Question Answers

* Explain or describe Efficieny ?

Efficiency in economics refers to the optimal use and allocation of Limited resources to achive the best possible outcome in terms of maximizing overall well-being or output It reflects the idea of getting the most value out of available resources

* Describe macro and micro in economics ?

There are main 2 parts of economics.

(I) Macro eco
(II) Micro "

meaning, Area of study, Deals with, Business Application, scope, significance, Limitation

Explain the difference between micro and macro economics?

Microeconomics	Macroeconomics
① A Branch of economics that is related to the study of individual decision making	① Deals with the study of the behavior and performance of economy in total.
② Studies the Particular market segment of the economy	② Studies the whole economy that covers several market segm
③ Applied to internal issue.	③ Applied to environmental and external issues
④ Deals with various issues Like demand, supply, factor pricing Product Pricing	⑤ Deals with issues Like national income, distribution, employment.

Production Function:

$$Y = f(L, K)$$

Y ↓ Output; (L, K) Input

L = Labour
K = Capital

Explain the Production function ? and given some

Ans In economics ,, is a mathematical representation that describes the relationship between the inputs used in production process and the output generated. It shows how various factors of production such as labor and capital

Y = quantity of output
L = represents, input of human effort
K = capital which includes Physical and human capital such as machinery.

* Explain input and output in economics?

In economics, inputs and outputs refer to the factors of production and the resulting goods or services produced in a production process. Here's consise explanation.

Inputs: are resources of factor of production. They are used in the production process. They are the raw materials, labour, land etc.

Outputs:

* Explain Opportunity cost with example and explain the example?

Opportunity cost represents the potential benifits that a business an investor or an individual consumer misses out on when choosing one alternative over another. While opportunity costs can't be predicted with total certainty taking them into consideration can lead to better decision making.

Key takeways:

(i) Opportunity cost forgone benifit that would have been derived for an option than the one that was chosen.

(ii) To properly evaluate oportunity costs the costs and benifits of every option available must be considered and weighed against other

• Considering potential opportunity costs can guide individuals and organization to more profitable decision making.

• Opportunity cost is strictly internal measure used for strategic planning. It is not included on accounting profit or reflected external financial reporting.

PPF curve.

What is Production Possiblity Frontier? and explain different point of PPF graph.

- The PPF is a curve on a graph that illustrates the possible quantities that can be produced of 2 products if both depend upon the same finite resources

PPF also plays a crucial role in economics. For example it can demonstrate that a nation's economy has reached the highest level of efficiency possible.

Key takeaways:

Question Answers

* Explain Demand theory ?

If other things/factors remain constant (ceteris Peribus) a demand function is a mathematical function describing the relationship between a variable like demand of quantity and various factors determining the demand.

$Q = f(P)$ P= Price , Q= quantity.

The purpose of this function is to analyze the behavior of consumers in market and to help firms make pricing decisions. This shows how changes in the price of a good effect the quantity demanded by consumer while keeping other factor constant.

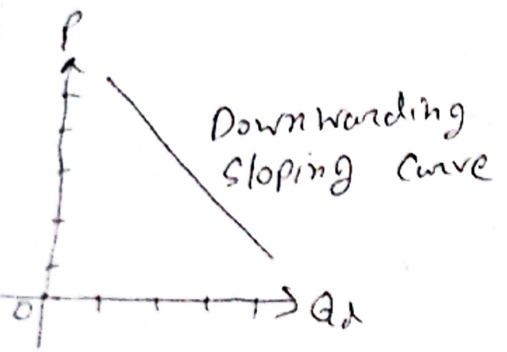
Negative Relation: If Price high ($P\uparrow$) and quantity of demand Low ($Q_d\downarrow$), the ~~the~~ relation between Price and quantity is in negative. According to demand theory

Demand function:

$$Q_d = f(P)$$

example:

$$\underbrace{Q_d}_{\text{dependent}} = \underbrace{10}_{\text{fixed value}} - 2\underbrace{P}_{\text{independent}}$$



Demand Curve

$Q_d = \underbrace{100}_{c} - \underbrace{50P}_{mP}$ calculate the slope and give it's interpretation.

To calculate we need to express it in the form $\boxed{Q = mP + C}$ here $\boxed{\begin{array}{l} m = \text{slope} \\ C = \text{constant} \end{array}}$

given,

$Q_d = 100 - 50P$

In the form of $mP + c$

$Q = -50P + 100$

We can see coefficient of P, which is -50, represents the slope of demand function.

another way

$Q_d = 100 - 50P$

$= 0 - 50 \cdot P^{1-1}$

$= -50P^0$

$= -50$ → Downward

Q = quantity Demand
P = Price

Independent variable P is shows ddn

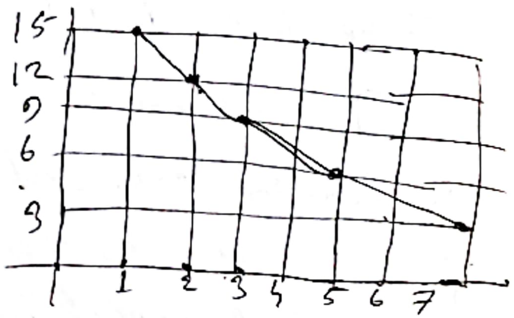
P	Q_d
1	50
2	0

→ negative relation

Interpretation: The slope of the demand function indicates the rate of change of quantity demanded with respect to the price. In this case since the slope is negative (-50). It means as the price increases by 1 unit the quantity demanded decreases by 30 Units. This suggests an inverse relationship between Price and quantity demanded, which is typical of demand curves in economics.

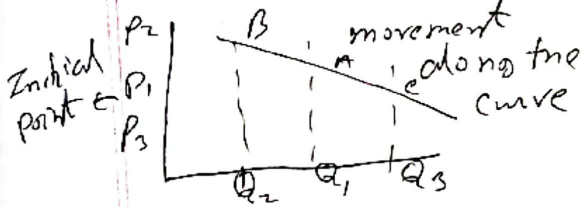
Explain the effect of Price on demand. Show it's corresponding Graph.

P	Q
15	1
12	2
9	3
6	5
3	7



Use graph provided by eco team

We can see on the demand Graph there is an inverse relation between Price and quantity demanded. Economist call this the law of Demand. If the Price goes up the quantity demanded goes down (demand stays same) if the Price decreases quantity demand increases. This is law of demand. On a demand Graph an inverse relationship represented by a downward sloping line from left to right.



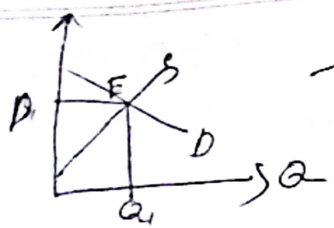
Explain the effect of Income, Price, Popul on Demand, Show it's corresponding Graph.

I) **Price:**

II) **Income:** Graph is a shif along the curv

Income and demand has an inverse relation

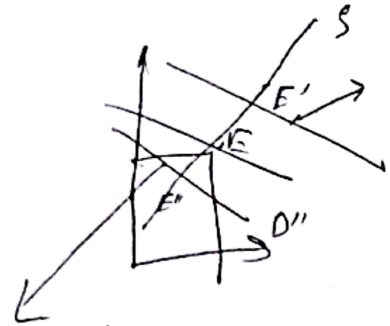
02/23/25



→ equilibrium এর চিত্র
effect এবং Demand
ও supply এর intersection এ

Q) Explain the effect of change in income on equilibrium price and quantity.

* Does if income increase Demand will increase why?

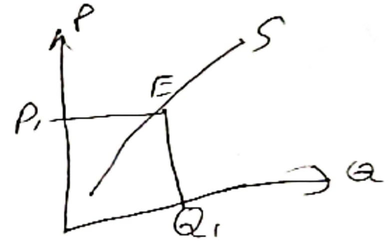


new demand curve rightwards.

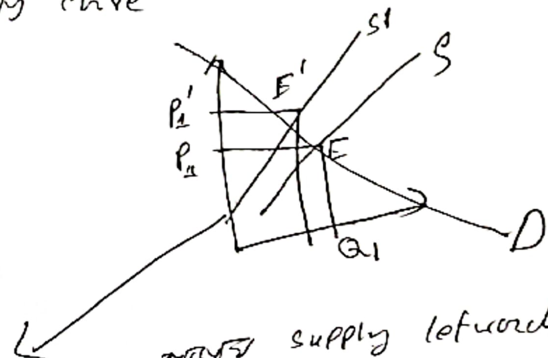
when income decreases demand curve leftwards.

Q2) Explain the effect of change in input price of equilibrium price and quantity.

উপাদানের

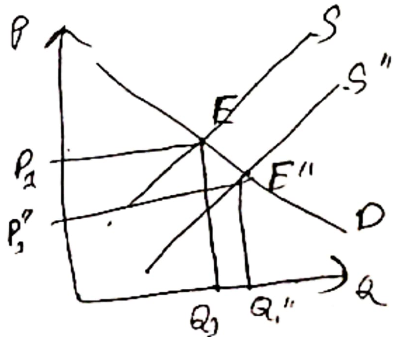


Supply curve কমলে left ward shift



input price বাড়লে supply leftwards supply কমবে

input price কমলে supply rightwards. supply বাড়বে



Effect on Demand (2 Page before)
P question answer.

(III) **Population:** Graph is a shift along the Curve. Income and demand has an inverse relation.

(IV) **Price of Related Goods:**

Question Answers

Market is any Structure that allows buyers and sellers to exchange any type of goods, Services and information.

2 types of market

(I) perfect competition market

(II) monopoly market

Explain the characteristics of perfect competition market?

Perfect competition is a Unique form of market place that allows multiple companies to sell the same product or services (monopoly) None of the firms can freely the a price for the product or services the because they'll lose their business to compet

Characteristics of Perfect Competitive market:

① **Many Seller:** Everyone has a right to sell the Product. As such many firms / seller may Join the market to sell such products under different brand name due to it's Profit or demand such as (rice, oil etc). Due to it's numerous buyers and seller situation it's Prevent any single entity from Influencing Price significantly.

② **Many Buyer:** Products such as rice, oils are the daily necessity of everyones life. So they always stay at high demand. As such many buyers are found in the market of these products.

③ **Homogeneous Products:** All the firms / sellers In a perfectly competitive market produces homogeneous Product. Firms Produces identical or homogeneous Goods or services. ensuring no Product differentiation among competitors. or can be a direct substitutive for buyers. This leads a situation where consumers make decisions based soley on Price.

④ **No Restrictions:** Perfect competition allows for easy entry and exits of firms in the market. There are no significant barrier. Promoting healthy Competition and efficiency. Obstacle like entry fee and exit fee. The absence of significant obstacles for new firms to enter the market or existing firms to leave ensures a level Playing field and encourage competition.

v) Seller and Buyer are both Price taker:

Both buyers & seller are fully aware of the market condition. Such as Price of a Product in different Place. & Seller are also aware of the Prices at which the buyer are willing to buy. Because of this If any Individual firm is charging higher or lower Price for the Product the buyer will shift away or shift towards to the seller/firm

The number of seller is so large that no individual firm/seller can even control over the market Price. Due to the large number of seller. there exists a Perfect and free market competition. A seller acts as a Price taker while Products Price is determined by 'demand' and 'supply' of the Product. This means Both buyers and Sellers accept the market determined Price and have no individual influence on it they both are Price-takers. and the Price sellers are supply and demand.

* Explain the characteristics of monopoly market

Ans: A monopoly market is a structure where there is only one seller of a unique Product or service with no close substitute. The seller has the Power to control the Price and supply of the Product and faced no competition from other. Some of the main characteristics of a monopoly market are:

1) Only one Seller: In a monopoly only one Seller that controls the entire supply of a specific Product. There are no other firm Producing Similar Product

2) Many Buyers: There are many buyers who wants to consume that specific Product but it only sold by only one Seller. So buyer has no influence over the seller fixed Price.

3) Product is not homogeneous: In this market One Seller sells one Product that no other Sellers sells. That means Products are unique

4) Restrictions: There are high restrictions that Prevent new seller from entering the market. these can be legal throug license.

Example: There are one rice seller in market. Then no new rice seller can enter the market this is a Pure discrimination

5) Price setter and faver: The seller is the setter of Price of Products. because there is Only one seller in the market seller has the Power to set Price as his will

Q. Calculate Equilibrium Price and quantity in case of perfect Competition market.

$$p = 100 - 2Q \quad \text{—(1)}$$

We know,

Cost function $\boxed{C = 10 + 2Q^2}$

Cost function কে ১ বার differentiation করলে marginal cost (MC) পাওয়া যায়।

$$\therefore MC = 0 + 2 \cdot 2Q^{2-1}$$

$$= 4Q^1 = 4Q$$

$\boxed{P = \text{marginal cost}}$

$$MC = 4Q$$

We know, $P = MC$

$$\therefore 100 - 2Q = 4Q$$

$$100 = 6Q$$

$$\therefore Q = \frac{100}{6}$$

$$= 16.67 \text{ m}$$