Introduction of Managerial Economics or Business Economics

- **Introduction**
- Economics is a growing subject it is generally related with adjustment between scarce means and unlimited wants. Thus economics tells us how a man tries to meet the maximum number of wants.
- **"Economics is the study of allocation of scarce resources and of the determinants of income, employment and economic growth ''**
- The business world has become increasingly complex, challenging and competitive in recent years. Business uncertainties and fluctuations have become the order of the day. The traditional micro economic theories have failed to offer solutions to the problems faced by business units today. In order to help the business executives to solve their business and managerial problems, a new branch of economics now popularly known as managerial economics or Business Economics has been developed by modern economists.
- **Meaning of Managerial Economics or Business Economics**
- **"Managerial economics is a science that deals with the application of various economic theories, principles, concepts and techniques to business management in order to solve business and management problems. It deals with the practical application of economic theory and methodology to decision-making problems faced by private, public and non-profit making organizations."**
- The same idea has been expressed by **Spencer and Seigelman in the following words. "Managerial Economics is the integration of economic theory with business practice for the purpose of facilitating decision making and forward planning by the management".**
- **According to Mc Nair and Meriam, "Managerial economics is the use of economic modes of thought to analyze business situation".**
- **Brighman and Pappas define managerial economics as," the application of economic theory and methodology to business administration practice"**
- **.Joel dean is of the opinion that use of economic analysis in formulating business and management policies is known as managerial economics.**
- Managerial economics is a highly specialized and new branch of economics developed in recent years. It highlights on practical application of principles and concepts of economics in to business decision making process in order to find out optimal solutions to managerial problems. It fills up the gap between abstract economic theory and managerial practice. It lies mid-way between economic theory and business practice and serves as a connecting link between the two.
- **Nature of managerial Economics**
- Managerial Economics is science.

- Managerial Economics is an art.
- Managerial Economics is micro in character.
- Managerial Economics is a normative science.
- Managerial Economics is pragmatic in nature
- **Features of managerial Economics**
- It is a new discipline and of recent origin
- It is a highly specialized and separate branch by itself.
- It is basically a branch of microeconomics and as such it studies the problems of only one firm in detail.
- It is mainly a normative science and as such it is a goal oriented and prescriptive science.
- It is more realistic, pragmatic and highlights on practical application of various economic Theories to solve business and management problems.
- It is a science of decision-making. It concentrates on decision-making process, decision-Models and decision variables and their relationships.
- It uses various macroeconomic concepts like national income, inflation, deflation, trade cycles etc to understand and adjust its policies to the environment in which the firm operates.
- It also gives importance to the study of non-economic variables having implications of economic performance of the firm. For example, impact of technology, environmental forces, socio-political and cultural factors etc.
- It uses the services of many other sister sciences like mathematics, statistics, engineering, accounting, operation research and psychology etc to find solutions to business and management problems.

It should be clearly remembered that Managerial Economics does not provide ready-made solutions to all kinds of problems faced by a firm. It provides only the logic and methodology to find out answers and not the answers themselves. It all depends on the manager's ability, experience, expertise and intelligence to use different tools of economic analysis to find out the correct answers to business problems.

- **Scope of managerial economics**
- The main function of business executive in an organisation is decision making and forward planning
- decision making and forward planning go hand in hand decision making is a process of selecting the best possible action out of available alternative actions and forward planning on the other hand means establishment plans for the future to carry out the decisions so taken.

- But the problem is that in most of the cases one feel to take the optimum decisions if he don't have the knowledge of the techniques and concepts required for solving the concerned problem

Thus managerial economics tries to help the managers in taking such important decisions particularly in the situations involving the risk and uncertainty some of such important decisions which are included under the scope of managerial economics are as follows-

- **Profit decisions**
- **Demand decisions**
- **production decision**
- **price and output decision**
- **investment decision**

Five fundamental principles of managerial economics

- **Opportunity cost principle**

The opportunity cost of anything is in next best alternative that could be produced instead by the same factors consisting of same amount of money.

Opportunity cost

For example suppose a firm has rupees 10 lakh at its disposal and there are three alternative available before it first to expand the size of the firm,Second to set up new production unit and third to set up joint venture abroad the three alternative that are able to generate the following return on capital invested

Alternative 1 expand the size of the firm Rs 5lakh

Alternative 2 setting up new production unit Rs 4lakh

Alternative 3 setting up joint venture abroad Rs 3lakh

Based on the returned the firm would pick them up alternative 1 and as such would sacrifice the next best alternative II which is expected to generate annual return of Rs 4 lakh .

In economic sense rupees 4lakh is called an annual opportunity cost of an annual income of rupees 5 lakh as such the opportunity cost of availing an opportunity is the expected income foregone from the the second best opportunity of using the resources

- **Marginal and incremental principle**

Incremental cost principle is an extension of concept of marginal cost marginal cost relates to the cost which is occurred on producing one additional unit of product but it is not practical to use as for an industrialist it is very difficult to find the cost of each additional unit every time in practice the output is

increased by a number of unit at a time and not by a single unit and therefore the Industrialist generally adopt to incremental principle which tries to find out the change in total cost on account of change in the level of business activity.

- The incremental principle is applied to business decisions which involves bulk production and a large increase in total cost and total revenue such an increase in total cost and total revenue is called incremental cost and incremental revenue respectively related to incremental output

Incremental Cost and Revenue

- incremental cost conceptually incremental cost can be defined as the cost that arise due to business decision for example suppose a firm decides to increase production by using more inputs or by adding a new plant to the existing capacity this decision increases the firm's total cost of production from Rs 100 million to Rs115 million.
- Then 115-100= Rs15 million is the incremental cost
- Incremental revenue on the other hand is the increase in revenue due to business decisions for example after the installation of new plant the Total production is increased and the firm is able to sell the incremental product as a result the firm's total sales revenue increases let us suppose from rupees 130 million to Rupees 150. Then

Then 150-130= 20 million is incremental revenue

- **incremental reasoning in business decision**
- The use of the incremental concept in business decisions is called incremental reasoning.
- Incremental mental reasoning is used for accepting or rejecting a business proposition or option
- according to the above example the incremental cost of installing a new plant is rupees 15 Million and incremental revenue of installing a new plant is rupees 20 million.
- The incremental revenue exceeds the incremental cost by rupees 5 Million which means 33.3% returns on the investment in the new plant does the firm will accept the proposition of installing a new plant provided there is no better business proposition available to the firm
- **Time Perspective principle :**

In economics, we often draw a distinction between the short-run and the long-run. This distinction is not based on any calendar period, say, a month, a quarter or a year. It is based in the speed with which decisions can be made and factors of production varied.

- The period during which it is possible to vary some factors and not others is called the short run. But the period during which all factors can be varied is called the long-run.
- For example, more output can be produced in the short- run by using more labour and raw materials. This is basically a short-term decision. But setting up a new factory or building an entirely new plant is a long-term decision.

- In reality, however, the distinction between the two often gets blurred. What remains is an estimate of those costs that vary and those that do not by the decision under consideration.
- In managerial economics we are concerned with the short-run and long-run effects of decisions on revenues as well as on costs.
- A decision may be made on the basis of certain short-term considerations but it may have various long-term repercussions which, in turn, may make it more or less profitable than it appeared at the first sight. A simple example will make this point clear. in all).

Case on Time perspective Principle

- Suppose there is a firm with temporary idle capacity.
- It now gets an order for 10,000 units.
- The prospective customer is willing to pay Rs. 3 per unit, or Rs. 30,000 for the whole lot.
- The short-term incremental cost (which ignores the fixed cost is) is only Rs. 2.50.
- So the contribution to overhead and profit is 50 paise per unit (or Rs. 5,000 in all).
- following long-term repercussions must be taken into account:
- If the management commits itself with too much of business at lower prices or with a small contribution, it may not have sufficient capacity to take up business with higher contributions when the opportunity arises. The management may be compelled to consider the question of expansion of capacity and in such cases; even the so-called fixed costs may become variable.
- If the management commits itself to a series of repeat orders at the same price, the fixed costs (which are ignored temporarily) will become variable cost.
- For instance, sooner or later it will become necessary to replace the machinery and equipment which wear out..
- 2. If lower price is charged for the extra order, old customers who pay higher price for the same product may become annoyed. This practice will appear to be unethical and may destroy the company image. This will be damaging in the long-run.
- Now on the basis of our above discussion we can state the above principle — the principle of time perspective — in the following words:
- A decision should always take into consideration both the short-term and long-term effects on revenues and costs, giving proper weight to the most relevant time periods.

Discounting Principle:

- There is a famous proverb that a bird in the hand is worth two in the bush'. This proverb, like many others, contains an element of truth. And one of the fundamental propositions of economic theory is that a rupee to be received tomorrow is worth less than the same rupee received today.
- A simple example will make clear the rationale of discounting. If an individual is offered to choose between a gift of Rs. 1,000 today or Rs. 1,000 to be received after one year, he would surely prefer the former (even if there is no uncertainty regarding the receipt of either gift).
- This is because in a world where the rate of interest is not zero there is scope for investing Rs. 1,000 at the market rate of interest and accumulate interest on the principal. If the rate of interest is 5%, today's Rs. 1,000 will become Rs. 1,050 after one year.
- There is another way of illustrating the discounting principle. One may ask how much money today would be equivalent to Rs. 100 a year from now.
- If the rate of interest is 5% the present value of Rs. 100 to be received after one year is:
- PV=100/1+i=100 /1.05 = 95.24

Where PV = present value and

i = rate of interest

- **Equi-marginal principle**
- The equi-marginal principle is related with the law of equi-marginal utility which states that a utility maximizing consumer distributes his expenditure in such a manner between various goods and services he use that the marginal utility derived from each unit of expenditure on various goods and services is the same in this manner he maximize his total satisfaction
- Same way the equi-marginal principle suggest that available input should be allocated between alternative option in such a manner that the marginal productivity from various activities are equal.
- MPa =MPb = MPc = MPd
- For example if a firm employed 200 workers for producing 4 type of product ABCD it can increase the production of any product by increasing the number of worker to it but only at the cost of production of other product.
- Let MPa > MPb OR
- Further if the value of marginal product is higher in one activity then another it will mean that optimum allocation has not been achieved in such a situation it would be profitable to shift labour from low marginal value activity to high marginal value activity.
- For intense if in production of A product marginal value of labour is Rs 25

- while that in production of B product is marginal value of labour Rs 35
- then in such situation it will be profitable to shift some labour of producing unit A to producing unit B thereby increasing production of B and reducing the production of A product in this sequence optimum value will be reached where marginal product from all the four products ABCD will be equal