

Chapter - 4 Price Determination in Different Markets

1) MCA

Elements of Market are

- i) Buyer & Seller
- ii) A product or Service
- iii) Bargaining for Price
- iv) Knowledge about Market Condition

MCA *

- v) One Price for a Product or Service at given time

* Classification of Market

Product Market

Factor Market *

Here, Household buy Goods

Here, Firms buy Resources

Some More Classification

- 1 Geographical Area
- 2 Time
- 3 Nature of Transaction
- 4 Regulation

- 5 Volume of Business
- 6 Type of Competition

• Geographical Area

- Local Market

- Regional Market (lower wider Area, Ex - Traditional Assamese Satee)

- National Market

- International Market (Gold, Silver, Even in these days Perishable Goods)

- Time (Alfred Marshall)
 - Very short period Market
 - Short Period Market
 - Long Period Market
 - Very long Period or Secular ★
- Nature of Transaction
 - Spot or Cash
 - Forward or Future
- Regulation
 - Regulated Ex - Stock Market
 - Unregulated Ex - weekly Markets also called Free Markets
- Volume of Business
 - Wholesale
 - Retail
- Competition
 - Perfectly "
 - Imperfectly Competitive

By Gautam Gogia

Types of Market Structures (Based on Competition)

Perfect Competition	Monopolistic Competition	Monopoly	Oligopoly
- Many Seller	- Many Seller	- Single Seller	- few Seller
- Many Buyer	- Many Buyer	- Many Buyer	- Many Buyer
- Same Product	- Diff Product	- Price Maker	- Competing Product
- Price Taker	- Little Price Control		

Price Elasticity $\rightarrow \infty$

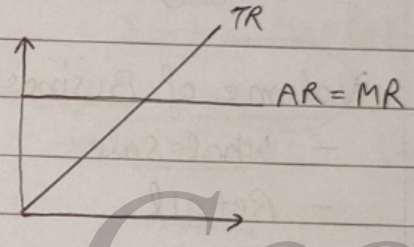
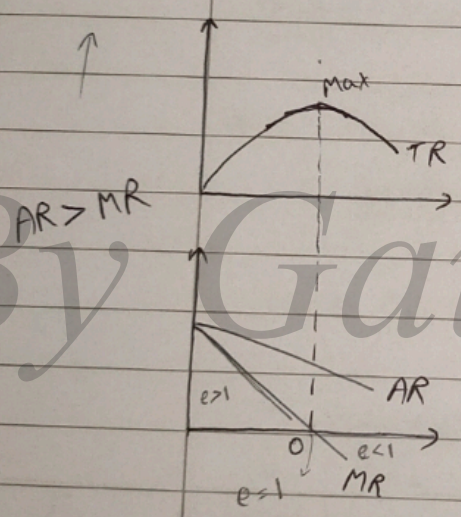


Price x Quantity

- Total Revenue $TR = P \times Q$
- Average Revenue $AR = \frac{TR}{Q}$ Thus $\frac{P \times Q}{Q} \Rightarrow \boxed{AR = P}$
- Marginal Revenue $MR = \frac{\Delta TR}{\Delta Q}$ also $MR = AR \left(\frac{E-1}{E} \right)$
 $MR_n = TR_n - TR_{n-1}$

Imperfect Competition

Perfect Competition



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MCQ's

- 1) AR Curve = Demand Curve
- 2) $MR = AR \times \frac{e-1}{e}$ * e = Price Elasticity
- 3) $e = 1$, Then $MR = 0$
 $e > 1$, " $MR = \text{Positive}$
 $e < 1$, " $MR = \text{Negative}$

Imp Behavioural Principal \star MCO

$TR < TVC$

- * Principle 1 - A Firm should Not Produce at all if its total Variable Costs are not Met.

$TR < TVC$ [Point of Shutdown] | At this Point firms Total /
Maximum loss is equal to than
of $AR \geq AVC$ [continue Production] | its Fixed Cost.
Max Loss = Fixed Cost

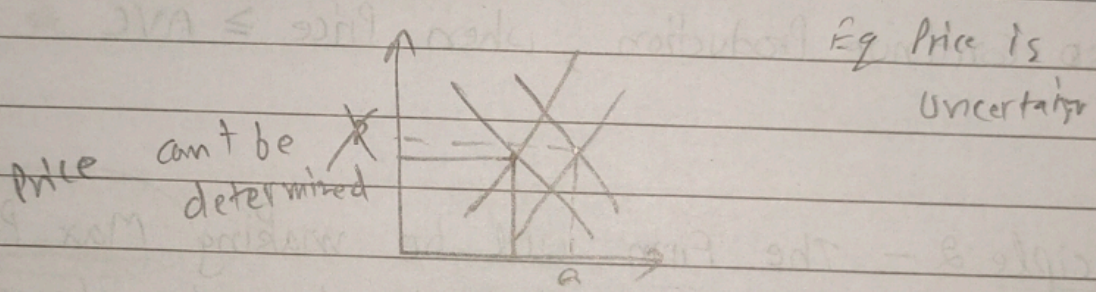
Also continue Production, when Price $\geq AVC$ \star

- * Principle 2 - The Firm will be making Max Profit by Expanding output to the Level where $MR = MC$ & MC must be rising

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Max profit when $MR = MC$, MC must be rising.

UNIT-2 Determination of Prices

- ★ Both Demand & Supply Increase, Eq Quantity also inc & Vice Versa.
- ★ But in both above cases Equilibrium Price is uncertain. ★



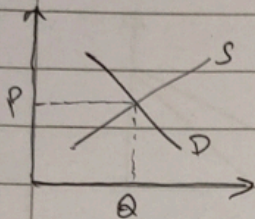
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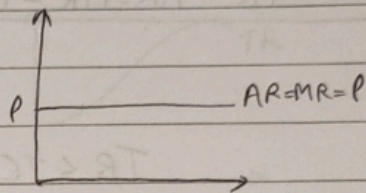
UNIT-3 Price-Output Determination Under Diff Markets

* Perfect Competition (Equilibrium)

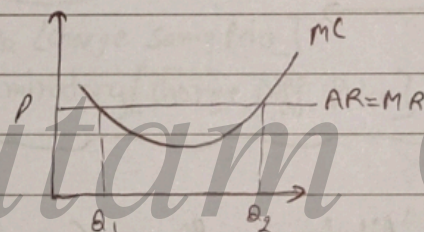
(a) Market



(b) Individual seller

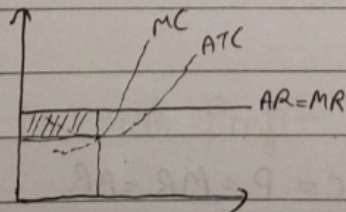


⊛ Short Run Supply Curve of the Firm (It means MC curve)



⊛ Profit Earnings in Competitive Firm

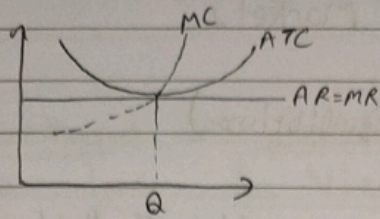
1) Super Normal Profit $TR > TC$ or $AR > AC$



$MR=MC$, MC is Rising

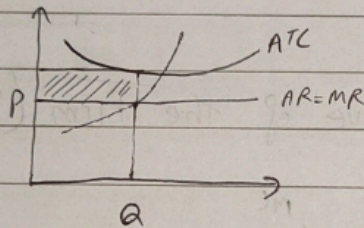
⊛ $TR = \text{Economic Cost}$
Explicit + Implicit

2) Normal Profits $TR = TC$ (or) $AR = AC$



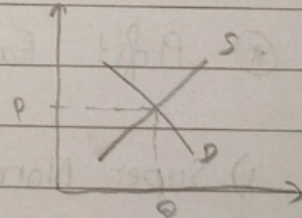
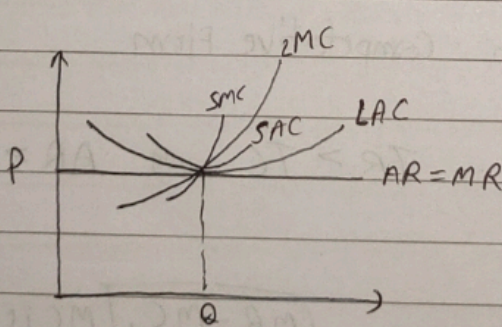
$AC = MC = AR = MR = P$ Normal Profit

3) Loss $TR < TC$ (or) $AR < AC$



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Long Run Equilibrium of a Competitive Firm



Eg = $SMC = LMC = SAC = LAC = P = MR = AR$

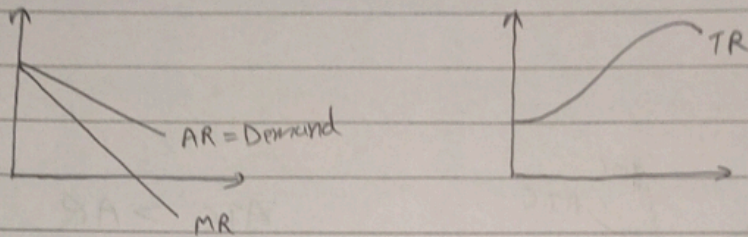
* In long Run Firm Only Earns Normal Profit

Price \uparrow \rightarrow New Firm enter \rightarrow Supply \uparrow \xrightarrow{SNP} Normal Profit
 Price \downarrow \rightarrow Firms Exit \rightarrow Supply \downarrow $\xrightarrow{Price \uparrow}$ " " "

Monopoly

* Basic Feature \leftarrow How does Monopoly Arise [4.40]

* Monopolist's Revenue Curves

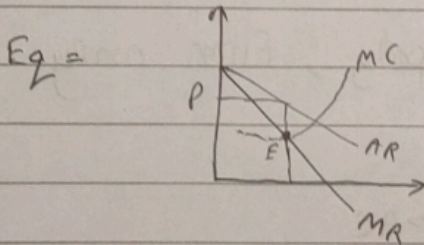


* MR falls Double than the fall in AR \rightarrow MCQ

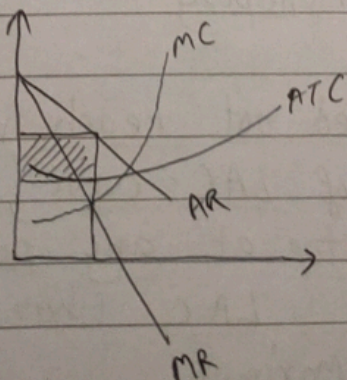
* Monopoly \leftarrow Simple [charge same price]
Discriminatory [charge Diff Price]

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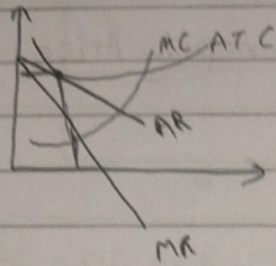
* Profit Maximisation in Monopoly: Equilibrium of Monopoly



1) Super Normal Profit $AR > AC$

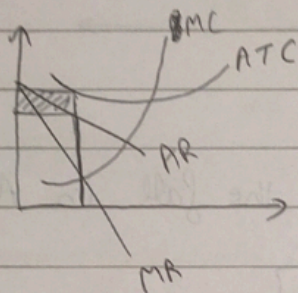


2) Normal Profits



$$AR = AC$$

3) Loss



$$ATC > AR$$

Long Run Equilibrium

In Long Run in Monopoly, Firm only earns Super Normal Profits.

SNP Diagram

$$AR > AC$$

Perfect Competition

It operate at minimum level of LAC

Monopoly

It need not reach minimum level of LAC curve, he can stop at any point on the LAC where profits are maximum.

* Price Discrimination in Monopoly

MCQ *

- 1) Price Elasticity of Product will be Different in Different market.
- 2) High Price for Buyers whose Price elasticity is less than 1 [inelastic demand]
- 3) Low Price for Buyer whose Price Elasticity is more than 1 [elastic demand]
- 4) There must be no Market Arbitrage

outsider 100 ka khareeda
1 market se

Aur 150 ka beecha
Dusri market mai

Numerical Ex of Price Discrimination

$$MR = AR \left(\frac{e-1}{e} \right)$$

Market A

Market B

$$MR = 30 \left(\frac{2-1}{2} \right)$$

$$MR = 30 \left(\frac{5-1}{5} \right)$$

$$= 15$$

$$= 24$$

Higher Price, with Lower Elasticity

Lower Price with Higher Elasticity

* MCO (Pa.Pa.)

Three Degree Classification of Price Discrimination -

By Pigou

1) First Degree

Extract entire Consumer Surplus

- charges Price that consumer is willing & able to pay. Ex - 'Bid & offer', Auction

2) Second Degree

Take away a part of Consumer Surplus

- Different Prices are charged for Diff Quantity Sold

3) Third Degree

- Divide the consumer into separate sub market

Monopolistic Competition

* Price Output Determination : Equilibrium of firms

Short Run

- Super Normal Profit
- Losses

Diagram Same as in monopoly

Long Run

- Normal Profit

Diagram same

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Competitive product

Oligopoly = Competition among the Few Few Sellers

MCQ - 4.26 Definitions

Prof. Stigler = Oligopoly "situation in which a firm bases its market policy, on the expected behaviour of a few close Rivals"

Game Theory

- By John von Neumann & Oskar Morgenstern
- The Rational behaviour or strategies, in situation of conflicts or uncertainty.

★ Types of Oligopoly

- 1) Pure or Perfect Oligopoly = Homogeneous Product
- 2) Imperfect Oligopoly = Differentiated Product
- 3) Open & Closed = New Firm can Enter & Not Enter
- ★ 4) Collusive & Competitive = Common Understanding & No " " "
- ★ 5) Partial or Full Oligopoly = Dominated by One large Player
- 6) Syndicated and Organized = Central Association Fix Price
sell Product through Centralized Syndicate

oligopoly doesn't have a determined Demand Curve

MCQ

Characteristic

- 1) Interdependence —
- 2) Group Behaviour —
- 3) Importance of Adv & Selling Cost —

* (*) Price & Output in oligopolistic Market

* - Oligopoly firm doesn't have determined Demand Curve, due to shifting in price due to Rivals.

* - It is assumed that if the firm ignore their interdependence and make their Decision independently. Then Demand Curve becomes Definite.

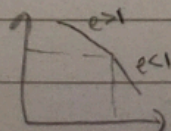
* (*) Price leadership

- Tricky to Fix Price
- Price is Fixed through assumptions regarding other oligopolistic groups
- Cartels are formed

* (*) Kinked Demand Curve [By Paul A. Sweezy]

Sweezy's Model

- Demand above prevailing price is elastic
- " below " " " inelastic



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- If one firm Lower Price then Competitor will Follow.
- " " " Increase " " " " Not "

Other Imp Market forms

- 1) Duopoly ÷ Two Firms In Market
- 2) Monopsony ÷ Single Buyer
- 3) Oligopsony ÷ Small No of Large Buyer
Few
- 4) Bilateral Monopoly ÷ Single Buyer & Single Seller

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Duopoly -
Two Firm

Monopsony
Single Seller

Oligopsony
Few Buyer