259.2	36	48.25	88.55	26.565	61.985	48.25	110.235	0.507	55.89
7	432	259.2	36	48.25	88.55	26.565	61.985	48.25	110.235	0.452	49.83
8	432	259.2	36	48.25	88.55	26.565	61.985	48.25	110.235	0.404	44.53
											551.74
(-) Cost of new equipment											-350
(-) Working Capital Introduced											-40
(-) Additional Equipment purchased (25 x 0.712)											-17.8
(+) working capital Recovered (40 x 0.404)											16.16
(+) Scrap Value (2.5 x 0.404)											1.01
											161.11

*

Profit for the year	23.93
Less: Set off of unabsorbed depreciation in 1 st year	(10.63)
Taxable profit	13.30
Tax @30%	3.99

Calculation of Depreciation:

On Initial equipment	=	Rs. 350 lakh ÷ 8 years = 43.75 lakh
On additional equipment	=	(Rs. 25 - Rs. 2.5) ÷ 5 years = 4.5 lakh