FORMS OF MARKET AND PRICE DETERMINATION

Important Concepts

Market : Market refers to the entire area where buyers and sellers of a commodity are in close contact (competition) with one another.

Forms of Market Structure

Perfect Competition

Imperfect Competition
(Non-competitive Markets)

Perfect Competition	Monopoly	Monopolistic Competition	Oligopoly
• Very large No. of buyers and sellers	• Single firms (seller)	• Large No. of firms	• A few firms
• Homogeneous product	• No substitute product	• Differentiated product	• Homogeneous and differentiated products
• Free entry and exit of firm	• Very different entry of firm	• Free entry and exit of firm	• Difficult entry of new firms
• Perfect knowledge	• Price discrimination	• Selling cost	• Selling costs
• AR (demand) curve parallel to X-axis	• AR curve down-ward sloping	• AR curve downward sloping	• AR, MR curves are downward sloping
• No control over price	• Greet control over price	• Some control over price	• Price rigidity
	(e.g., Posts and Telegraphs)	*(e.g., firms manufacturing tooth pastes)*	*(e.g., firms mfg. cars, steel, cement, etc.)*

Meaning of Perfect Competition

Perfect competition is a market situation in which buyers and sellers operate freely and a commodity sells at a uniform price. It is a market in which a very large number of firms produce homogeneous goods and sell them at a uniform price.

Feature of Perfect Competition

(i) **Very large number of buyers sellers :** The number of buyers and sellers is so large that none of them can influence the prevailing price an the market. Each buyer and seller buys or sells a very insignificant proportion of total supply of the commodity in the market.

Implication **of** "large number of sellers in the market" is that the share of each seller in total market supply is so small that ***no single seller can influence*** the price. Hence, it has no option but to sell the product at the price given (determined) by the industry.

(ii) **Homogeneous product :** Products sold in the perfect market are homogeneous, i.e., they are identical in all respects like quality, colour, size, weight, design. Etc. They are perfect substitutes of one another. The products sold by different firms in the market are equal in the eyes of the buyers.

Implication of product being homogeneous is that all firms have to change the same price for the product; otherwise, no one will buy from the firm selling at a higher price.

(iii) **Free entry and exit of firms :** It means there are no artificial barriers or natural obstacles in the way of new firms wishing to enter the industry. Buyers and sellers are free to enter or leave the market (industry) at any time they like. New firms induced by large profits can enter the industry whereas losses make the inefficient firms to leave the industry.

Implication of free entry and exist is that no firm can earn above normal profits in the long run, i.e., firms earn zero abnormal profits. In other words, each firm earns just normal profit.

(iv) ***Perfect knowledge of market and technology :*** Perfect knowledge means that the buyers and sellers have full knowledge about the prices and costs prevailing in different parts of the market. All firms have equal access to technology and inputs with the result that all firms have same per unit cost of production.

Implications—Clearly, this leads to uniform price and uniform cost of the product.

(v) **Perfect mobility :** There is perfect mobility of goods and factors of production without any hindrance or obstruction.

(vi) **Absence of transport cost :** In perfect competition, it is assumed that there is no transport cost for consumer who may buy from any firm.

(vii) **Demand (AR) curve is perfectly elastic and parallel to X-axis.**

<u>Price Determination under Perfect Competition</u>

Under perfect. "Industry is the price-maker and firm is the price-taker."

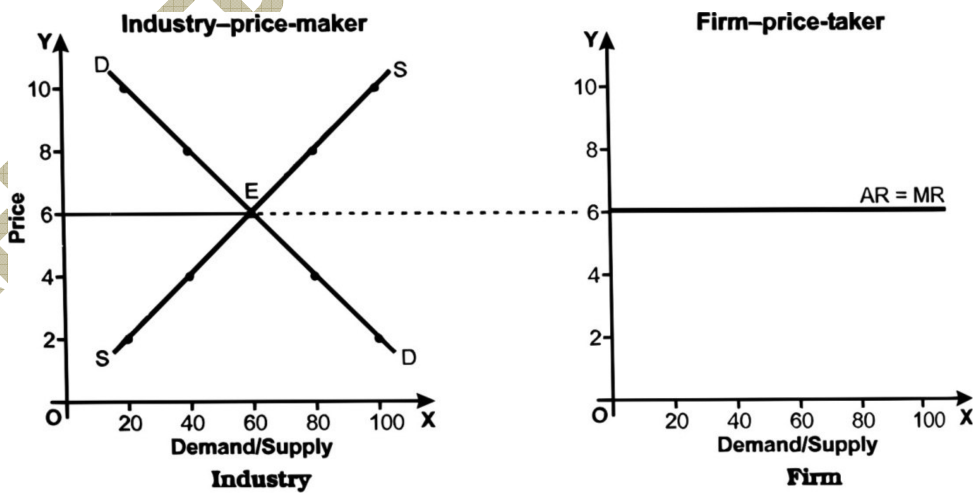
(a) **Distinction between Industry and Firm**

Firm : *A firm is a single unit of production which produces goods and services for sale.*

Industry : *An industry is an aggregate of all the firms producing the same commodity.*

(b) **Price determination :** *Under perfect competition, price of a commodity is determined by the interaction of market demand and market supply of the whole industry.*

Industry			Firm				
Price per unit (₹)	Market Demand *(units)*	Mkt. Supply *(units)*	Price per unit (₹)	Quantity sold *(units)*	TR (₹)	AR (₹)	MR (₹)
2	100	20	6	20	120	6	6
4	80	40	6	21	126	6	6
6	60	60	6	22	132	6	6
8	40	80	6	23	138	6	6
10	20	100	6	24	144	6	6



(c) **AR and MR curves in perfect competition :** AR and MR curves are a horizontal straight line parallel to X-axis. Since AR equals price, therefore, AR curve is also said to be price line.

Concept of Monopoly

Monopoly is a market situation where there is a single firm selling the commodity and there is no close substitute of the commodity sold by the monopolist.

Main Features of Monopoly

(i) **Single seller of the commodity :** There is only one seller or producer of a commodity in the market. This may be due to Copy Rights. Patent Law or State Monopoly. As a result, the monopoly firm has full control over the supply of the commodity.

(ii) **Absence of close substitute of product :** A product faces competition when it has close substitutes. The product sold by the monopolist has no close substitute. Though some substitutes of the product may be available, yet they are not close substitutes in the sense that such substitutes may be costly or inconvenient to use.

(iii) **Difficult entry of a new firm :** The monopolist controls the situation in such a way that it becomes very difficult for a new firm to enter the monopoly market and compete with the monopolist by producing a homogenous or identical product.

(iv) **Negatively sloped demand curve :** The demand curve (or AR curve) facing a monopolist is negatively sloped which indicates that a monopolist can sell more only by lowering the price. In other words, the price has to be reduced to sell additional units.

(v) **Price-maker with constraint :** Since a monopoly firm is the only seller and has no competitor, therefore, it can fix the price partially. It has substantial influence over the price of its product by manipulating its supply. It is because of this position that the monopolist is sold to be a price-maker.

(vi) **Price discrimination :** Unlike uniform price at which a product is sold in perfect competition, a monopolist can charge different prices for his product from different persons and in different market areas. In other words, price discrimination takes place in monopoly.

Reasons for Emergence of Monopoly

(i) **Grant of patent rights :** When a company / firm introduces a new product or a new technology, it is granted patent rights. How ? The company applies to the government to grant it Patent Certificate by which it gets exclusive right to produce the new product or use new technology. Thus, a patent offers a kind of limited monopoly. The period of which a patent right is valid is called patent life.

(ii) **Licensing by government :** A monopoly market emerges when government gives a firm the licence, i.e., exclusive legal rights to produce a given product or service in a particular area or region.

(iii) **Forming a cartel:** A cartel is a group of firms who jointly decides level of output and prices. Sometimes, individual firms, while retaining their identities, units into a group and coordinate their output and pricing policy in such a way as to reap the benefits of monopoly. Such formation is called a Cartel. ***A cartel is a business combination under which firms coordinate their output and price to reap the benefits of monopoly.*** In 1960 some oil producing companies formed a cartel by the name of OPEC (Organisation of Petroleum Exporting Countries) which sets production quotas for profit.

<u>TR, AR, MR under Monopoly—Properties and Curves</u>

(i) TR increases when MR is positive, decreases when MR is negative (i..e, below zero) and becomes maximum when MR is zero.

(ii) MR decreases with an increase in output because more of a product can be sold by reducing its price. In the beginning, MR is positive and after a certain level of output MR becomes negative.

(iii) TR increase with output initially and then it decreases. Thus, graphically TR curve rises initially and then falls. As a result, TR curve is inversely U-shaped.

(iv) AR curve of the firm is, in fact, demand curve faced by the firm because AR of a firm = Price of commodity. Monopolist's AR curve like demand curve is downward sloping for negative sloped) which means more can be sold at a lower price.

(v) MR is less than AR (MR < AR) and, therefore, MR curve lies below AR curve as shown in Fig.

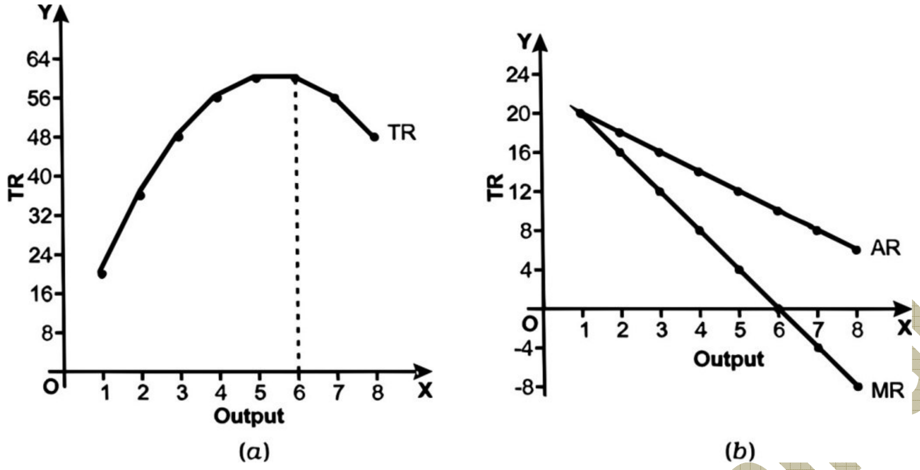
(vi) TR curve is inverse U-shaped because TR increases in the beginning and then decreases with output.

<u>TR, AR, MR under Monopoly</u>

Output *(= Units sold)*	**Price (₹)**	**TR (₹)**	**AR (₹)**	**MR (₹)**
1	20	20	20	20
2	18	36	18	16
3	16	48	16	12
4	14	56	14	8
5	12	60	12	4
6	10	60	10	0
7	8	56	8	-4
8	6	48	6	-8

The above table is graphed below.

TR, AR, MR Curves Under Monopoly



Meaning of Monopolist Competition : Monopolistic competition refers to a market situation in which there are many firms but each sells closely related by differentiated products.

<u>**Main Features of Monopolistic Competition**</u>

(i) **A large number of firms :** The number of firms selling similar product is fairly large but not very large as in perfect competition, each supply a small percentage of total supply of the product. As a result, firms are in position to influence marginally the price of their product due to their brand names.

(ii) **Product differentiation :** This is the most important feature of monopolistic competition. Products are said to be differentiated when buyers feel that a firm's product is different from others. The buyers of a product differentiate between same product produced by different firms. ***Differentiated products are variants of a given commodity.***

(iii) **Free entry and exit of firms :** New firms can enter the market if found profitable. Similarly, inefficient firms already operating in the market are free to quit the market if they incur losses. It is because of this feature that like perfect competition, monopolistic competition also gives rise to normal profit. ***Free entry and exit imply that abnormal profits is driven to zero.***

(iv) **Selling costs :** Selling costs are the expenses which are incurred for promoting sales or for inducing customers to buy the good of a particular brand. These costs—also called **advertisement costs**.

(v) **Demand curve :** The demand curve (or AR curve) faced by a firm is negatively sloped (i.e., downward sloping) because *the firm can sell more only by lowering the price of its products.*

Oligopoly—Meaning and Features

It is that form of imperfect competition in which of a few big firms produce most of total output of the industry and are mutually dependent for taking decision about price and output.

(i) **A firm firms :** There are a few firms controlling the market where each firm produces a substantial part of total output of the industry. The number of firms is so small that each seller knows that he can influence the price by his own action and that he can provoke rival firms to react.

(ii) **Interdependence :** There is interdependence of firms for taking decision about price and output. Since there are a few firms, a change in price and output of a product by any firm is likely to influence output and price of rival firms whose reaction may prove counter-productive.

(iii) **Selling costs :** Heavy selling and advertisement costs are incurred to promote sales.

(iv) **Price rigidity :** Mostly prices are stable since no firm dares to change the price for fear or retaliatory actions by rival firms. Firms generally keep prices at similar levels to avoid price war.

(v) **Indeterminate demand curve :** An oligopoly firms can never predict its sales correctly. No firm can be certain of demand for its product due to unsure reaction of rival firms. Therefore, demand curve for its product is indeterminate.

(vi) **Group behaviour :** Interdependence of firms compels them to act in mutual cooperation. Thus, group behaviour in the form of collective decision by firms is common.

(vii) **Product** may be homogeneous (like steel) or differentiated (like cars).

(viii) **Difficult Entry :** Entry of new firms in the industry is difficult. There are barriers in the form of patent rights, large capital, critical raw materials, etc. Hence, in the long run firms continue to earn abnormal profits due to almost absence of competition.