1. Monopoly:

Definition: A market structure characterized by a single seller, selling a unique product in the market. In a monopoly market, the seller faces no competition, as he is the sole seller of goods with no close substitute.

Description: In a monopoly market, factors like government license, ownership of resources, copyright and patent and high starting cost make an entity a single seller of goods. All these factors restrict the entry of other sellers in the market. Monopolies also possess some information that is not known to other sellers.

Characteristics associated with a monopoly market make the single seller the market controller as well as the price maker. He enjoys the power of setting the price for his goods.

Features of Monopoly Market

Maximize profit: It is an important reason why a company wants to be in a monopoly market. The company strives to generate and secure not only the revenue but also to maximise the profit.

Price maker: The monopoly players have the authority to fix and plan the price of goods. In this market, the firm has the sole right to influence the market rate and has the pricing power. Here, the price is modified according to the demand and supply of goods in the market.

High competition: A monopoly market has high barriers for new players or participants to enter. Sometimes, high competition makes it difficult for participants of the monopoly market to make less profits.

4. Unique product

In a monopolistic market, the product or service provided by the company is unique. There are no close substitutes available in the market.

Government Regulation

As difficult as it is to replicate a perfectly competitive market in reality, it is equally impossible to replicate a monopolistic market model.

Usually, the government grants monopolies to public utility companies – telephone, natural gas supply, and power generation. However, the government may regulate the monopolistic market to prevent monopolies from setting excess prices.

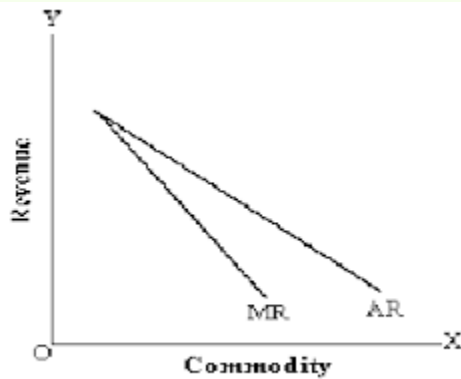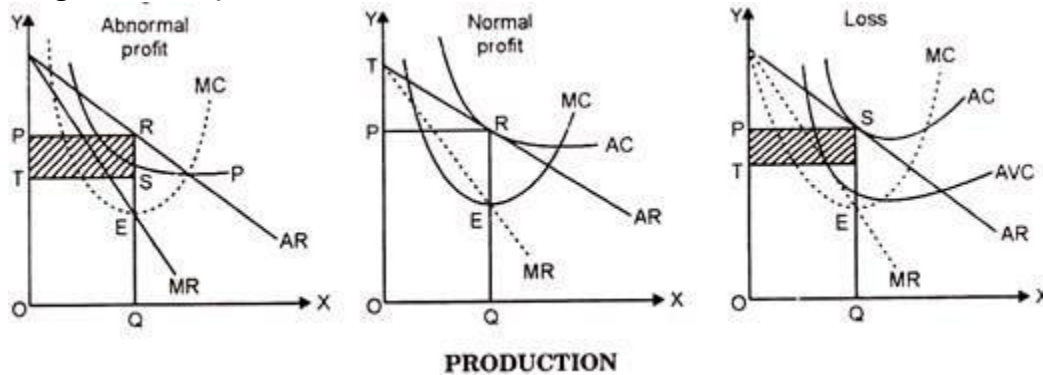Under monopoly, AR and MR curves slope downwards, and MR curve lies below AR curve.

Fig. 4.13

Determination of Price:

Determination of Price in the Short Run Period: (Equilibrium under monopoly)

Determination of price in short run period. (The explanation and diagrams of these situations are given below)

PRODUCTION

On the point E the firm is in equilibrium when MC = MR. Thereafter MC curve starts to rise. Under the condition, OP is the price and OQ is the 'total production' of the commodity so determined. In order to calculate profits or losses, we will have to measure the difference between AR and AC. If AR > AC, the difference between the two is profit per unit and by multiply it with total number of units produced we can get total profit.

In the first figure RQ = OP is the price, TO is the cost of production per unit. Thus, RS =PT is unit for profit. On the OQ quantity of production, total profit is PTSR shaded area which is abnormal profit. In the second figure RQ = OP is the determined price and RQ is the average cost. Under this condition, there will be only normal profit.

In the figure three also price per unit is RQ = OP but cost per unit is SQ. Thus, SR (TP) is loss per unit. As a result TPRS shaded area will be the total loss. But this loss is only short period phenomenon. In the long period, this loss will disappear, under that condition and situation, only profit will be earned.

Determination of Price in the Long Period:
In the long period the monopolist introduces changes in his equipment's and techniques of production. During this period in order to gain excess profit, he will change efficiency and capacity of his resources according to his need. But the determination of the quantity of production follows, the same line as under short period.

This is clear from the following figure:
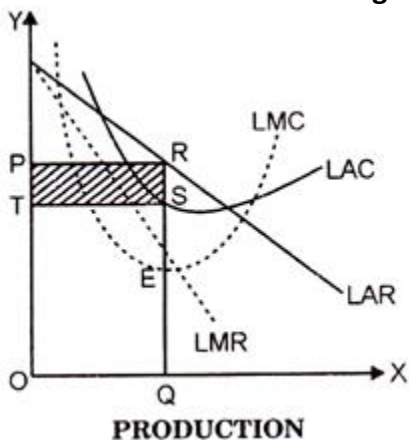
PRODUCTION

In this figure LMC and LMR intersect each other at the point E and after that LMC goes on rising. Thus OQ production is determined and OP is the price. But average cost is SQ. So profit per unit is RS and at OQ output the total profit is PTSR.

2. Price Discrimination:

Price discrimination is a common pricing strategy' used by a monopolist having discretionary pricing power. This strategy is practiced by the monopolist to gain market advantage or to capture market position.

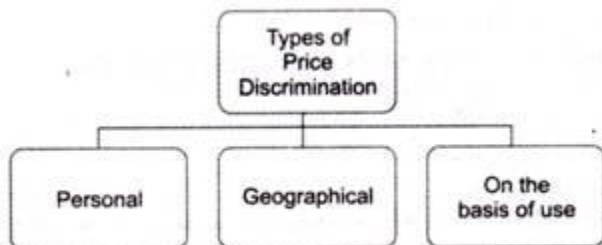**There are three types of price discrimination, which are shown in Figure-13:**

Figure-13: Price Discrimination

The different types of price discrimination

i. Personal:
Refers to price discrimination when different prices are charged from different individuals. The different prices are charged according to the level of income of consumers as well as their willingness to purchase a product. For example, a doctor charges different fees from poor and rich patients.

ii. Geographical:
Refers to price discrimination when the monopolist charges different prices at different places for the same product. This type of discrimination is also called dumping.

iii. On the basis of use:
Occurs when different prices are charged according to the use of a product. For instance, an electricity supply board charges lower rates for domestic consumption of electricity and higher rates for commercial consumption.

3. Types of Price Discrimination (Degrees of Price Discrimination):

There are three types of price discrimination: first-degree or perfect price discrimination, second-degree, and third-degree. These degrees of price discrimination are also known as personalized pricing (1st-degree pricing), product versioning or menu pricing (2nd-degree pricing), and group pricing (3rd-degree pricing).

First-Degree Price Discrimination

First-degree discrimination, or perfect price discrimination, occurs when a business charges the maximum possible price for each unit consumed. Because prices vary among units, the firm captures all available consumer surplus for itself or the economic surplus. Many industries involving client services practice first-degree price discrimination, where a company charges a different price for every good or service sold.

Second-Degree Price Discrimination

Second-degree price discrimination occurs when a company charges a different price for different quantities consumed, such as quantity discounts on bulk purchases.

Third-Degree Price Discrimination

Third-degree price discrimination occurs when a company charges a different price to different consumer groups. For example, a theater may divide moviegoers into seniors, adults, and children, each paying a different price when seeing the same movie. This discrimination is the most common.

4. Possibility and Profitability of Price Discrimination:

Price discrimination is profitable only if elasticity of demand in one market is different from elasticity of demand in the other. Therefore, the monopolist will discriminate prices between two markets only when he finds that the price elasticity of demand of his product is different in the different sub-markets.
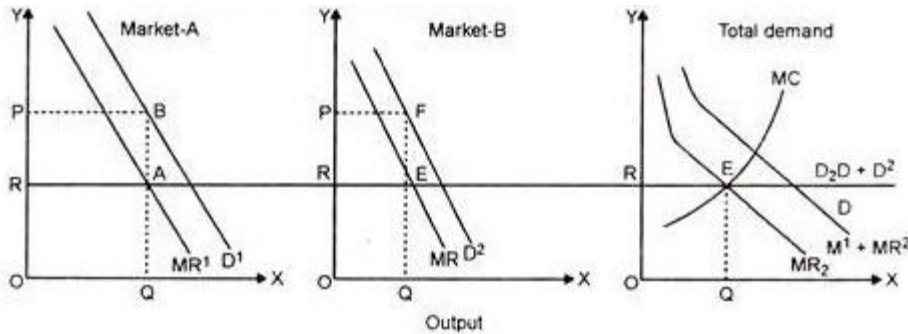
FIG.1 in elastic market   Fig.2 elastic market   Fig.3 combined market

Equilibrium of a Discriminating Monopolist:

Total profit of a price discriminating monopolist is the difference between his total revenue from both the markets and his total cost of production:
That is, price will be lower in the market with greater price elasticity of demand. Diagram illustrates pricing under price discrimination when both the market segments have some degree of imperfect competition. At point E the firm is in equilibrium where CMR = MC.

Here MC = MR, in Diagram gives output in market 1 equal to $0Q_1$ and MC = MR_2 in Fig.(b) gives output in market II equal to $0Q_2$. Corresponding to these output levels ($0Q_1$ and $0Q_2$) prices are $0P_1$ and $0P_2$ in markets I and II, respectively. Although $MR_1 = MR_2$, $P_1 \neq P_2$. Therefore, the monopolist is discriminating.

Under price discrimination, a monopolist charges different prices in different sub-markets. To begin with, he divides the market into sub-markets based on their elasticity of demand. We will take the case when a market is divided into two sub-markets, for simplicity.

Next, the monopolist is faced with making two decisions:

A. How much output should he produce?

B. How should he divide the output between the two sub-markets and how should he price them?

The monopolist compares the marginal revenues with the marginal cost of the output. However, before that, he must calculate the aggregate marginal revenue of both sub-markets taken together and compare this value with the marginal cost of the total output.

In Fig. 1 above, MR$_a$ is the marginal revenue curve in the sub-market A having a demand curve D$_a$. Similarly, MR$_b$ is the marginal revenue curve in the sub-market B having a demand curve D$_b$. The aggregate marginal revenue curve (AMR), shown in III above, is an addition of MR$_a$ and MR$_b$. The AMR curve shows the total amount of output sold in both the sub-markets. Further, the marginal cost curve (MC) is also depicted in III above.
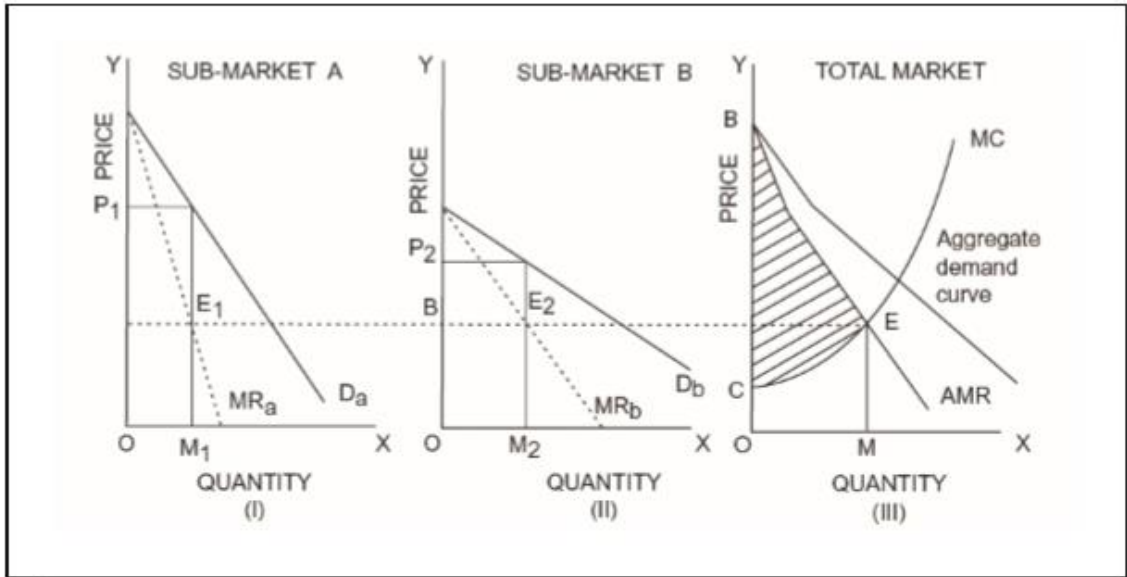

Fig. 1: Fixation of Total Output and different price in the two sub-markets by the discriminating monopolist

5. Dumping Price Discrimination:

Dumping is an international price discrimination in which an exporter firm sells a portion of its output in a foreign market at a very low price and the remaining output at a high price in the home market Haberler defines dumping as: "The sale of goods abroad at a price which is lower than the selling price of the same goods at the same time and in the same circumstances at home, taking account of differences in transport costs" Viner's definition is simple.

According to him, "Dumping is price discrimination between two markets in which the monopolist sells a portion of his produced product at a low price and the remaining part at a high price in the domestic market."

Given these conditions, price and output under dumping will be determined by the equality of the total marginal revenue curve and the marginal cost curve of producing the commodity. Figure illustrates price-output determination under dumping.

Fig. 13.
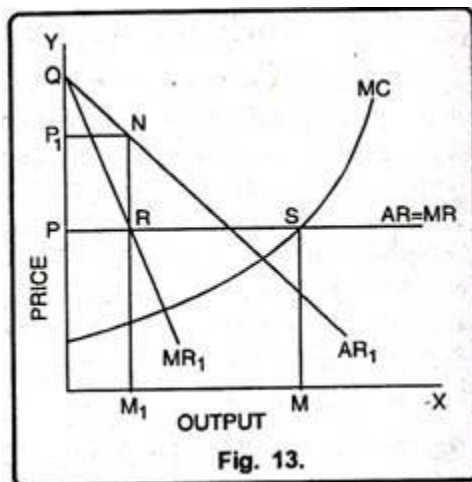
In Fig., the average revenue (AR_1) and marginal revenue curve (MR_1) are given for the home market. They are sloping downward, since there is monopolistic condition in the home market. Average and marginal revenue for the world market is shown by a horizontal straight line, since perfect competition is assumed in the world market. QRS is the composite (combined) marginal revenue curve for the markets.

The equilibrium output of the monopolistic firm is determined at the point where MC of the monopolist firm equals composite marginal revenue, i.e., where MC curve of the firm intersects composite (combined) marginal revenue curve, that is, at the point S. Hence, OM is the equilibrium output or the total output that the monopolistic firm will produce.

Instead of selling the whole output either in home market or in the world market, the monopolist will sell a part of it in the home market at higher price OP_1 and a part in the world market at the lower price OP, since it gives him maximum returns.

The monopolist is in equilibrium at OM_1 level of output, in the home market since at the point R, marginal revenue in home market (MR_1) equals marginal cost of the firm. Hence, the monopolist sells OM_1 output at OP_1 price in home market and M_1M output at OP price is the world market.

The price charged by the monopolist in the home, market is higher than price charged in the world market, i.e. $OP_1 > OP$, where OP_1 is price in home market and OP is the price in world market. But the marginal revenue in both the markets (home and world) are equal, i.e., $RM_1 =$ SM. Hence, the profits are maximized.