

**P #1**

Smart Manufacturing Company is planning to reduce its labor costs by automating a critical task that is currently performed manually. The automation requires the installation of a new machine. The cost to purchase and install a new machine is \$15,000. The installation of machine can reduce annual labor cost by \$4,200 and annually cost of machinery increases \$ 200. The life of the machine is 15 years. The salvage value of the machine after fifteen years will be zero. The required rate of return of Smart Manufacturing Company is 25%.

Should Smart Manufacturing Company purchase the machine?

**P #2**

Initial Cost of the project: \$ 500,000/-  
 Annual incremental revenue \$ 100,000/-  
 Incrementally Cost annually \$ 200,000/-  
 Cost of Capital 8%  
 Life of the project 8 years

Calculate the NPV of the project. Accepted or rejected

**P #3**

Calculate the NPV of the project.

Detail of the project	Relevant Values
Annual profit after tax <i>DEP</i>	\$ 25,000
Cost of the project	\$ 100,000
Life of the project	5 years
Interest rate	12%

**P #4**

Detail of the project	Relevant Values
Initial outflow	\$200,000
Life of the project	4 years
Cost of capital	5%

Annual Revenue and costs are as follow :

Years	Revenue	Cost
1	\$ 50,000	\$ 10,000
2	\$ 80,000	\$ 30,000
3	\$ 100,000	\$ 30,000
4	\$ 30,000	\$ 1200

At the end of the project residual value of the project 20,000.