



Note : Scrap Value = ₹ 3,00,000 × $\frac{10}{100}$ = ₹ 30,000.

□ Example 20 : A company is considering an investment project which requires an initial cash outlay of ₹ 2,50,000 on equipment. The project's economic life is 10 years. An additional investment of ₹ 1,00,000 would also be necessary at the end of each two years to restore the efficiency of the equipment. The annual cash inflows which are expected from the project are as follows :

Year	:	1	2	3	4	5	6	7	8	9	10
Cash inflows	:	40	55	80	90	125	150	190	200	230	250
(₹ '000)											

If the scrap value of the equipment is zero after 10 years and cost of capital is 20%, justify whether the project should be accepted or not by determining the net present value.

Given : The present value factors at a discount @ 15% rate are :

Year	:	1	2	3	4	5
PVF at 20%	:	0.833	0.694	0.579	0.482	0.402
		6	7	8	9	10
		0.335	0.279	0.233	0.194	0.162

• Solution ⇒ Statement showing the Present Value of Cash Outflows

Year	Outflows of cash (₹)	PVF of Re. 1 at 20% (₹)	Present value (₹)
0	2,50,000	1	2,50,000
2	1,00,000	0.694	69,400
4	1,00,000	0.482	48,200
6	1,00,000	0.335	35,500
8	1,00,000	0.233	23,300
Total present value of cash outflows			4,26,400

Statement showing the Net Present Value

Year	Cash inflows (₹)	PVF of Re. 1 at 20% (₹)	Present value (₹)
1	40,000	0.833	33,320
2	55,000	0.694	38,170
3	80,000	0.579	46,320
4	90,000	0.482	43,380
5	1,25,000	0.402	50,250
6	1,50,000	0.335	50,250
7	1,90,000	0.279	53,010
8	2,00,000	0.233	46,600
9	2,30,000	0.194	44,620
10	2,50,000	0.162	40,500
Total present value of cash inflows			4,46,420
Less : Total present value of cash outflows			4,26,400
Net Present Value			20,020