

# **FINANCIAL MATHEMATICS & EXCEL PROJECT,**

## **SEMESTER – 1**

### **Ques 1**

Cash flows have been generated for the years 2022-32 i.e., of 10 years considering all the data of the cashflows, no. of participants, expenses and the revenues for both the cases (considering the alterium and excluding it). The data at the side of the table is stated in general for both the cases.

On analyzing the cash flows we can assume that the company has made a good amount of profit through the project.

### **Ques 2**

As the company is about to get sold after 10 years, the total amount invested in infrastructure and servers has been calculated according to the book value. With the help of goal seek method, we found that IRR is approximately 94%.

### **Ques 3**

It is assumed that the company goes on till the year 2040 i.e., 8 more years and the cost of capital, the participation growth percentage, etc. are taken into consideration from **Ques 1**.

After 18 years, considering the present value of the cashflows IRR is calculated with the help of goal seek method and is found to be approximately 83%.