

# <u>Chapter - 1</u> <u>INTRODUCTION OF MICROECONOMICS</u>

# **Video Lecture Explanation**

Video Lecture 1 : Introduction

1. Meaning of Economics

2. Cause of central problem of economy

3. Central problem of economy

Video Lecture 2: PPC

1. Difference between Microeconomics & Macroeconomics

2. Production possibility curve

3. Marginal Oppurtunity cost

4. Shifting / rotation of PPC

Video Lecture 3: Important Question & Answers

## Meaning

Economics is the study of economic issues for the optimum use of scarce limited resource to maximize economic welfare.

## **Economic problems**

It is problem of choice involve satisfaction of unlimited human wants out of limited resources

## Causes of Economic problems are:

- Scarcity of resources
   Resources are limited in relation to their demand.
- b) Allocation of resources Economy has to make choice between alternative use of available resource.
- c) Unlimited human wants Human wants are never ending ie. They can never be fully satisfied.

Economics is broadly classified into two parts:

- 1) Microeconomics
- 2) Macroeconomics

# **Distinguish between Microeconomics & Macroeconomics**

Basis	Micro economics	Macro economics
Meaning	It study economic problem at level of individuals.	It study economic problem at the level of economy at whole.
Tools	Individual Demand & Individual Supply	Aggregate Demand & Aggregate Supply
Objective	Determination of price of product & factors of production	Determination of National Income & employment level of economy.
Other name	Price theory	Income & employment theory
Example	Demand & Supply	Aggregate Demand & Aggregate Supply



Economy is a system of a particular area that tells us the nature & level of economic activities in that area. It shows how people of concerned area earn their living.

## Central Problems of economy:

**Economy & its central problem** 

# 1) What to produce?

It involve problem of what goods & service are to be produced & in what quantitities.

**Guiding principle** is to allocate resource in such a way that generates maximum aggregate satisfaction.

#### 2) How to produce?

It involve problem of selection of best technique of production.

There are two technique of production

- a) Labor intensive technique i.e., use of labor
- b) Capital intensive technique i.e., use of machine

**Guiding principle** is to combine factor of production in such a way that generates maximum output at minimum cost.

## 3) For whom to produce?

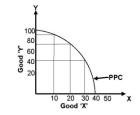
It relates to distribution of output in different section of economy i.e.,

Richer section or poorer section

**Guiding principle** is to produce urgent & priority based good to maximum possible extent.

# Production possibility curve (PPC) / Production possibility frontier (PPF)

PP curve shows all possible combination of two goods that can be produced with the help of available resource & technology.



Example: Different combination of wheat & rice can be produced with the help of available resources & technology.

Goods		Production	Possibilities		
	А	В	С	D	E
Wheat Rice	100 0	90 10	70 20	40 30	0 40

## **Assumption of PPC**

- a) The given resource are fully & efficiently utilized.
- b) There is no change in technology

## **Characteristic of PPC**

- a) PPC slopes downward from left to right (More of Good X can only be produced with sacrifyce of Good Y)
- b) PPC is always concave to the origin ( Due to rising marginal opportunity cost)

# Attainable & unattainable combination of output

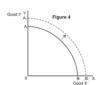
Any point inside or on the PPC are attainable combination of output Any point outside the PPC are unattainable combination of output

# Shifting/ Rotation of production possibility curve

# Shifting of production possibility curve

PPC shift leftward or rightward , when there is change in resource or technology for both the good.

a) Rightward shift of PPC

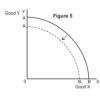




If resources are increased or upgradation of technology for both the good then PPC shifts rightward ,from AB to A1B1.

# b) Leftward shift of PPC

If resources are reduced or degradation of technology for both the good then PPC shifts leftward , from AB to A1B1.

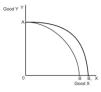


# Rotation of production possibility curve

PPC rotate on X axis, when there is change in resource or technology for only one good.

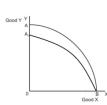
a) Rotation for commodity on X - axis

If resources are increased or upgradation of technology for Good X only , then PPC shifts on X axis ,from AB to AB1 & vice versa.



b) Rotation for commodity on Y - axis

If resources are decreased or degradation of technology for Good Y only , then PPC shifts on Y axis , from  $A_1B$  to AB & vice versa.



## **Opportunity cost**

Opportunity cost is the cost of availing opportunity in terms of loss of the other opportunity. Example: A piece of land is used for production of 200kg of wheat or 150 kg of rice. If land is used for the production of wheat only, then we loose 150 kg of rice.

# Marginal Opportunity cost / Marginal rate of transformation

It is the rate at which output of Good Y is to be sacrificed for every additional unit of  $\,$  Good X .

It refer to slope of PPC.

Marginal opportunity cost =  $\frac{\Delta y}{\Delta x} = \frac{Loss\ of\ output}{Gain\ of\ output}$ 

# Synonyms

Positive Economics	Positive Science
Normative Economics	Normative Science
Microeconomics	Price Theory
Macroeconomics	Income and Employment Theory
Production Possibility Frontier (PPF)	<ul> <li>Production Possibility Curve (PPC)</li> </ul>
	<ul> <li>Production Possibility Boundary</li> </ul>
	<ul> <li>Transformation Curve</li> </ul>
	<ul> <li>Transformation Boundary</li> </ul>
	<ul> <li>Transformation Frontier</li> </ul>

# **IMPORTANT QUESTION (Video Explained)**

1 Distinguish between Microeconomics & Macroeconomics. Sol Refer Notes

2 Differentiate between positive & normative economics.

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Basis	Positive economics	Normative economics
Related	Related to Current situation of economy	Related to Ideal proposed situation of
		economy



Based	Objective and fact based	Subjective and value based
Proven	Able to be tested and proved or disproved.	Opinion based, so they cannot be proved or disproved.
Example	Government-provided healthcare increases public expenditures & it can be proved or disaproved by examining healthcare spending data in countries	Government should provide basic healthcare to all citizens

3 Explain central problem of economy.

Sol Refer Notes

4 Why does economic problem arise?

Sol Economic problem is problem of choice involve satisfaction of unlimited human wants out of limited resources

#### Causes of Economic problems are:

#### a) Scarcity of resources

Resources are limited in relation to their demand.

#### b) Allocation of resources

Economy has to make choice between alternative use of available resource.

#### c) Unlimited human wants

Human wants are never ending ie. They can never be fully satisfied.

5 Define Marginal opportunity cost / Marginal rate of transformation . Explain the concept with a hypothetical numerical example.

Sample Paper 2016

Sol Marginal Opportunity Cost is the rate at which output of Good Y is to be sacrificed for every additional unit of Good X .

Marginal opportunity cost =  $\frac{\Delta y}{\Delta x} = \frac{Loss\ of\ output}{Gain\ of\ output}$ 

Goods	Production Possibilities Schedule				
	А	В	С	D	E
Wheat	100	90	70	40	0
Rice	0	10	20	30	40
МОС		10:10	20:10	30:10	40:10

# Schedule Explanation

Production Possibilities of two goods Wheat & Rice shows for additional production of Rice, producer sacrifice production of Wheat in following manner:

A to B = For additional production of 10 unit of Rice producer sacrifice 10 unit of Wheat.

B to C = For additional production of 20 unit of Rice producer sacrifice 10 unit of Wheat & so on.

6 Define opportunity cost with help of suitable example?

Sol Opportunity cost is the cost of availing opportunity in terms of loss of the other opportunity.

Example: A piece of land is used for production of 200kg of wheat or 150 kg of rice.

If land is used for the production of wheat only, then opportunity cost is 150 kg of rice.

7 Explain production possibility curve /frontier with help of diagram. State its assumption & characteristics.

Or

Draft a hypothetical schedule for a straight line Production Possibility Curve. Sample Paper 2018 Sol Refer Notes



8 a) Why is PPC concave to origin?b)Why is PPC curve slope downward from left to right?Sol Refer Notes

- 9 i) Which factor leads to shift of PPC?
  - ii) Which factor leads to rotation of PPC?
  - iii) How is PPC affected by underemployment in the economy? Explain

Or

State and discuss any two factors that will shift the Production Possibility Frontier (PPF) to the right.

Sample Paper 2018

Sol Refer Notes i & ii

iii) Underemployment reveal under utilisation of resources indicate production inside the PPC Curve

# 10 Calculate MOC from the following table. What will be the shape of PPC and why.

	_	
Combinations	Wheat (Units)	Rice (Units)
Α	100	0
В	95	1
С	85	2
D	70	3
Е	50	4
F	25	5

Sol Video Explained

#### **HOTS**

11 Does production always take place only on the PP curve?

Sol No , production may take inside PPC during underutilization of resource.

12 What will be the shape of PPC when MOC is constant?

Sol PPC will be straight line.

13 Unemployment in India is a subject matter of Microeconomics or Marcoeconomics, give reason.

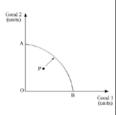
Sol Marcoeconomics, because we study Unemployment at country level.

14 A lot of people die and many factories were destroyed because of a severe earthquake in a Japan. How will it affect the country's PPC?

Sol PPC will shift leftward due to fall in Human resource in Japan.

15 How swachh bharat abhiyan affect PPC?

Sol PPC will operate on PPC due to increasing efficiency of workers & enhancement of resource. Clean India mission increase human resource, resulting more and more healthy persons will be available for work so will increase the workforce and efficiency.



16 Government introduce 'Education for all'. How PPC will get affected.

Sol PPC will operate on PPC due to increasing efficiency of workers.

17 Using a diagram, explain what will happen to the PPC of West Bengal, if there are widespread strikes and lockouts?

Sol PPC will operate inside PPC at point C , due to fall in production , unemployment & underemployment of resource as manpower will not be utilised efficiently on account of strikes and lockouts .

18 Does massive unemployment shift the PPC to the left?

Sol Massive unemployment will shift the PPC leftward because labour force remains underutilized. The economy will produce inside the PPC indicating underutilization of resources.



19 Explain the effect of "Make in India" programme launched by the government on the production possibility frontier of the country.

The theory behind 'Make in India' is India should become a manufacturing powerhouse in order to

- > Enhance job opportunities within country
- Minimize import & maximize export of goods .

PPC shift rightward as production will increase due to :

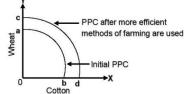
- 1) Make in India Campaign by the government will encourage more production in the country
- 2) Domestic & foreign investment in India increases by make in India campaign
- 3) Discovery of new technology to increase production efficiency

## **APPLICATION QUESTIONS**

whole economy? Use diagram.

20 Only wheat and cotton are grown in an economy. More efficient farming methods are adopted by all the famers. How would it impact (i) PPC of an individual farmer, and (ii) PPC of the  $\gamma$ 

Sol More efficient farming methods are used by all the farmers growing wheat and cotton. Accordingly, PPC for an individual farmer as well as for the economy as a whole will shift to the right.

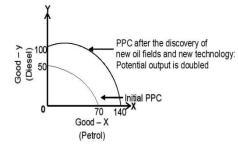


21 There is only one oil company controlling the supply of crude oil in a country.

The company discovers new oil fields and new technology. As a result, the potential of output in the economy

increases by a factor of '2'. How would you reflect this change on a PPC diagram?

Sol Initial PPC shows that the economy can produce 50 million barrels of diesel and 70 million barrels of petrol (using the given supply of crude oil). After the discovery of new oil fields and new technology, the potential level of output increases by a factor of '2'. Accordingly, PPC shifts to the right, indicating potential output of 100 million barrels of diesel and 140 million barrels of petrol.



22 Actual level of output of many individual firms in the economy is less than their potential level of output. In such a situation, is it possible that the actual level of output for the entire economy is equal to its potential level of output?

Sol No. When many firms in the economy are operating inefficiently (as their actual output is less than the potential output) the economy as a whole cannot be expected to have efficient utilisation of resources. So that at the macro level also, actual output would be less than the potential level. In other words, the economy would be operating somewhere inside the PPC, not on the PPC.

- 23 The tax policy of the government shows a substantial shift from indirect taxation (a regressive taxation) to direct taxation (a progressive taxation). How would it impact the central problem of 'for whom to produce'? Sol A substantial shift from indirect taxation (regressive taxation) to direct taxation (progressive taxation) is expected to make the distribution of income more equitable.
- 24 Owing to high opportunity cost, farmers in an area are not willing to shift the use of land from the cultivation of cotton (meant for export) to the cultivation of rice (meant for domestic consumption). But the government acquires the land and uses it for the cultivation of rice. Do you think that the government has taken a rational decision?

Sol Acquiring land from the farmers and using it for the production of rice (instead of cotton) is indeed a rational decision by the government. Because, rice is needed for domestic consumption, and for food security of the people. Of course, this decision is rational from the society's point of view, not from the viewpoint of the farmers.

25 Microsoft Corporation (USA) plans to make huge FDI in the Indian economy. Do you think that this will push our GDP growth and shift macro level PPC?

made within	ndia by the Microsoft Corporation (USA) would definitely push our GDP growth, because FDI is in the domestic territory of India. Also, this investment would shift the macro level PPC to the ating higher level of potential output.	(I)