SEMESTER 3 – INDUSTRIAL ECONOMICS

MODULE-1

Concept and Organisation of Firm

Introduction

In economics, a firm holds important position as at the firm level managerial decisions are taken. In common language a firm is considered as a manufacturing unit involved in production of goods. The scope of the term firm in economics is broad. It represents any business organization inhering service & agriculture organization also.

Definition of Firm

Some definitions of firm given by renowned economists are given below.

1. Firm is a unit of production that employs factors of production (or inputs) to produce goods & services under given state of technology.

2. It is an independently administered business unit – Hanson.

3. It is a centre of control where the decisions about what to produce & how to produce are taken.

4. It is a business unit which hires productive resources for the purpose of producing goods & services.

5. A firm is an independent organization whose destiny is determined by the magnitude of the aggregate pay off & in which the aggregate pay off production & sale of goods or services.

All these definitions have evolved during different time periods. They try to emphasis the different economic problems faced by firms. From various definitions different characteristic features of firm emerge which are listed below.

Factors Influencing Optimum Firm

The following are the factors that influence the optimum size of a firm:
a. Technical forces

b. Managerial forces

c.Financialforces
d.Marketingforces e.
Forces of risk and fluctuations

1. Technical forces influence size of a firm:
Technical forces which influence the optimum size of firm are degree of specialization (division of labour), mechanization and integration of work processes. In the case of division of labour, a job is split into small functions and each function is assigned to a specific workman. When a workman performs a specific operation over a long period of time, the skill of the workman, speed of performance, quality of work etc improve. Division of labour facilitates mechanization.

The size of the optimum firm will be large if

1. The product or machinery used for manufacturing is large in size (e.g. ship building, aircraft manufacturing, iron and steel plants, heavy machinery etc)

2. The industry is a public utility (power generation and distribution, railways etc.)

3. The industry produces intricate, complex products (computer chips, semi conductors, watches etc). In case then industry produces products of a small size or the machinery used in Manufacturing is small in size, the optimum size would be small (e.g. small machine tools etc).

2. Managerial forces influence size of business units:
Managing an organization today is a complex task. The services of qualified, experienced, professionals are required to run the organization in an efficient manner. Therefore businesses which desire to maximize their sales and profitability need to appoint a competent management team. To appoint such personnel, high amounts of remuneration and benefits.

MODULE-2

Economics of Scale

Economies of scale refer to the cost advantage experienced by a firm when it increases its level of output. The advantage arises due to the inverse relationship between per-unit fixed cost and the quantity produced. The greater the quantity of output produced, the lower the per-unit fixed cost.

Economies of scale also result in a fall in average variable costs (average non-fixed costs) with an increase in output. This is brought about by operational efficiencies and synergies as a result of an increase in the scale of production.

Economies of scale can be realized by a firm at any stage of the production process. In this case, production refers to the economic concept of production and involves all activities related to the commodity, not involving the final buyer. Thus, a business can decide to implement economies of scale in its marketing division by hiring a large number of marketing professionals. A business can also adopt the same in its input sourcing division by moving from human labour to machine labour.

Effects of Economies of Scale on Production Costs:

It reduces the per-unit fixed cost. As a result of increased production, the fixed cost gets spread over more output than before.

It reduces per-unit variable costs. This occurs as the expanded scale of production increases the efficiency of the production process.

Types of Economies of Scale:

1. Internal Economies of Scale

This refers to economies that are unique to a firm. For instance, a firm may hold a patent over a mass production machine, which allows it to lower its average cost of production more than other firms in the industry.

2. External Economies of Scale

These refer to economies of scale enjoyed by an entire industry. For instance, suppose the government wants to increase steel production. In order to do so, the government announces that all steel producers who employ more than 10,000 workers will be given a 20% tax break. Thus, firms employing less than 10,000 workers can potentially lower their average cost of production

by employing more workers. This is an example of an external economy of scale – one that affects an entire industry or sector of the economy.

WEBER'S THEORY OF INDUSTRIAL LOCATION

Alfred Weber a German economist was the first economist who gave scientific exposition to the theory of location and thus filled a theoretical gap created by classical economists. He gave his ideas in his Theory of Location of Industries' which was first published in German language in 1909 and translated into English in 1929. His theory, which is also known as 'Pure Theory' has analytical approach to the problem.

The basis of his theory is the study of general factors which pull an industry towards different geographical regions. It is thus deductive in approach. In his theory he has taken into consideration factors that decide the actual setting up of an industry in a particular area.

Weber's Problems:

Weber was faced with many serious problems. He wanted to find out why did industry moved from one place to another and what factors determined the movement. After considerable thinking he came to the conclusion that causes be responsible for this migration could be Regional Factors Primary Causes and Agglomerative and deglomerative factors (Secondary Factors).

In so far as regional factors were concerned these, among other things, included cost of the ground, buildings, machines, material, power, fuel, labour, transportation charges and amount of interest that the capital would have earned.

i. Regional Factors (Primary Causes):

According to Weber transportation costs play a vital role in the location of an industry. Each industry will try to find location at a place where transportation charges are the barest minimum, both in terms of availability of resources and place of consumption. According to him transportation costs are determined by the weight to be transported on the one hand and distance to be covered on the other.

SARGENT FLORENCE THEORY OF INDUSTRIAL LOCATION

Sargant Florence has given his theory about industrial location, which has become popular. He started with the idea that some of Weber's assumptions are not realistic. According to him geographical location of an industry is not as important, as the distribution of occupied population. His main consideration is that occupational distribution of population should be the main and primary factor for taking into consideration the location of an industry.

His theory is mainly based on inductive analysis and while explaining location factor of an industry he has taken into consideration location factor and co-efficient of localisation. Now a question arises as to what is location factor. According to him, it is an index of the degree of concentration of an industry in a particular region. Now this raises another problem namely how to arrive at the index, to which Sargant has made a reference.

According to Sivayya and Dass, This index is calculated by taking into consideration two ratios, namely, the percentage of workers of the industry in question found in the region under consideration and the percentage of all industrial workers in the country.

In calculating index to find out the location factor the first one is divided by the second and if the quotient is one, the location factor is said to unity and it can be said that the industry is evenly tribute over the whole country. If quotient is above unity, then the conclusion can be that the region under reference has higher share of industry.

Co-Efficient of Localisation:

By this he meant prosperity of an industry for concentration. It indicates an industry's tendency for localisation anywhere in the country. It is primarily concerned with a particular industry and not a particular region. It will thus be a single figure for the industry and also for the country as a whole.

Co-efficient of localisation can be found with the help of following formula:

(a) % age of all workers found in each region;

(b) % age of the workers of industry in question in each region.

MODULE-3

Constraints on Growth Productivity

Economists of a certain vintage will remember the old development models in which rapid economic growth was held back by three key constraints.

The first was the savings constraint. A poor country such as India could not save enough of its annual national income to sustain high rates of investment. The lack of domestic savings was without doubt the most serious constraint to economic growth in the early decades after political independence.

The second was the foreign exchange constraint. This lack of hard currency to import the capital equipment needed to build new industrial capacity led to the Nehruvian quest to build a domestic capital goods industry ahead of a consumer goods industry.

The third was the food constraint. The Mumbai critics of the Mahalanobis plans had warned that the impact of the lack of wage goods would be inflationary as money incomes went up. The mainstream plan models optimistically considered agriculture as a bargain sector in which production could be increased with minimal investment.

Each of these constraints has eased as the decades went by. India now has a savings rate that compares well with those in the East Asian economies during their economic accelerations. Foreign exchange is no longer scarce; the Reserve Bank of India has a huge pile of hard currency.

And what about the food constraint? In some of his recent writings in The Indian Express, Harish Damodaran has put forth a fascinating hypothesis that Indian agriculture has now entered a new era of permanent surpluses. He argues that new seeds plus faster diffusion of new technology has changed the traditional dynamics of production in crops ranging from pulses to vegetables to sugar to wheat. “The flip side of a more elastic supply curve, however, is that it makes gluts commonplace and shortages temporary", Damodaran wrote last month.

Much of the current discussion has remained focused on the immediate implications of such permanent agricultural surpluses.

Marginal Cost Vs Full Cost Pricing

Setting pricing strategies is one of the more difficult decisions a business owner ever faces. Price too high and inventory doesn't move; price too low, and profits are difficult to attain. Full-cost pricing is a common strategy that factors the entire overhead into the product pricing, while marginal cost pricing is designed to move inventory without necessarily turning a profit. Both approaches are useful under the right circumstances, and each serves an entirely different purpose for the business.

Marginal-Cost Pricing Strategy:

Marginal pricing is designed to move inventory quickly. The pricing strategy places the price right at the margin. In some cases, pricing just ahead of the margin is also considered a marginal-cost pricing strategy.

When the price and margin are the same, there is no profit left over for the business. This strategy is unsustainable and is designed primarily to move old inventory off the shelves. It recovers the initial overhead cost incurred against that inventory so the store can acquire new product to price with a profitable strategy.

Most margin-cost pricing occurs during year-end sales and other sales or when an updated product is released. For example, when a new phone model is released, retailers may price the older model phones on a marginal cost to move them out and make room for the new models.

This pricing strategy is not used frequently, and it exists solely to push inventory out the door when turnover is needed in the business.

Full-Cost Pricing for Profits:

Full-cost pricing strategies are designed to return a maximum yield profit. In many pricing strategies, the product margins are set against the overhead for each individual unit. For example, if a unit costs $5 to acquire, the price is set against this cost.

PRODUCT PRICING

Product pricing is a process that entails the translation of product value into quantitative terms. Pricing decision is usually made before its initial release to the market, however, businesses can change the selling price at any point for a variety of reasons.

Pricing of the product is something different from its price. In simple words, pricing is the art of translating into quantitative terms the value of a product to customers at a point of time. Someone has opined that, "The key to pricing is to build value into the product and price it accordingly."

Pricing is one of the key elements of marketing mix.

The salient ingredients of pricing are:

(i) Pricing covers all marketing aspects like the item-goods or services-mode of payment, methods of distribution, currency used, etc.

(ii) Pricing may carry with it certain benefits to the customers like guarantee, free delivery, installation, free after-sale servicing and so on.

Factors Affecting Prices:

The prices that a firm can charge for its products are subject to many influences. The various factors -economic and non economic – impinge upon the prices of the products.

Following are the important factors that may apply to all type of products:

(i) Product characteristics

(ii) Product cost

(iii) Objectives of the firm

(iv) Competitive situations

(v) Demand for the product.

Concept Reasons for Concentration

Meaning of Industrial Concentration:

Industrial concentration means sellers concentration. In other words, in a market some big firms have dominance over production and sales. The limit of this industrial concentration depends upon two main factors, firstly number of active firms in the given market, secondly, quantity of demand fulfilled by a firm out of the total market demand. If in a market number of firms is limited, the size of firms will be relatively big and a big firm will have the control over a large portion of total supply.

This situation is known as high quantity of seller (or industrial) concentration. High class industrial concentration depends upon the market power of every firm. Market power means the capacity of a firm or seller to influence the price of a product or commodity. In the perfect competitive market situation this market power is zero, which means the industrial concentration is zero. But more we move towards the monopoly market more the industrial concentration.

Methods of Measurement of Seller Concentration:

It is important to measure industrial concentration for many reasons. Firstly, one of the characteristics of the perfect competition is that there is large number of firms in the industry. Lesser the number of firms more is the concentration. For example in 1975, there were 50 firms in the Plastic and Synthetic Resin industry in U.K. Out of these 422 firms had a net production of 10% while the biggest firms had that of 40%.

Hence the market power of such firms which are less in number but big in size is more than those which are more in number but less in size. Secondly, it is necessary to measure industrial concentration because it indicates the ratio of concentration. For example Concentration Ratio (CR) 53.6% indicates that the biggest five firms produce more than 50% in this industry.

The methods of measurement of industrial concentration can be divided into two categories i.e. absolute and relative.

Measures of Monopoly and Concentration

Monopoly and Concentration of Economic Power:

Monopoly refers to the control on production or distribution of any commodity by any institution or firm. So, market power is essential for monopoly. State of monopoly can be found even in small scale industries. On the contrary concentration of economic power means centralisation of effective control over important economic activities (Industry, Agriculture, Transport etc.) to decide, to make jobs available and on the stream of income and wealth in the hands of some persons or groups.

In India concentration of economic power has been occurred through monopoly. Thus monopoly is the means through which concentration of economic power flourishes and its flourishing enhances the power of monopolistic institutions.

Concentration of Economic Power:

To check concentration of economic power and diffuse and decentralise economic power has become the accepted goal of a modern economy. Concentration of power in a few hands is a negation of social justice since it leads to larger inequalities of income and wealth.

The economic power is manifested in the control by few big businessmen over the price of industrial products, the attempt and pattern of investment and the choices of technology and therefore over the creation of employment opportunities in the economy.

Extent of the Concentration of Economic Power in India:

In a developing economy such concentration of economic power widens the gap of disparity in income and wealth, which is harmful to the development of the country. This malady is growing fast in India. Many committees were formed to study it and to suggest remedies.

Mahalanobis Committee (1960):

According to this committee, the working system of the planned economy has encouraged the growth of big companies in Indian industries. These received financial assistance from Indian.