



# RAMA UNIVERSITY

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**FACULTY OF COMMERCE AND MANAGEMENT**

**COURSE: B.COM V SEM.**

**SUBJECT: INTRODUCTION TO FINANCIAL MANAGEMENT**

**SUBJECT CODE: BCH 505**

**LECTURE: 15**

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## LECTURE-15



## **Determination of Internal Rate of Return:**

### **1. When the annual net cash flows are equal over the life of the assets.**

$$\text{Present value Factor} = \frac{\text{Initial Outlay}}{\quad}$$

### **2. When the annual net cash flows are Unequal over the life of the assets.**

Following are the steps

Prepare the cash flow table using an arbitrary assumed discount rate to discount the net cash flows to the present value.

Find out the net present value by deducting from the present value of total cash flows calculated in above the initial cost of the investment

If the NPV is positive, apply higher rate of discount.

If the higher discount rate still gives a positive NPV, increase the discount rate further the NPV becomes negative.

If the NPV is negative at this higher rate, the internal rate of return must be between these two rates.

## **Advantages of Internal Rate of Return Method**

It takes into account the time value of money and can be usefully applied in situations with even as well as uneven cash flows at different periods of time.

It considers the profitability of the project for its entire economic life.

It provides for uniform ranking of various proposals due to the % rate of return.

## **Disadvantages of Internal Rate of Return Method**

It is difficult to understand.

This method is based upon the assumption that the earnings are reinvested at the internal rate of return for the remaining life of the project, which is not a justified assumption particularly when the rate of return earned by the firm is not close to the internal rate of return.

The result of NPV and IRR method may differ when the project under evaluation differs in size.

**Profitability Index or PI:** This is also known as benefit cost ratio. This is similar to NPV method. The major drawback of NPV method is that it does not give satisfactory results while evaluating the projects requiring different initial investments. PI method provides solution to this. PI is calculated as:

$$\text{PI} = \frac{\text{Present value of cash Inflows}}{\text{Present value of cash outflows}}$$

If  $PI > 1$  project will be accepted, if  $PI < 1$  then project is rejected and if  $PI = 1$  then decision is based on non-financial consideration.

### **Advantages of PI method**

It considers Time value of money

It considers all cash flow during life time of project.

More reliable than NPV method when evaluating the projects requiring different initial investments.

### **Disadvantages of PI method**

This method is difficult to understand.

Calculations under this method are complex