**UNIT-VI**

**CAPITAL AND CAPITAL BUDGETING**

Types of capital: capital can broadly be divided in to two types:

1. Fixed Capital
2. Working Capital

**Fixed capital**: It is the portion of capital which is invested in acquiring long term assets such as land and buildings, plant and Machinery and so on. It forms the skeleton of the business.

***Features of Fixed Capital***:

* ***Permanent in Nature***: It is more or less permanent in nature. It is generally not withdrawn as long as the business carries on its business.
* ***Profit generation***: Fixed assets are the sources of profits but they can never generate profits by themselves. They use stocks, cash and debtors to generate profits.
* ***Low Liquidity***: The fixed assets cannot be converted into cash quickly. Liquidity refers to conversion of assets into cash.

Types of Fixed Assets

* Tangible fixed assets- Eg: Land, building, Machinery etc
* In Tangible Fixed assets – Eg: Good will, Patents, Copy rights.
* Financial Fixed Assets-Eg: Shares, Government Bond etc.

**Working Capital**: Working capital is the flesh and blood of the business. It is that portion of capital that makes a company work. Working capital is also called circulating capital. It is used to meet regular needs of the business.

 The regular needs of the business are purchase of materials, payment of wages and salaries, expenses like rent, advertising, power and so on.

***Features of working capital***:

* ***Smooth flow of operations***: Adequate amount of working capital enables the business to conduct its operations smoothly.
* ***Liquidity***: The assets represented by the working capital can be converted into cash quickly in a short period.
* ***Life Span***: Working capital changes in its form from cash to stock, stock to debtors, debtors to cash

**CAPITAL BUDGETING**

Meaning: Capital budgeting is a process of making decisions regarding long term investment in fixed asset. It is a long range planning to employ the available capital for the purpose of maximizing the long term profitability.

Nature of Capital Budgeting: The nature of capital budgeting can be explained as:

* Capital expenditure plans involve huge investments.
* Capital expenditure once approved cannot be withdrawn.
* Evaluating cash flows.
* Selection of projects based on an acceptance criterion.

 The term capital budgeting means planning for capital for capital assets. Capital budgeting involves decisions on investment of a firm’s fund in long term activities in expectation of an expected flow of future benefits over a series of years.

Features of Capital Budgeting: The capital budgeting of a firm includes addition, modifications and replacement of long term or fixed assets the following are the features of capital budgeting:

* ***Large Investments***: Capital budgeting decisions generally involve huge investments of funds. The funds available with the firm are always limited and the demand for the funds exceeds the resources.
* ***Long term effect on profitability***: Capital budgeting decisions affect the profitability of a firm. A firm may lose business to competitors if a decisions is not rightly taken
* ***Greater risks***: Benefits from capital investments are received in future. As the future is not certain the risk involved is also higher uncertainties such as wrong forecast of earnings, change in consumer tastes and preference, technological changes etc.

**Capital Budgeting Process**: Capital budgeting decisions are among crucial, complex and critical business decisions as it involves decisions to the investment of current funds for the benefits to be achieved in future it is always uncertain. The steps involved in the capital budgeting are as follows:

* Identification of investment proposals.
* Screening the proposals.
* Evaluating of various proposals.
* Establishing Priorities.
* Final Approval.
* Implementation of proposals.
* Performance review.

**METHODS/TECHINQUES OF CAPITAL BUDGETING**

The methods of appraising capital expenditure proposals can be classified into two broad categories:

* **Modern or Discounted cash flows Techniques.**
* **Traditional Techniques**.

**MODERN OR DISCOUNTED CASH FLOWS TECHNIQUES**: Discounted cash flow methods take into accounts both magnitude and timing of expected cash flows in each period of project life.

 Under this technique, all the cash flows i.e cash inflows and outflows are to be discounted at the appropriate rate of interest, in order to find out the present value.

 The various discounted cash flows are:

* Net Present Value (NPV).
* Profitability Index (P.I).
* Internal Rate of Return (I.R.R).

***Net Present Value (NPV)***: The Net Present Value is the classic economic method of evaluating the investments proposals. In this method cash inflows are discounted with a cost of discounted rate. The NPV is to be found out by subtracting the present value of cash flows from the present value of cash inflows.

**NPV = Cash Inflows – Cash Outflows**

If the NPV is Positive or at least equal to zero then the project is said to be “**Accepted**”. If the project is Negative then it is “**Rejected**”. Among the various investments alternatives, the project which gives the highest positive NPV should be selected.

Advantages:

1. It recognizes the time value of money.
2. It considers all cash flows over the entire life of the project.
3. It is simple to find out the acceptable projects.

Disadvantages:

1. It is difficult to calculate.
2. Unless the discount rate is known this method cannot be used.

 Formula:

 Ct =Cash inflows of various year of the project.

 R = Discount rate.

 N = No: of years.

 Io = Initial outlay or cash outflows.

***Profitability Index (P.I)***: This method is based on net present value and gives a very good guide to profitability. It is the ratio of present value of cash inflows to cash outflows.

**Profitability Index: Present value of cash Inflows/ Present value of cash Outflows**.

If the profitability Index is greater than one then the project is accepted. If it is less than one then the project is rejected.

***Internal Rate of Return (I.R.R)***: The Internal Rate of Return is defined as the defined as the interest rate that equates the present value of the expected future receipts (cash inflows) to the investment outlay (cash out flows).

 Calculate the present values of cash inflow with a desired rate which is equal to the outflow. If the cash inflow is having higher value then you have to calculate the present value with another discount rate. If should be computed until the inflows is exactly or not exactly equal to outflow at a specific discount rate.

**I.R.R = Project Cost/ Annual Cash Inflows**.

Advantages:

1. It considers the time value of Money.
2. This method is more meaningful and Acceptable to the users.
3. IRR method takes into account the cash flows over the entire life of the project.

Disadvantages:

1. It is difficult to understand and use in practice as it involves.
2. It may give negative rate.
3. Like other methods, it is difficult to estimate the future earnings accurately.

 **TRADITIONAL TECHNIQUES:** The following are the traditional techniques.

* Pay Back Period.
* Average or Accounting Rate of Return.

***Payback Period***: It refers to time required to recover the initial cost of the project. It is the number of years and months required to recover investment. Payback period refers the no: of years required for cumulative cash inflows to be equal to its cash outflows.

Advantages:

1. It is very easy to apply. Calculate and interpret the result.
2. It is easy to understand.
3. It is very simple measure of economic feasibility of investment proposals.

Disadvantages:

1. It fails to measure the profitability of a project.
2. It fails to consider the magnitude of cash inflows.
3. There is no rational basis for selecting the optimum payback period.

***Accounting Rate of Return***: This method is based on the accounting information rather than cash flow. There are no: of alternative methods of calculating the ARR.

**Accounting Rate of Return: Average Annual Profit after tax\*100**

 **Average Investment**

Average annual profit after tax or EAT = Total Annual profit/ No: of years.

Ave investment = Working capital+ Scrap value +1/2 (Initial outlay – Scrap value).

Advantages:

1. It is simple to understand and use.
2. It considers the entire stream of incomes over the entire life of the project.
3. In this method profit after taxes are considered.

Disadvantages:

1. It ignores time value of Money.
2. Cash inflows are not taken in to account.
3. It does not consider the length of the project.