



## Last Class work 2013:

ABC bank wishes to make a purchase agreement for smart credit cards the next 5 years.

- Their need is 2 million cards for year one with a price offer of 3 TL per card.
  - o Their demand will increase with 3% per year for the next 5 years.
  - o The price of the cards will be arranged according to inflation rate (TUFE), which is estimated as 7% for each year.

Your company decided to invest in smart card producing machinery to make a sales contract with the bank.

- The initial cost for the machinery and equipment is about 20 Million TL. You will be able to get a credit to finance 50% of this investment with an interest rate of 12 %, again from the ABC bank.
- The cost of labor is estimated as 200,000 for year one and it will increase with 10% for the other years.
- Maintenance cost of the machinery will be 200,000 for year one will increase by 5 % each year.
- Other overhead expenses will be 50,000 for the first year and will increase by 5 % each year.
- Fixed costs for the production will be 100,000 TL and will increase by 10,000 for the following years.
- You will be able to use straight line depreciation to deduct your investment from tax within the first four years of project life.
- Tax rate is given as 20%.

You need to keep a card inventory within the process and shipping area. The cost for this is estimated as 10% of the yearly sales and this value of inventory will be sold at the last year of the project.

The project life is five years and all the machinery will be sold at the end of the five years with the estimated price of 4 million TL.

- a) Develop the Income Statement and Cash Flow table for the 5 years project life
- b) Calculate Internal Rate of Return of the project.
- c) Calculate the Net Present Worth of the net cash flow if the MARR is given as 15%.