

JANUARY						
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11	13	14	15	16	17	
18	20	21	22	23	24	
25	27	28	29	30	31	

JANUARY 2010

PRINCIPLE OF ECONOMICS  
Efficient utilization of limited resources (man satist)  
Rs 500 (R<W)

Transport  
(200)

2) lunch

Rs 500  
(150)

3) Snacks

(50)

4) Savings

(100)

limited resources → scarce sources

ECONOMICS

(How an economic agent utilizes resources)

Microeconomics  
Individuals (economic agents)

Consumer Producer

↳ Cost (min) & Profit (max)   
 By utilizing investment  
 Lim. source → investment

Expenditure (min) & Man satisfaction  
(Income) (quality or quantity)

Currency (liquid) : easily converted

(sales)

Profit : Total revenue - Total cost

Microeconomics: The study of how a consumer & producer utilize the scarce resources efficiently

Macroeconomics: The study of how a nation utilizes scarce resources efficiently.

Pakistan → Agriculture country → uses hybrid seeds (Imported)

Income : GDP or GNP  
(gross domestic product)

3 gens → (large yield  
survival 100%)

Evening

JANUARY 2010

JANUARY						
M	T	W	T	F	S	S
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11	12	13	14	15	16	10
18	19	20	21	22	23	17
25	26	27	28	29	30	24

## Questions / Problems Of Economics

Q: What to produce → ideas

Q: How to produce → factors of production (land, labor, capital, organization)  
Go for whom to produce

★ **LAND**: All the natural resources (tree, rocks etc)

★ **LABOUR**: Mental efforts & physical efforts of all human beings for monetary reward are counted under the category of labor unskilled labor: not efficient skills (few skills)

★ **Skilled labour**: Human capital (skills & experience gained)

**Capital**: Investment required to start a business

Depend - anti linked 4 MONDAY Human Capital: Skills required Financial capital cannot be converted directly into prod

Physical Capital: Machines, Tools - base

**Financial**: Cap - Wages or Investment - uct

↳ Money as a medium of exchange.

★ **Organization**: Organizes All 3 factors of production.

Manages hierarchy. Improves the upper hierarchy.

H.W → examples of roles of fast food serve

11 PRESENTATION:

12 Pakistan economy. Group of 5.

01 ADP: Defense expenditure is more in Pakistan  
02 Education & health should be priority

03 economy compromises only 2% or less than 2% on health

04 ↳ producer & consumer are national.  
05 soft copies (pirated)

Evening

JANUARY			
T	F	S	S
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4	8	9	10
1	15	16	17
3	22	23	24
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JANUARY						
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11	12	13	14	8	9	10
18	19	20	21	15	16	17
25	26	27	28	29	22	23

"There is no free lunch."

11<sup>th</sup> September 2025

JANUARY 2010

# Factors of Production

- | Production             |  | from financial capital   |
|------------------------|--|--------------------------|
| * Land: Rent           | * Labour: wages/salary                 | * Capital: Interest rate |
| * Organization: Profit |  | physical capital         |
| Adv.                   | Land and Capital can be merged.        | 10                       |
|                        | Organization and Labour can be merged. | 11                       |
|                        | Goods & services: Trading sources      | 12                       |
| (Tangible)             | (Intangible)                           | 01                       |

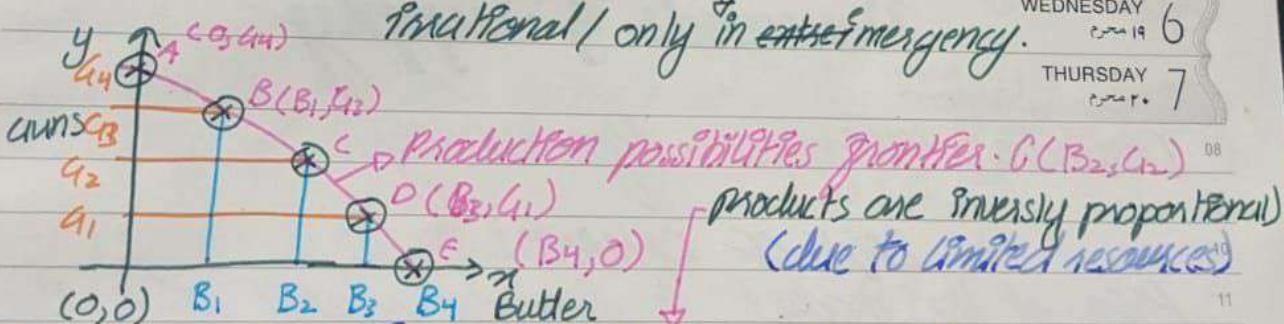
## Production Possibilities Curve (PPC) / Production Possibilities Frontier

- \* Only two goods (for simplicity).
  - \* Full utilization of Resources

→ Factors of production (fully utilized)

↳ Technology (y-intercepts are extreme points)

practical / only <sup>to</sup> in emergency



Opportunity Cost: The activity forgone to achieve another activity.

## In-efficient Allocation of Resources:

## Slope Steepness of a Line (Position)

(Change)<sup>3</sup>

- Slope of PPF is Marginal Rate of Transformation (Additional/Extra) (MRT<sub>xy</sub>)

slope  $\rightarrow$  Always negative (sign is not necessary) (Shows decrease in graph)

↳  $\frac{5}{3}$  if economy wants to produce 3 additional units of butter, then it should sacrifice 5 additional units of guns  
(Also called concept of opportunity cost)

JANUARY 2010

JANUARY						
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25	26	27	28	29	30	31

All the points on PPF are efficient, attainable, desirable & feasible.

Efficient: we cannot bring something better off without trashing something worse off. Saturation point  $\rightarrow$  efficient point

To Some resources are under utilized

To achieve point T we should modify the skills of "labors" and "human" capital. Reduce insignificant resources and utilize the savings to advance our "technology".

PPF can shift outside the efficient point by:

\* Economic growth \* Tech  $\uparrow$  (GDP growth)

Developing nation can convert into developed nation.

## Demands & Supply

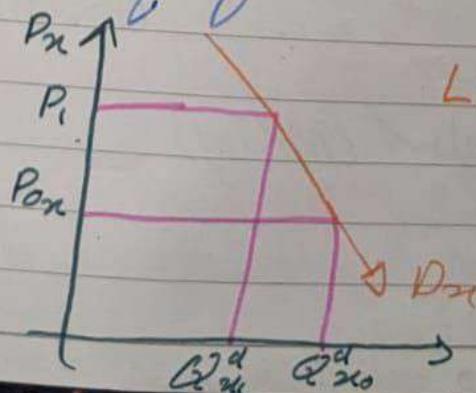
8 FRIDAY  
9 SATURDAY  
10 SUNDAY

Demand: Willingness + Affordability

### LAW OF DEMANDS

Price of the product is inversely related with the quantity demanded; Holding the effect of other factors that effect on quantity demanded except price of the group of goods and services kept constant.

Demand Curves:

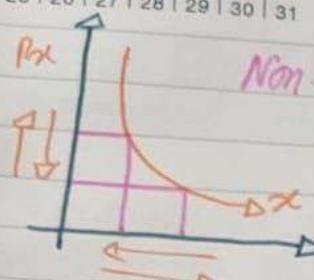


Linear Demand Curve

Evening

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JANUARY 2010



Non-Linear demand Curve  
(Ceteris paribus)

Demand for Tea

$$D_n = f(P_x^{(-)}, P_s^{(+)}, P_c^{(-)}, \text{Income}^{(+)}, T/F^{(+)}, E^{(+)}, \text{Population future expectations})$$

Income (M)  $\propto D$

Normal Inversion  
vary income to income

- \* Substitutes
- \* Complementary
- \* T/F (Taste, Fashion, Trend)
- \* Expectations regarding future

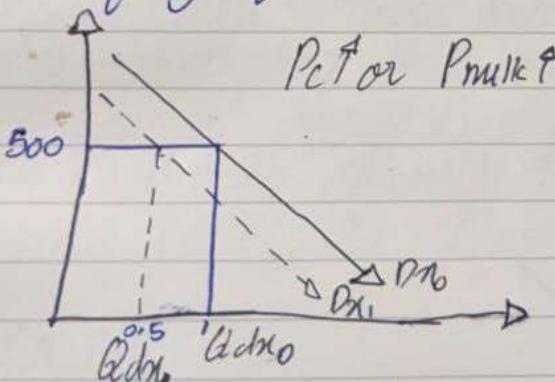
Case I

- \* If the price, other factors
- \* Movement along the same demand curve.
- \* Law of demand is valid
- \* Change in quantity demanded  $\Delta Q^d = Q_2 - Q_1$

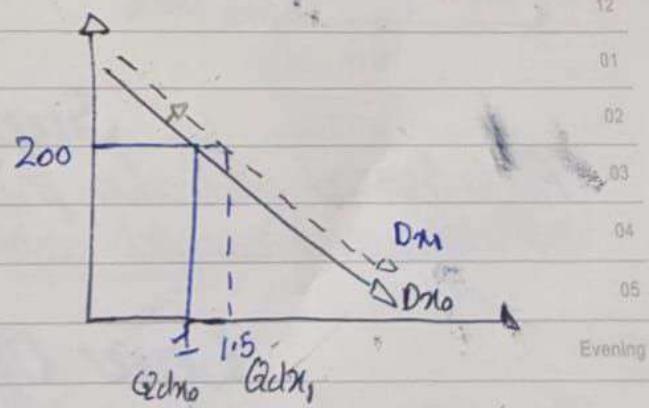
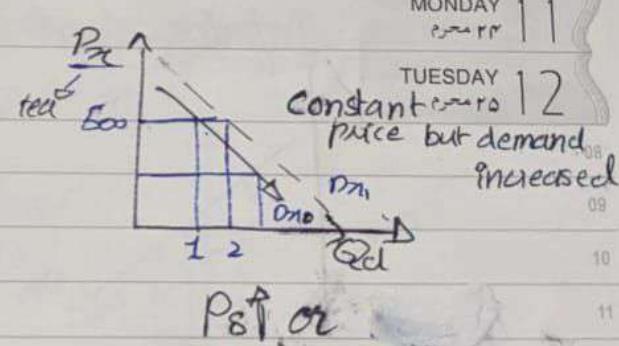
CASE II

When  $P_x \rightarrow$  (other factors)

- \* Shifting of Demand Curve

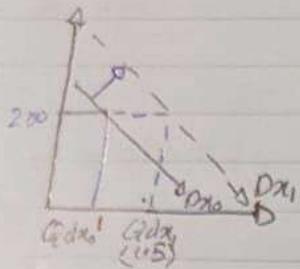


- \* Law of demand is invalid
- \* Change in demand

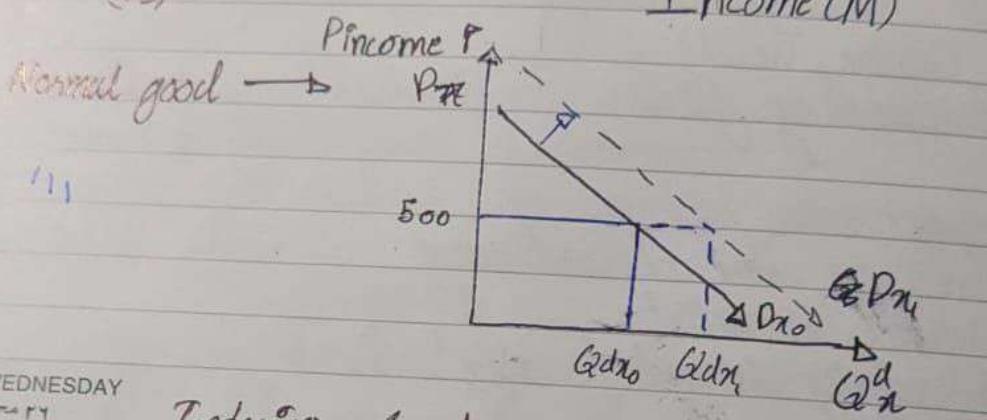


JANUARY 2010

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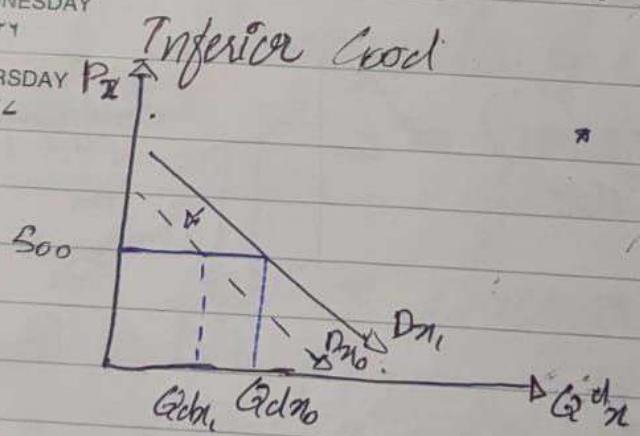


$P \uparrow P_{\text{coffee}} \uparrow$



13 WEDNESDAY

14 THURSDAY



**Supply**

Production at particular price  
Willingness + Financial capital = Supply

**Law of Supply**

The price of a product is directly proportional to the quantity supplied holding the effect of other factors

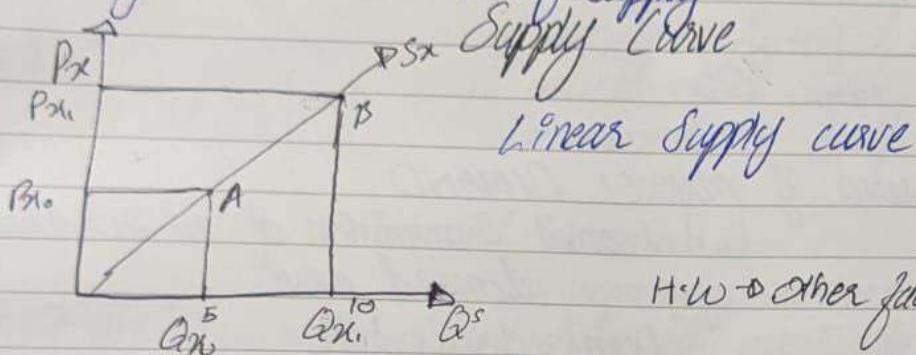
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JANUARY 2010

constant (the effect of other factors that effect on quantity demanded except price of the product)

$P_x \propto Q_s^s$

\* Whenever the price of product increases, the profit increase resulting in the increase of supply



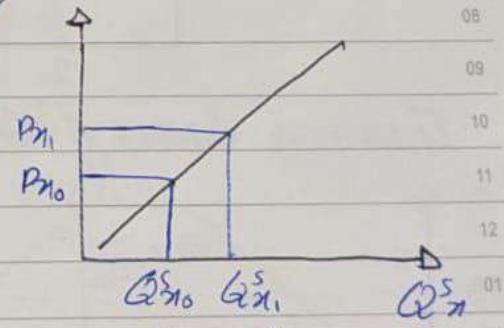
H.W  $\rightarrow$  other factors related to supply

$$S_x = f(P_x^{(+)}) [Tech^{(+)}, Cost \text{ of production, cost of factors of production}^{(-)}]$$

+ coffee  $\rightarrow$  Tax, Subsidy, population)

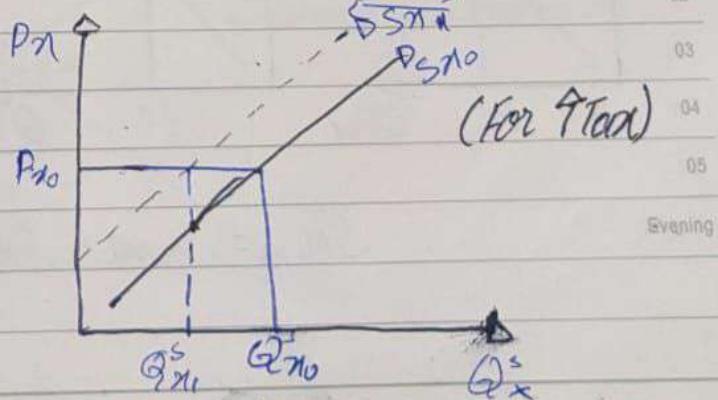
CASE I

- \* when,  $\Delta P_x \rightarrow$  other factors constant
- \* Movement along the same curve
- $\rightarrow$  Law of supply is valid
- $\rightarrow$  Change in Quantity supply  $(\Delta Q_s^s) = Q_s^1 - Q_s^o$



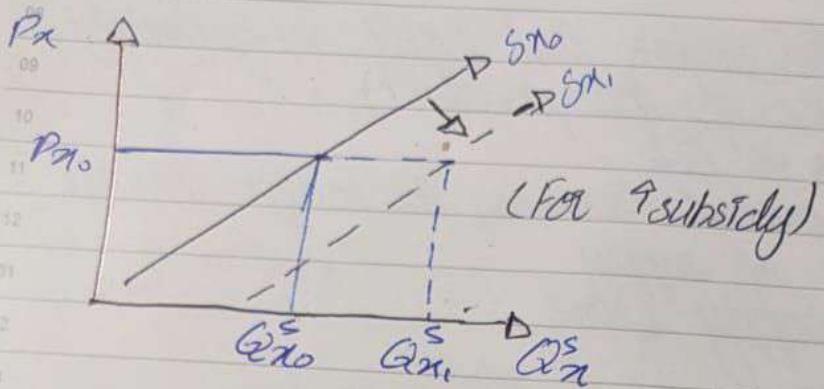
CASE II

- When,  $P_x$ ,  $\Delta$  (other factors)
- \* Shift of supply curve
  - \* Law of supply invalid
  - \*



10-1-1 صفر JANUARY 2010

JANUARY						
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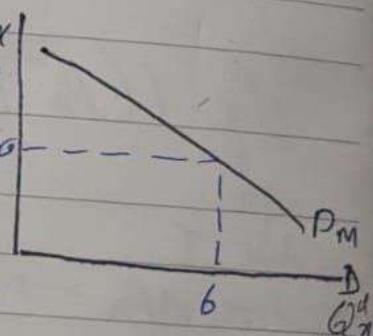
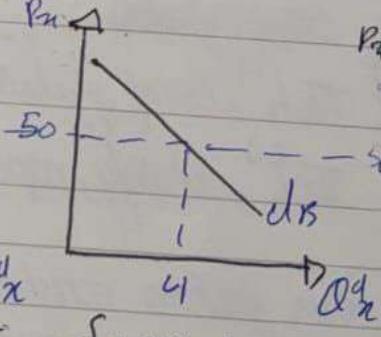
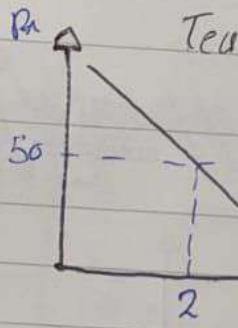
INDIVIDUAL DEMAND & MARKET DEMAND

↳ Horizontal summation of all individual demand curves.

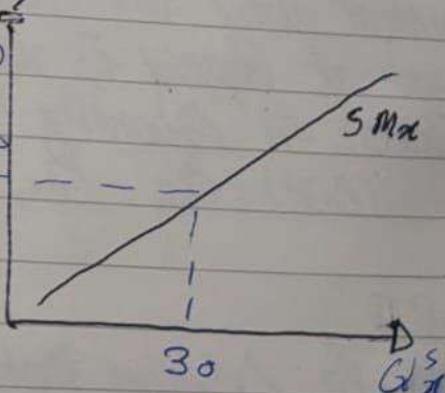
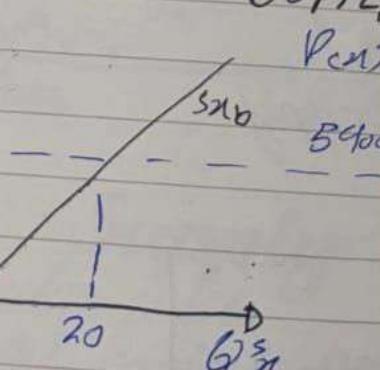
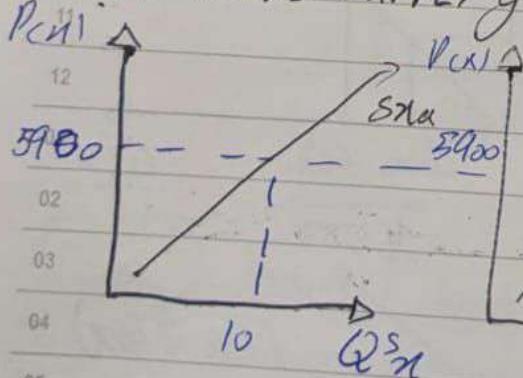
$$D_{\text{INDIVIDUAL}} = d_{A\text{INDIVIDUAL}} + d_{B\text{INDIVIDUAL}}$$

18 MONDAY صفر

19 TUESDAY صفر



INDIVIDUAL SUPPLY & MARKET SUPPLY



$$S_{\text{INDIVIDUAL}} = S_{\text{INDIVIDUAL A}} + S_{\text{INDIVIDUAL B}}$$

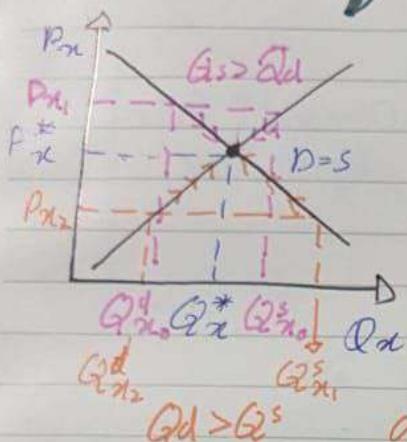
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JANUARY						
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JANUARY 2010

## Market Equilibrium

↳ When demand is equal to supply



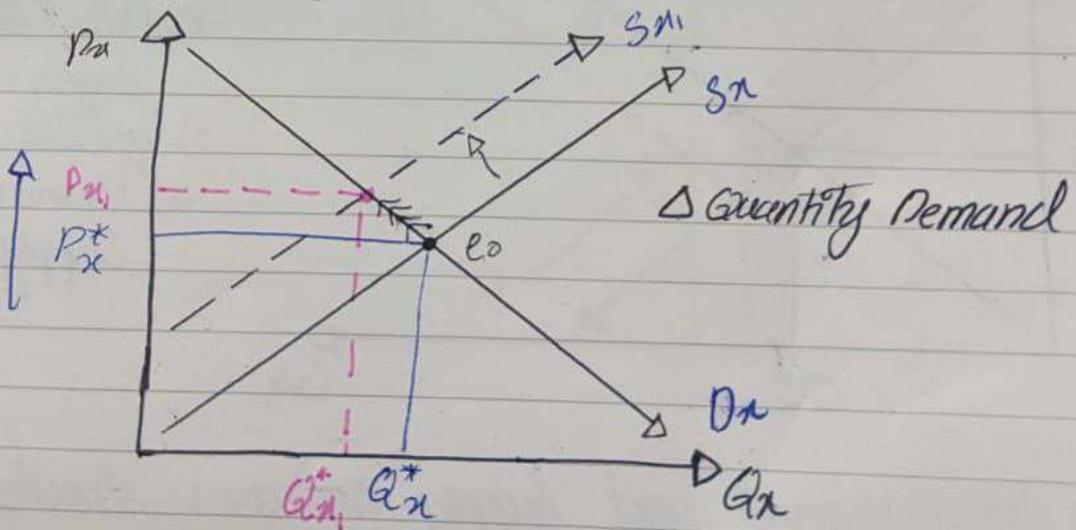
$$Q_x^* = Q_x^d = Q_x^s$$

If supply is increased, the condition of  
is called excess supply  
In economics → Surplus

demand increased, condition is called excess supply  
In economics → Shortage

- \* If equilibrium is disturbed, it will eventually restore  
Increased supply due to high price result in less demand. Therefore  
to manage the excess supply, the price will reduce  
Increase demand due to low price result in sale  
Increase, to manage the supply, price will increase.

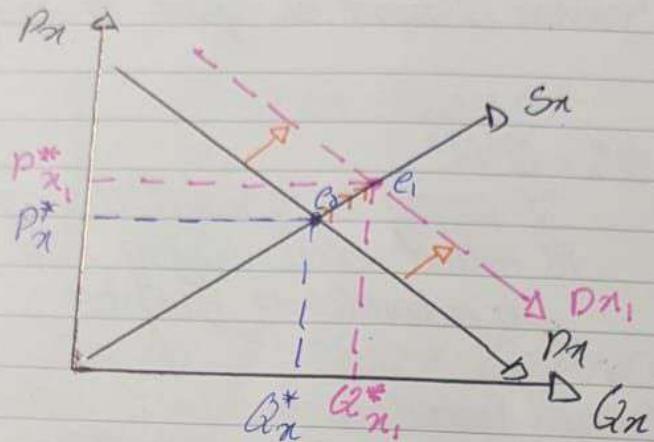
### IF TAX IS INCREASED



JANUARY 2010

JANUARY						
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INCOME  $\uparrow$  (Normal Good)  $\uparrow$



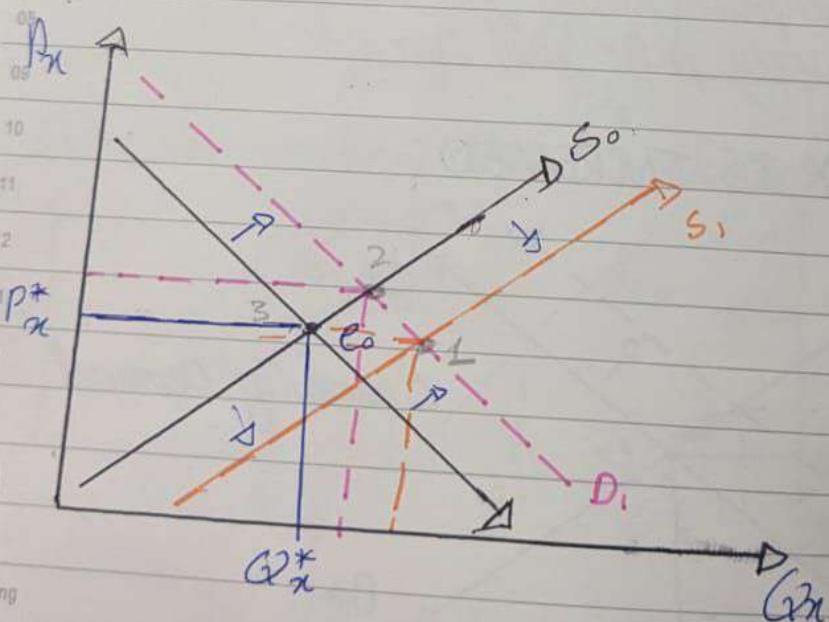
Demand  $\uparrow$  Price  $\uparrow$   
Supply same

22 FRIDAY

23 SATURDAY

24 SUNDAY

T/F  $\uparrow$  SUBSIDY  $\uparrow$



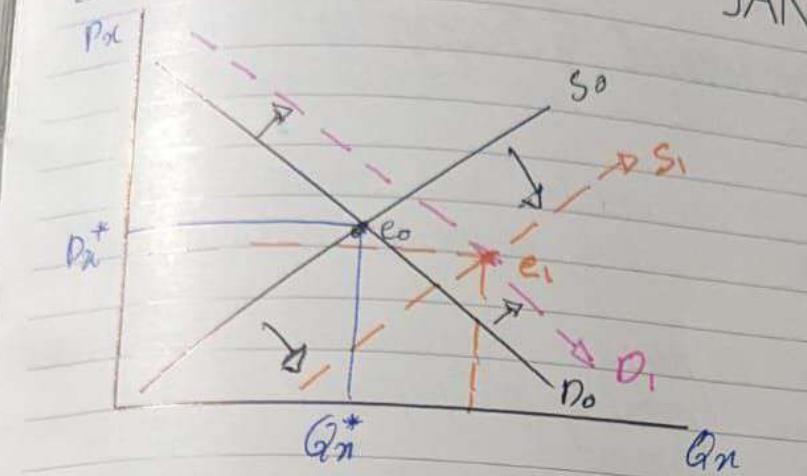
- 1)  $S_1 \rightarrow$  Price constant  
Supply  $\uparrow$  Demand const
- 2) Price  $\uparrow$  Demand  $\uparrow$   
Supply const Demand  $\uparrow$
- 3) Equilibrium
- 4) Demand same  
Supply  $\uparrow$  Price  $\downarrow$

When demand and supply increases simultaneously price remains same. Quantify  $\uparrow$

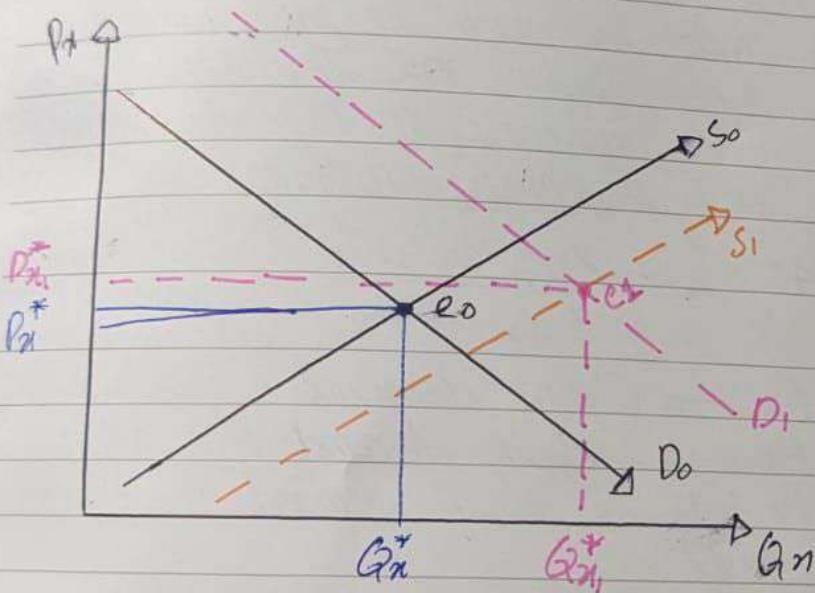
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JANUARY						
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4	12	13	14	15	16	17
11	19	20	21	22	23	24
18	26	27	28	29	30	31

JANUARY 2010



$P \downarrow S \uparrow D \uparrow$



$P \uparrow D \uparrow S \uparrow$

MONDAY 25  
TUESDAY 26

const  
1↑  
mand↑  
↓

e  
↓

price

Long-run  $\rightarrow$  elastic demand  
expensive  $\rightarrow$

JANUARY 2010

## Elasticity of Demand & Supply

$\hookrightarrow$  Responsiveness of one material onto another material

In Economics: Responsiveness of one variable onto another  
Highly responsive  $\rightarrow$  Elastic  
lousy responsive: Inelastic

PRICE ELASTICITY OF DEMAND  $\rightarrow$  Responsiveness of price on quantity demanded (Elastic demand)  $\rightarrow$  for pepsi/coke for insulin  $\rightarrow$  Inelastic demand

Perfectly Inelastic  $\rightarrow$  No matter how much the price changes, quantity demand will remain same OR zero responsiveness perfectly elastic  $\rightarrow$  If the responsiveness is infinitely declined. Means that there is a similar substitute

27 WEDNESDAY

28 THURSDAY

$$\text{FORMULA: } E_{Pn}^d = \frac{\% \Delta \text{ in } Q_n^d}{\% \Delta \text{ in } P_n}$$

- i)  $\% \Delta Q_n^d > \% \Delta \text{ in } P_n \rightarrow$  Elastic demand
- ii)  $\% \Delta Q_n^d < \% \Delta \text{ in } P_n \rightarrow$  Inelastic demand
- iii)  $\% \Delta Q_n^d = \% \Delta \text{ in } P_n \rightarrow$  Unit elastic demand.  
(Does not exist)

very similar product  $\rightarrow$  great change in demand

$$E_{Pn}^d = \frac{Q_n^d - Q_{n1}^d}{P_n - P_{n1}} \times \frac{P_{n1}}{Q_{n1}^d}$$

Profit should work more on quantity  
Work more on price rather than quantity

$\rightarrow$  The change in price makes a huge change, means if the change in quantity demand is greater than the change in price then the demand is elastic

long run

short run

demands not change much

long run

short run

demands not change much

## JANUARY

S	3	10	17	24	31
T	W	T	F	S	S
5	6	7	8	9	10
12	13	14	15	16	17
19	20	21	22	23	24
26	27	28	29	30	31

JANUARY 2010

صفر ١٤٣١

POINTS

Px (T)

G<sub>n</sub><sup>d</sup>

180°/

∞

COMMENTS  
Elastic

TR = PxG 08

A	8	0	7	Elastic	7000 10
B	7	1000	7	Elastic	0 09
C	6	2000	3	Elastic	12,000 11
D	5	3000	5/3	Elastic	15,000 12
E	4	4000	1	Elastic	16,000 01
F	3	5000	3/5	Inelastic	15,000 02
G	2	6000	1/3	Inelastic	12,000 03
H	1	7000	0.142	Inelastic	7,000 04
I	0	8000	0 -		

Evening

$$1000 - 0 \times 8000$$

7-8 0 8000

$$3000 - 2000 \times 6$$

5-6 2000

$$1000 - 0 \times 8$$

7-8 0

$$4000 - 3000 \times 5$$

4-5 3000

FRIDAY 29 صفر ١٣

SUNDAY 31 صفر ١٥

SATURDAY 30 صفر ١٤

$$2000 - 1000 \times 7$$

6-7 1000

$$5000 - 4000 \times 4$$

3-4 4000

$$6000 - 5000 \times 3$$

2-3 5000

$$7000 - 6000 \times 2$$

1-2 6000

$$8000 - 7000 \times 1$$

0-1 7000

$$0 - 8000 \times 0$$

8-0

06

09

10

11

12

01

02

03

04

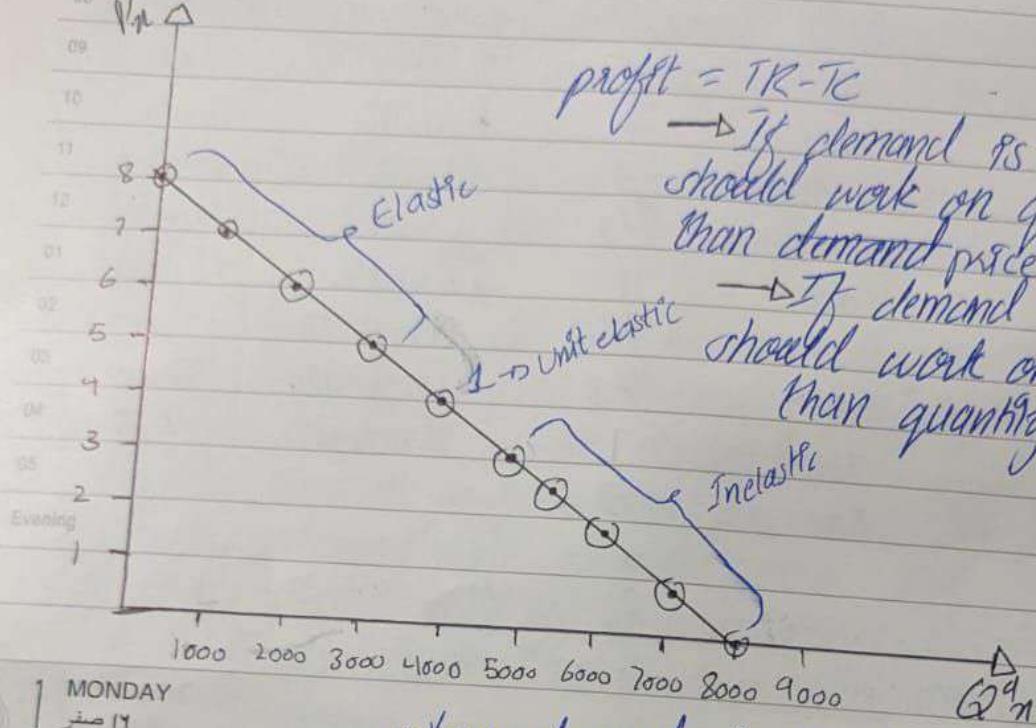
05

Evening

# FEBRUARY 2010

FEBRUARY						
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1	2	3	4	5	6	7
8	9	10	11	12	13	14
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22	23	24	25	26	27	28

Pn ↑



$$\text{profit} = TR - TC$$

→ If demand is elastic, producer should work on quantity rather than demand price

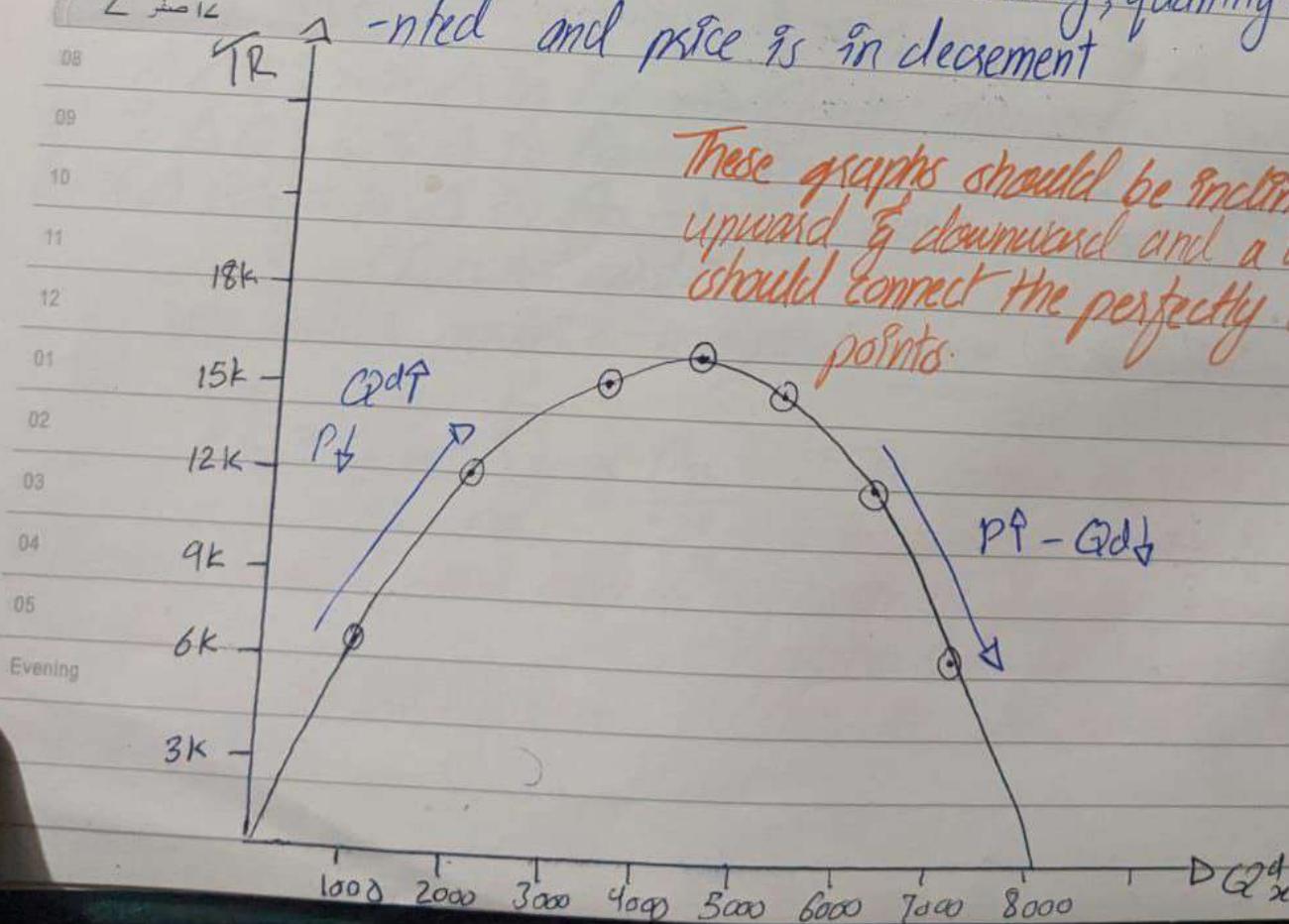
→ If demand is inelastic, producer should work on demand price rather than quantity

1 MONDAY

2 TUESDAY

when demand is in elasticity, quantity is increased and price is in decrease

These graphs should be inclined upward & downward and a line should connect the perfectly elastic points.



J A R Y		
F	S	S
5	6	7
12	13	14
19	20	21
26	27	28

FEBRUARY				
W	T	F	S	S
3	4	5	6	7
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24	25	26	27	28

FEBRUARY 2010

# Full Elasticity of Supply (Chow) Theory of Production $\rightarrow$ Productive

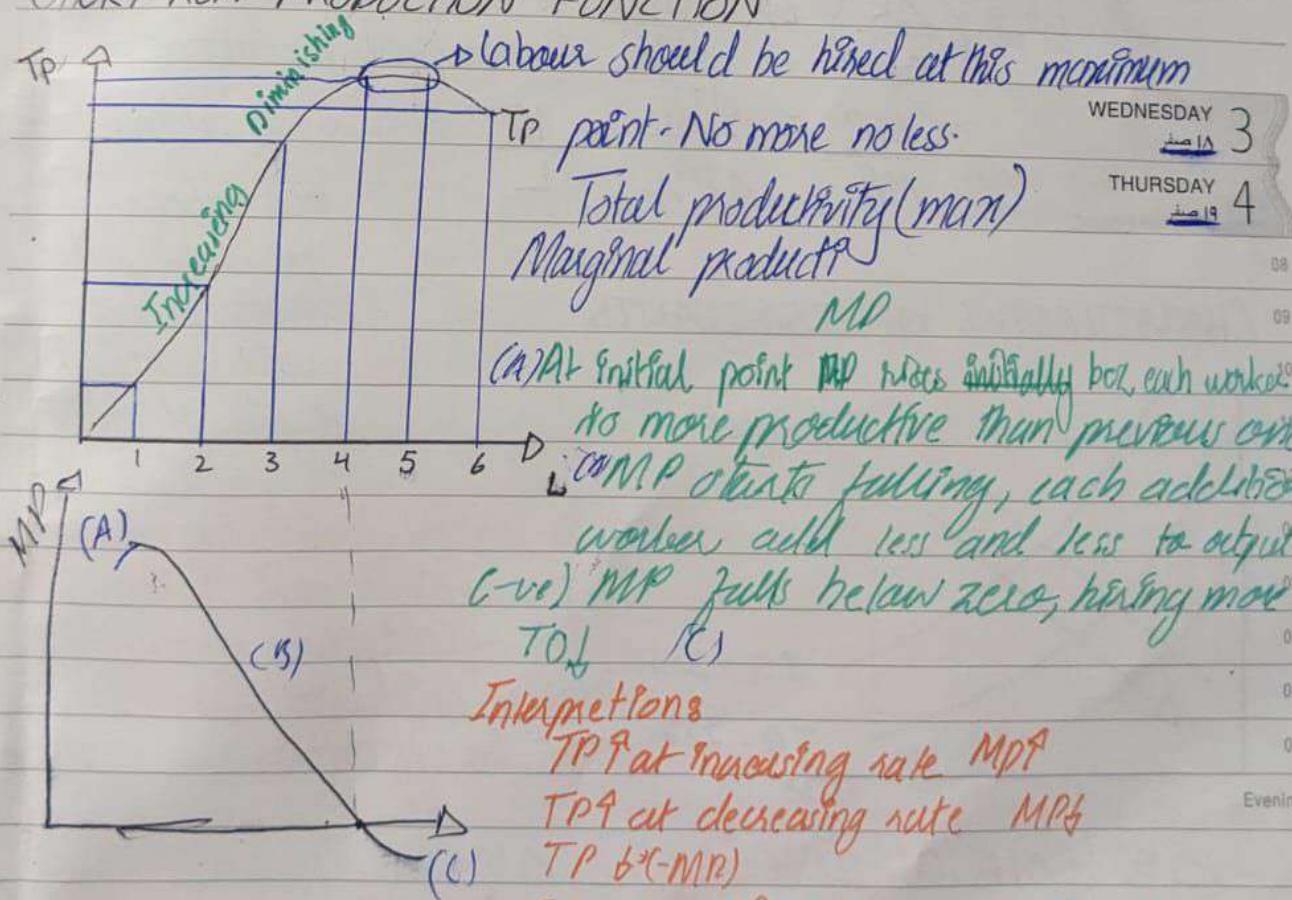
Two types

- ↳ Short term Run: Some f. op. are fixed and some are variable
- ↳ Long Run: All are variable.

→ Long Run: All are variable.

Short run  $\rightarrow$  labour or capital increasing

## SHORT-RUN PRODUCTION FUNCTION



## Intersentions

TP ↑ at increasing rate MDP

TPF at decreasing rate MPG

TP 6<sup>o</sup>(-MR)

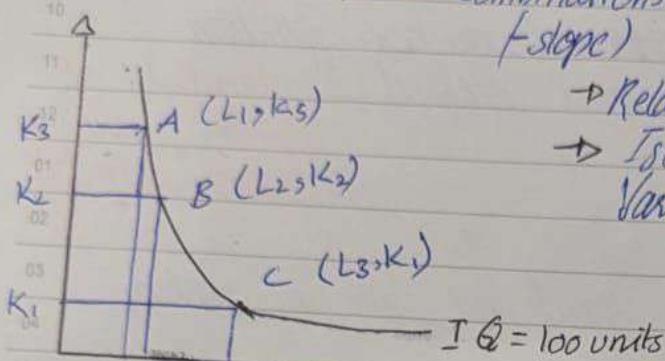
TP max,  $MP=0$  bcz we can't produce more output

FEBRUARY 2010

FEBRUARY						
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1	2	3	4	5	6	7
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15	16	17	18	19	20	21
22	23	24	25	26	27	28

## L-R Production Function $\rightarrow$ productivity factor

ISO-QUANT  $\rightarrow$  Combinations giving same production (slope)



$\rightarrow$  Relation of Labor & Capital

$\rightarrow$  ISO; same Quant; Quantity Variable inputs give desirable outputs.

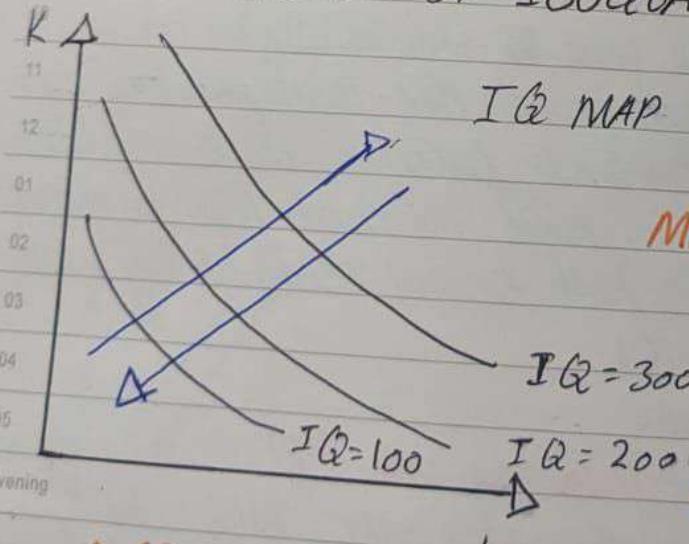
MRTS  $\rightarrow$  Marginal rate of technical substitution  
Evening Labor or capital.

$$MRTS_{LK} = \left( \frac{\Delta K}{\Delta L} \right) \text{ OR } \frac{MP_K}{MP_L} \rightarrow \text{marginal product of } \overset{\text{capital}}{K} \text{ or } \overset{\text{labor}}{L}$$

$$\checkmark \frac{MP_L}{MP_K} = \frac{\Delta TP}{\Delta L} = \frac{K}{L} = \frac{4}{1} \rightarrow \text{By adding one labor}$$

you can produce  
the same output  
while reducing  
4 units of capital

## CHARACTERISTICS OF ISOQUANTS.



MRTS is usually diminishing  
If we replace more labor with capital, too many workers with few resources won't be effective.

$$\Delta Q = MP_L \Delta L + MP_K \Delta K$$

$$\frac{\Delta K}{\Delta L} = -\frac{MP_L}{MP_K}, MRTS_{LK} = -\frac{\Delta K}{\Delta L} \Rightarrow MRTS = \frac{MP_L}{MP_K}$$

$$\Delta Q = 0$$

Profit factor  
auctor

Capital  
Quantity  
e desirable  
outputs.

position

capital  
product of labour  
cost of labour  
defined

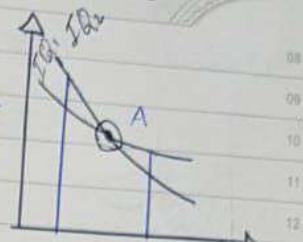
any  
capital

100%  
many  
resources

FEBRUARY						
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FEBRUARY						
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FEBRUARY 2010



- \* Iso-quants are negatively sloped.
- \* They are convex to the origin.
- \* Two Iso-quants can never intersect  
→ same productivity

ISO-COST LINE:

Various combination of labor & capital that a producer can purchase.

$$P_L(L) + P_K(K) = T_0 \rightarrow \text{Total Outlay}$$

Price of labour

Slope of ISO cost line

$$\frac{P_L(K)}{P_K} = m [P_L(L)] + T_0$$

$$-\frac{P_L}{P_K} = -\frac{w}{i} \quad (\text{wages}) \quad (\text{interest rate}) \quad (\text{tangency})$$

$$K = \frac{T_0}{P_K} - \frac{P_L(L)}{P_K}$$

$$\text{Capital Intercept: } K = \frac{T_0}{P_K} \quad (\text{y-intercept})$$

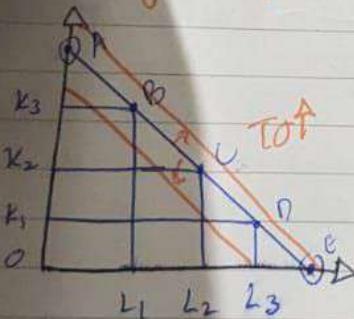
$$\text{Labour Intercept} = \frac{T_0}{P_L} \quad (\text{x-intercept})$$

$T_0 \uparrow$  Upward shifting (same slope)

$$= -\frac{P_L}{P_K}$$

$$y = mx + c \Rightarrow P_L(K) = T_0 + P_L(L)$$

$$K = \frac{T_0}{P_K} + \frac{P_L(L)}{P_K}$$



When  $P_K$  and  $P_L$  constant,  $T_0 \uparrow \rightarrow$  outward wise versa  
B (Budget)

FEBRUARY						
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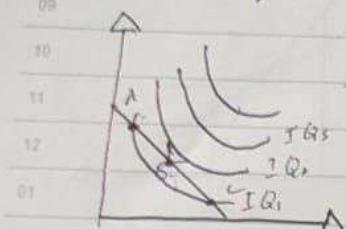
صفر ١٤٣٩

FEBRUARY 2010

08 Producer Equilibrium  $Supply = Uniqueness + Financial Capital$

$$S = W + A \quad W = IQ \quad A = Iso\ cost$$

Iso-cost are tangent with each other, then this is condition of producer



Slope of TGS = Slope of Iso Cost

$$MR_{TGS} = -\frac{P_L}{P_K}$$

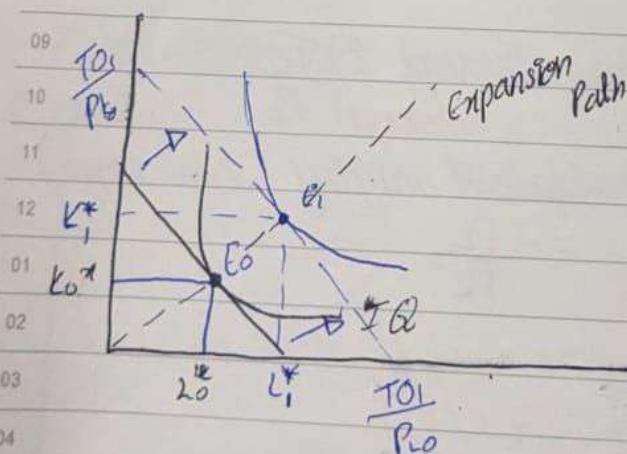
Evening  $\frac{\Delta K}{\Delta L} = -\frac{W}{\frac{P_L}{P_K}} = \frac{MP_L}{MP_K}$  } Mathematical expression for producer equilibrium.

$$\frac{MP_L}{P_L} = \frac{MP_K}{P_K} \Rightarrow \frac{MP_L}{W} = \frac{MP_K}{\frac{P_L}{P_K}}$$

10 WEDNESDAY صفر ٢٥

11 THURSDAY صفر ٢٦

EXPANSION PATH  $\rightarrow$  Locus of all producer equilibrium



$P_L$  and  $P_K \rightarrow TOL \uparrow (E_1)$   
when the  $P_L$  and  $P_K$  are constant while Total Output (TOL) is changing.

$$\text{Iso-cost} = WL + \frac{P_L}{P_K} L$$

$$\text{slope} = -\frac{W2}{P_K2}$$

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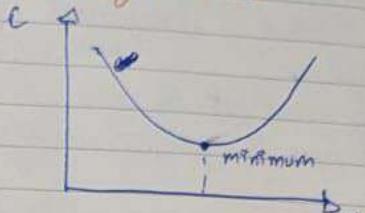
Capital  
cost  
then this

FEBRUARY 2010

### COST OF PRODUCTION

Explicit cost  
(clearly mentioned)  
Implicit cost  
Opportunity cost  
All the visible cost

total expenditure incurred by a firm to  
produce goods & services



### COST OF PRODUCTION

Cost to cost  $\rightarrow$  no profit no loss

SHORT RUN COST

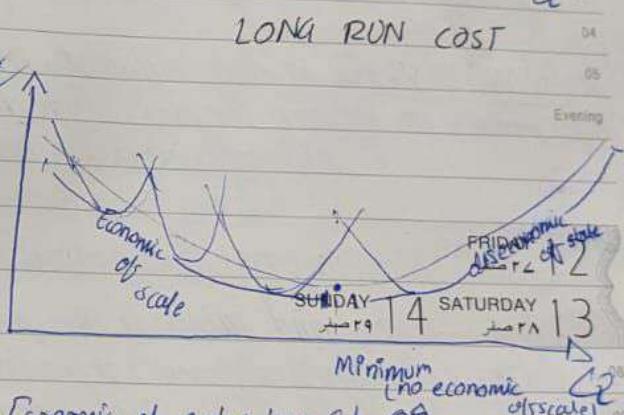
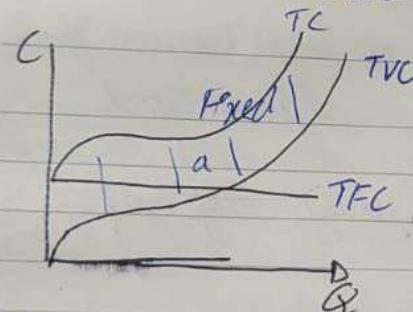
$$TC = TFC + TVC$$

(fixed cost)

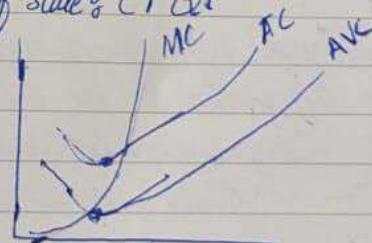
Independent of  
output

(variable cost)

Depends on  
outcome



Economic of scales:  $C_f \propto Q^2$   
no economic of scale:  $C_v \propto Q^2$   
diseconomic of scale:  $C_f \propto Q^2$



AC Costs Curves (per unit cost)

$$AC = \frac{TFC}{Q} + \frac{TVC}{Q}$$

$AFC = \frac{TFC}{Q} \rightarrow$  decreases as output increases

$$AC = AFC + AVC$$

$TVC = \text{U shaped}$

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## FEBRUARY 2010

Tuesday

08 Market Structure:

- 09 **Perfect Competition:** 1) large number of buyers & sellers. 2) Product is homogeneous and identical. 3) Every producer is price taker. 4) Knowledge of price & cost (perfect information). 5) They cannot set the price. 6) There is no barriers to entry & exit. 7) There is a perfect mobility of resource (easily movable).

03 Raw wheat is the example

Highly imperfect  
multiple consumers

- 04 **Monopoly:** 1) Has no close substitutes, producer are price setter (single producer) or influence the price. 2) High barrier to entry & exit. 3) Microsoft → closest example

15 MONDAY

15 MONOPOLISTIC COMPETITION: \* There are large number of

16 TUESDAY

- 05 buyers and sellers \* The product is differentiated (similar but slightly different) \* producers are price setter to some extent \* Can enter easily but can't manage easily, easily exit. 6) Shampoo, pen, fan

11

- 12 **Quasiopoly:** 1) Large no. of consumers but few producers \* product can be differentiated by identical. \* 2) High barriers to entry or exit \* They are price setter to some extent. 3) Airlines, mobile networks, cars

04

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FEBRUARY 2010

# Macroeconomics

## \* OBJECTIVES

- 1- To increase the output of the nation ↑ (GDP)
- 2- Reduce the unemployment ↓
- 3- To maintain the stability in prices

## \* INSTRUMENTS OF MACROECONOMICS

- 1- Fiscal policy → controls Govt spending, taxes, budget balances, Demand
- 2- Monetary policy → controls Money supply, interest rates, inflation

Gross Domestic Product: Total real production

All domesticated It is the "market value" of all "final goods and services" that are "newly produced" and "produced within a country" and "within a fiscal year"

Market Value: The price of good & services at the market

Final Goods & Services: The goods and services consumed fully

(To avoid double counting) effect policy

Newly produced Goods & Services: Goods and Services produced within an year (consumed or not)

Produced within a country: Produce within the premises of the country, no matter who produced it

Within A Fiscal Year: The next month after the budget is announced marks the start of FY

٢٠١٠년 ٢월

FEBRUARY 2010

FEBRUARY						
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## Price Elasticity of Supply

It measures how much and how quickly the quantity supplied of a good changes when its price changes

$$PES = \frac{\% \text{ change in quantity supplied}}{\% \text{ change in price}}$$

- i)  $\% \Delta Q_s^s > 1 \rightarrow$  elastic supply ( $\% \Delta Q_s^s > \% \Delta P_s^s$ )
- ii)  $\% \Delta Q_s^s < 1 \rightarrow$  Inelastic supply ( $\% \Delta Q_s^s < \% \Delta P_s^s$ )
- iii)  $\% \Delta Q_s^s = 1 \rightarrow$  Unit elastic ( $\% \Delta Q_s^s = \% \Delta P_s^s$ )
- iv)  $\Delta Q_s^s = \infty \rightarrow$  Perfectly elastic

19 FRIDAY

Factors affecting  $E_s^s$

20 SATURDAY

21 SUNDAY

\* Availability of raw materials

\* Production capacity

Uses

- 1) Measure the size of economy (how big or small economy is)
- 2) Make government policies (Government use data to plan budgets)
- 3) Comparing GNP per capita helps compare income levels, living standards
- 4) Measure if the economy is growing or shrinking

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FEBRUARY 2010

GROSS NATIONAL Product (GNP): Country's output

It is the market value of all final goods and services that are newly produced and produced by the country's FOP and within a fiscal year.

$GDP = GNP - NFPC$  Net factor payments for

CALCULATION FOR GDP: (National Income Accounting)

\* Expenditure Approach

Sum of All expenditures within a year

↳ Record making

\* Income approach

All the income expended

EXPENDITURE APPROACH  $\text{Imports} - M$ )

$Y = \text{Consumption} + \text{Govt} + (\text{Net Exports}) + \text{Investment}$

$C \quad G \quad NX \quad I$

• Consumption expenditure: Part of the income not saved but consumed  
Types:

Current consumption: Consumed at the moment

Durable consumption: Consumed for a certain period of time

• INVESTMENT: Any asset the provides return (increase in value)  
Types:

Business Investment: Done in business

Residential Investment: Purchasing a house

• GOVERNMENT EXPENDITURE

FEBRUARY						
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FEBRUARY 2010

10 More Current Expenditures: Small expenditures (e.g. Railways, PIA)  
 less Development Expenditures: For country's development (Red Bus etc)

11 Pakistan invests more in defense expenditure / military expenditure  
 12 they should rather invest in development expenditure, for  
 01 the development of the country.

Use 12 Limitation of GDP

1) Proxy of standard of living (proxy of life)  
 04 conversion of quality into quantity at a particular standard  
 05

Evening

$$\frac{\text{GDP}}{\text{Population}} = \text{GDP per person (per capita)}$$

24

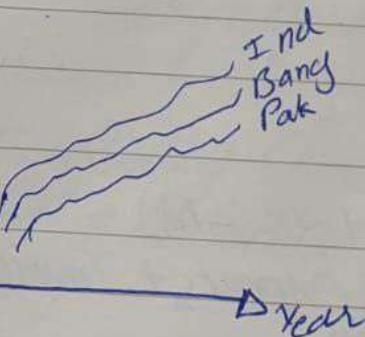
WEDNESDAY  
الجمعه, ٩

GDP  
per capita



25

THURSDAY  
الجمعه, ١٠



↑ GDP per capita results  
 in ↑ Employment opportunities  
 ↑ Labour, GDP is going  
 upwards

- 10 Limitations of GDP (not 100% measure of standard of living)
- 11 1) Illegal / Unclaimed informal economy: All of this does not count in GDP.
- 01 2) Child labor (uncountable)
- 03 3) Household production Production but no monetary reward
- 04 4) Environmental Quality:
- 05 5) Leisure hours.
- 06 6) Emotions
- 07 7) Not published Business

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## FEBRUARY 2010

C	10,285	70.5	
I	18,42	12.6	→ low
(C+D) G	2991	20.5	→ Current expenditure > Development
X-M	-539	-3.7	→ Trade deficit
Y	14,579		

$C \uparrow \rightarrow S \downarrow \rightarrow I \downarrow \rightarrow \text{profit} \rightarrow \text{Employment} \downarrow \rightarrow \text{GDP} \downarrow$

Interpretations (in paper)

Real vs Nominal GDP

↳ Inflation adjusted GDP  
 $\xrightarrow{\text{Inflation}} \text{Inflation adjusted GDP}$   
 $(P_{\text{base}} \times Q_{\text{current}})$

↳ Base year → No economic crisis

SUNDAY 28 SATURDAY 27

Unadjusted → Inaccurate as the price increases over time, increasing in GDP and it does not determine change in that

UNEMPLOYMENT

Any person who is actively searching for job for 4 weeks and is capable for doing a job then the person is unemployed

Unemployment rate =  $\frac{\# \text{ of people unemp}}{L \text{ of F}} \times 100$

labor force - sum of employed and unemployed

MARCH 2010

MARCH						
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### 08 TYPES

- 09 1) Cyclical unemployment
- 10 2) Structural unemployment
- 11 3) Frictional unemployment
- 12
- 01 2) Unemployment due to structural change in the govt economy  
(manual  $\rightarrow$  digital)
- 02
- 03 3) Unemployment with mismatch job, after leaving the mismatch  
(diff job, diff job) (Good Type)
- 04
- 05 1) Cyclical Unemployment, (Dangerous) Unemployment due to recession  
Economic cycle  $\rightarrow$  Business cycle  $\rightarrow$  recovery
- Evening lowest point  $\rightarrow$  Depression
- 1) Highest point  $\rightarrow$  Recession (closing of company)  $\rightarrow$  Peak point

1 MONDAY

2 TUESDAY

### CONSUMER PRICE INDEX (CPI)

The major of avg prices in economy  
measure

$$CPI = \frac{\text{Cost of basket in the current year prices} \times 100}{\text{Cost of basket in the base year prices}}$$

Basket: Consumable goods & services (summation)  
same goods & services

$$\% \Delta \text{Change} = \frac{\text{New CPI} - \text{CPI}_{\text{old}}}{\text{CPI}_{\text{old}}} = +(\text{Inflation}) - \text{continuous rise}$$
  
$$- (\text{Deflation}) + \text{decrease in CPI}$$

Inflation does not effect much  
Salary 85% Inflation 13% (Not bad effect)

MARCH						
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29	30	31				

MARCH 2010

IMPUNIKA

TASK: Why deflation is more dangerous than inflation

People have no money to buy  $\rightarrow$  Producer reduces the price  
 $\rightarrow$  Producer goes  $\rightarrow$  Producer leaves the country

Monetary Policy: State Bank of Pak decides how many notes to print acc to inflation and Interest rate and money supply

Fiscal Policy: Government can

adjust

Real GDP  $\rightarrow$  does not inflation  $\rightarrow$  Actual value / Raw (Faux / Accurate)  
 Nominal  $\rightarrow$  no inflation

WEDNESDAY 3  
الیکارڈ ۳

Calculation  $\rightarrow$  Graphs  $\rightarrow$  Concepts (T/F) (summarized)

In sequence (4-5 questions)

THURSDAY 4  
الیکارڈ ۴

08  
09  
10  
11  
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03  
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05  
Evening

Evening