



NET PRESENT VALUE PROBLEM



Problem

- Calculate NPV of the two projects and suggest which of the two projects should be accepted assuming discounting rate at 10%



	Project X	Project Y
Initial Investment	Rs.40,000	Rs.60,000
Estimated Life	4 years	5 years
Scrap Value	Rs.2,000	Rs.4,000

Cash Flows					
Year	1	2	3	4	5
Project X	10,000	20,000	20,000	6,000	4,000
Project Y	40,000	20,000	10,000	6,000	4,000

PV Factor @ 10% Discount					
Year	1	2	3	4	5
PV Factors@10%	0.909	0.826	0.751	0.683	0.621



PV Factor @ 10% Discount

Year	1	2	3	4	5
PV Factors@10%	0.909	0.826	0.751	0.683	0.621



Project X

Year	Cash flows	DF@10%	PV
0	(40,000)	1	(40,000)
1	10,000	0.909	9,090
2	20,000	0.826	16,520
3	20,000	0.751	15,020
4	6,000	0.683	4,098
5	4,000	0.621	2,484
5(Scrap)	2,000	0.621	1,242
NPV			8,454



Project Y

Year	Cash flows	DF@10%	PV
0	(60,000)	1	(60,000)
1	40,000	0.909	36,360
2	20,000	0.826	16,520
3	10,000	0.751	7,510
4	6,000	0.683	4,098
5	4,000	0.621	2,484
5(Scrap)	4,000	0.621	2,484
NPV			9,456