PRINCIPLES OF ECONOMICS 1.

Course Content

Unit : 1 Introduction

Nature & Field/Scope of Economics.
Nature & Limitations of Economic laws.

Unit : 2 Definition of Economics

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Evolution of each Definitions

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Factors of elasticity of demand, income elasticity of demand & cross elasticity of demand.

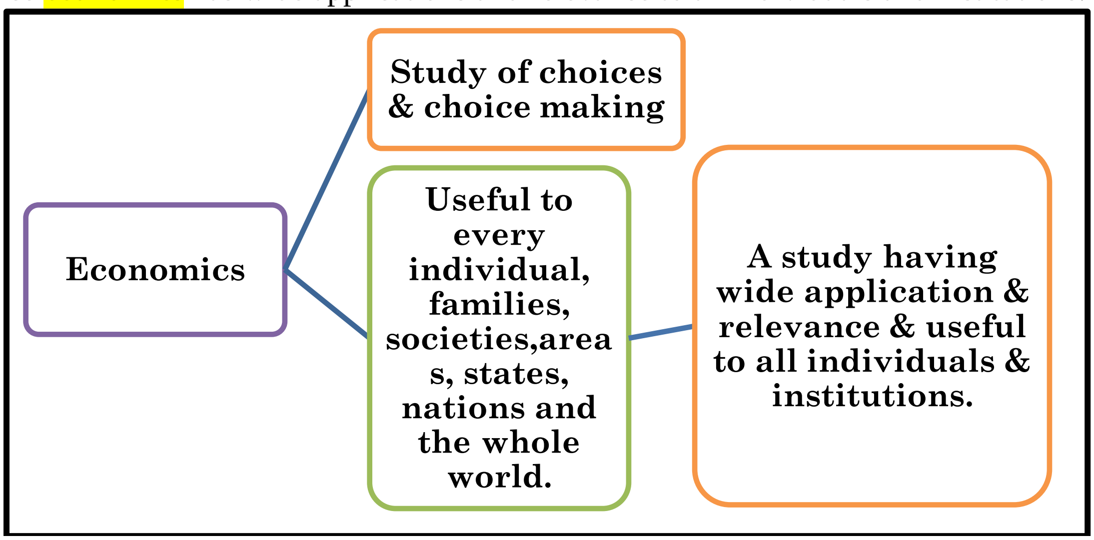
Unit 1: Introduction.

- Nature & Scope Of Economics.
- Nature & Limitations Of Economic Laws.

Q 1. Explain in detail the nature and scope of economics?

Ans: Economics is a study of choice and choice making. Choice making is relevant for every individuals, families, societies, institutions, areas, states and nations and for the whole world.

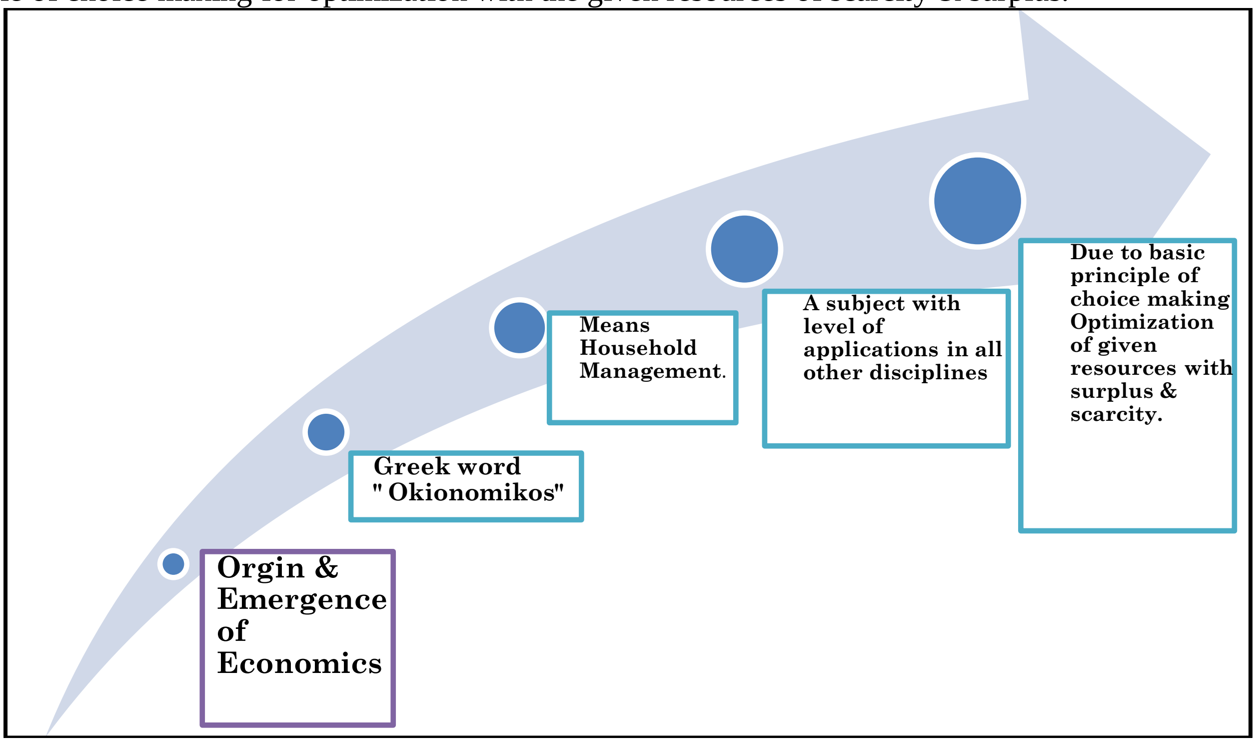
Hence **economics** has wide applications and relevance to all individuals and institutions.



Questions	Answers.
1. Economics is a study of	Choices & Choice Making.
2. A study of choices or choice making is known as	Economics.
3. What is relevant for every individual, societies, institutions, nations and for the whole world?	Choice Making.
4. Which study has wide application & relevance to all individuals & institutions?	Economics.

The word **"economics"** originates from a **Greek word " Okionomikos" meaning household management.**

Economics emerged as a subject with a high level of applications in all other disciplines due to its basic principle of choice making for optimization with the given resources of scarcity & surplus.



Questions	Answers
1. From which Greek word did economics originated	"Okionomikos"
2. Okionomikos means	Household Management.
3. Economics as a subject emerged with high level of application because of	Choice making.
4. Due to choice making optimization of given resources is possible with	Surplus & Scarcity

We generally discuss whether economics is a science or art or both. Often questions arises whether economics is a science or arts or both. If science whether it is a positive or a normative science or both.

Nature of economics:

A subject is considered as science when

- It is a systematized body of knowledge which studies the relationship between the cause and effect.
- It is capable of measurement.
- It has its own methodological apparatus.
- It should have the ability to forecast.

Questions.	Answers.
1. A subject is considered as science when it is a _________	Systematized body.
2. A subject is considered as science only when	It is capable of measurement.
3. A subject is considered science when it has	Its own methodological apparatus.
4. A subject is considered science when it is	Able to forecast.

Economics as a science:

- Hence, like science it studies the cause and effect relationship between economic phenomena.
- To understand let us take the law of demand.
- It explains the cause and effect relationship between price and demand for a commodity.
- It says other being constant as price rises the demand for commodity falls and vice versa.
- Here the cause is price rise and effect is fall in quantity demanded.
- Similarly like science it is capable of being measured, the measurement in terms of money.
- It has its own methodology of study and it forecasts the future market conditions with the help of various statistical and non statistical tools.
- But it is noted that economics is not a perfect science.
- This is because economists do not have uniformity in particular event.
- The subject matter of economics and the economic behavior of man which is highly unpredictable.
- Money which is used to measure outcomes in economics is itself a dependent variable.
- It is not possible to make correct prediction about the behavior of economic variables.

Economics as a science.

- It studies the cause and effect relationship between economic phenomena.
- It is capable of being measured.
- It has its own methods of study & is able to forecast.
- Economics is not a perfect science.
- It is not possible to correct prediction.

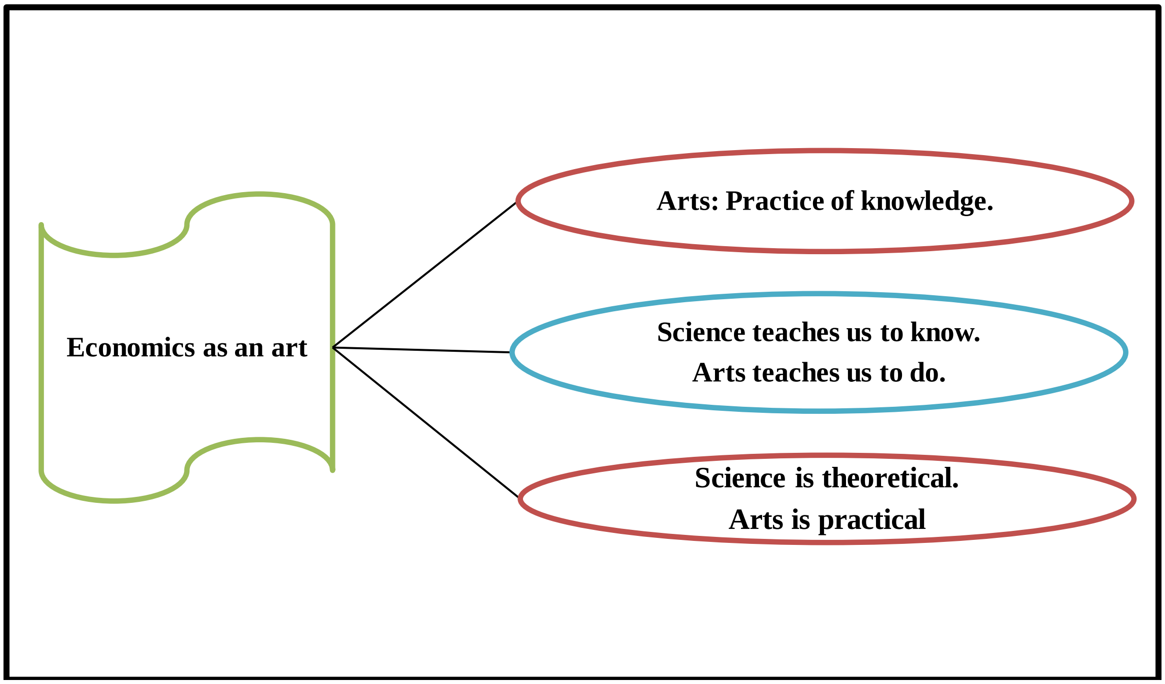
Questions.	Answers.
1. Economics like science studies	Causes and effect relationship between economic phenomena.
2. In law of demand the cause is ______________and effect is ____________.	Price rise and fall in quantity demanded.
3. Economics like other sciences is	Capable of being measured.
4. Economics also has ____like science which enables it to _____future markets with the help of various _______ and _______ tools.	○ Own methods. ○ Forecast. ○ Statistical. ○ Non statistical.
5. Economics is not a	Perfect science.
6. It is not possible to make correct	Prediction about the behavior of economic variables.

Economics as an art:

- Art is nothing but practice of knowledge where as science teaches us to know art teaches us to do.
- Unlike science which is theoretical art is practical.
- If we analyze economics we find that it has the features of an art also.

- Its various branches, consumption, production, public finance etc provide practical solutions to various economic problems.
- It helps in solving various economic problems which we face in our day to day life.

Economics is both a science and an art. It is science in its methodology and art in its application. Study of unemployment problem is science but framing suitable policies for reducing the extent of unemployment is an art.

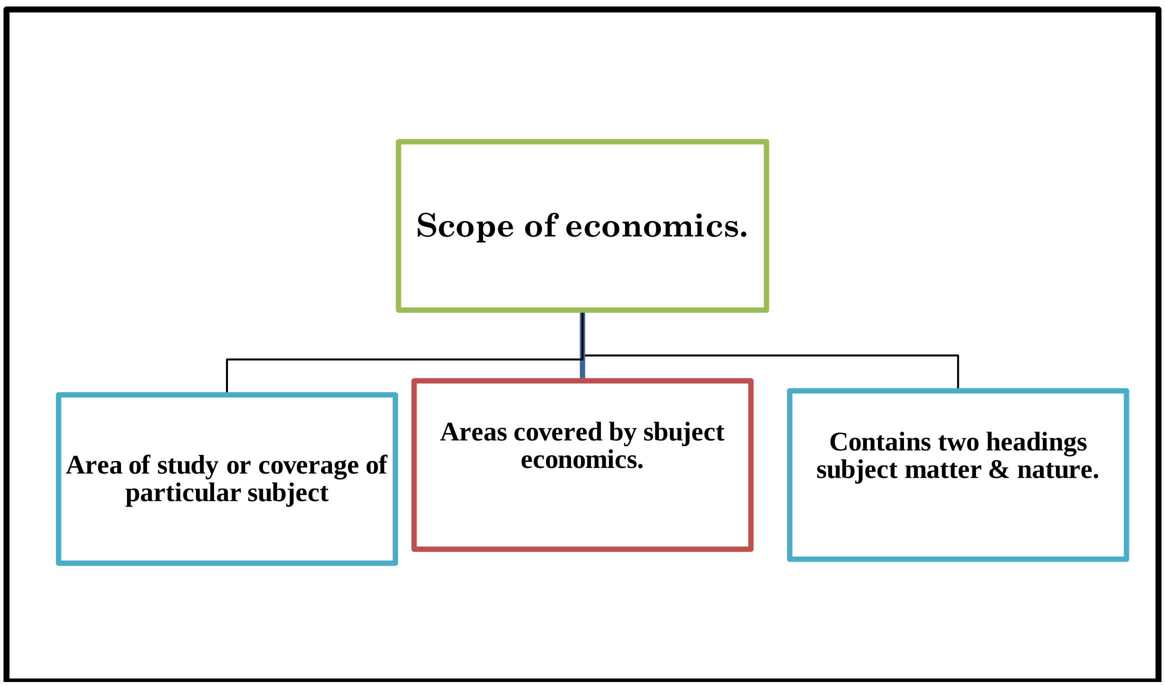


Question.	Answers.
1. Art is nothing but	Practice Of Knowledge.
2. Science teaches us to ______________ and arts teaches us to ______.	• Know. • Do.
3. Science is ____________ and art is _________.	• Theoretical. • Practical.
4. When we analyze economics we find that it has the features of	Arts.
5. Various branches of economics provide	Solutions to various economic problems

6. Economics is a science in its __________ and art in its __________.	• Methodology. • Application.
7. Study of unemployment problem is ________ and framing suitable policies for reducing it is an ________.	• Science. • Art.

Scope Of Economics:

Scope means an area of study or coverage of the particular subject. Scope of economics means areas covered by subject economics i.e. the whole topics which should be studied in economics.
The scope of economics contains two headings they are subject matters and nature of economics.

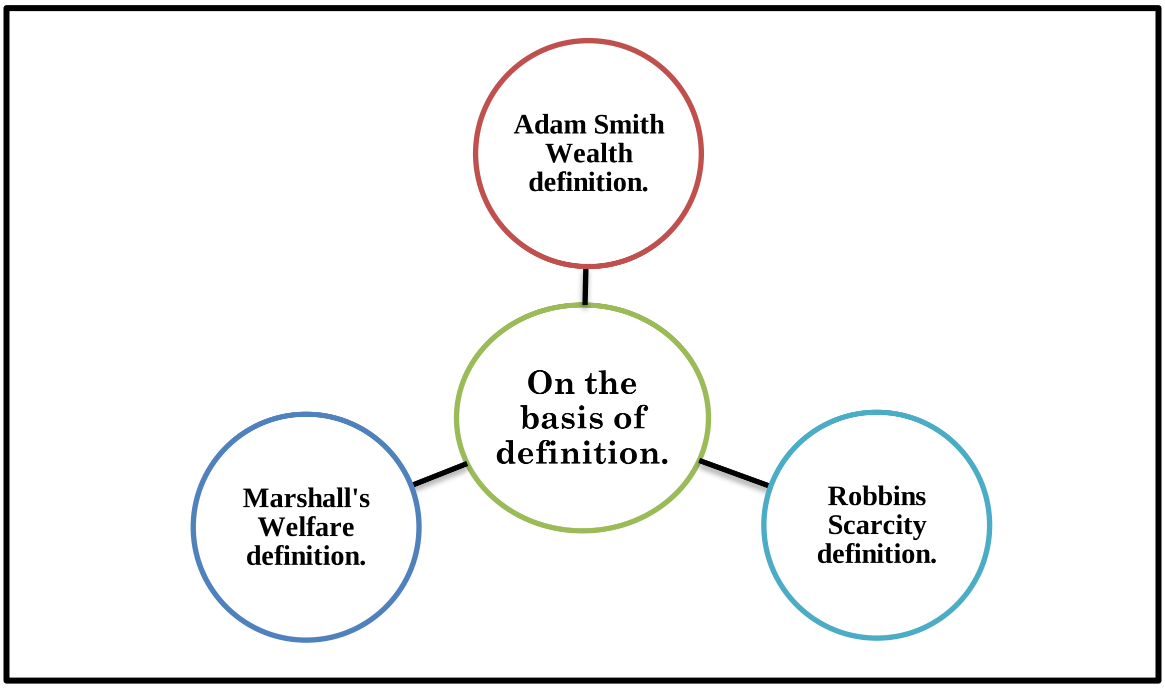


Questions.	Answers.
1. Scope means	An area of study or coverage of the particular subject.
2. Scope of economics means	An area covered by the subject of economics.
3. The scope of economics contains two headings.	• Subject matter. • Nature of economics.

The subject matter of economics is studied with help of the following

1. On the basis of definition:

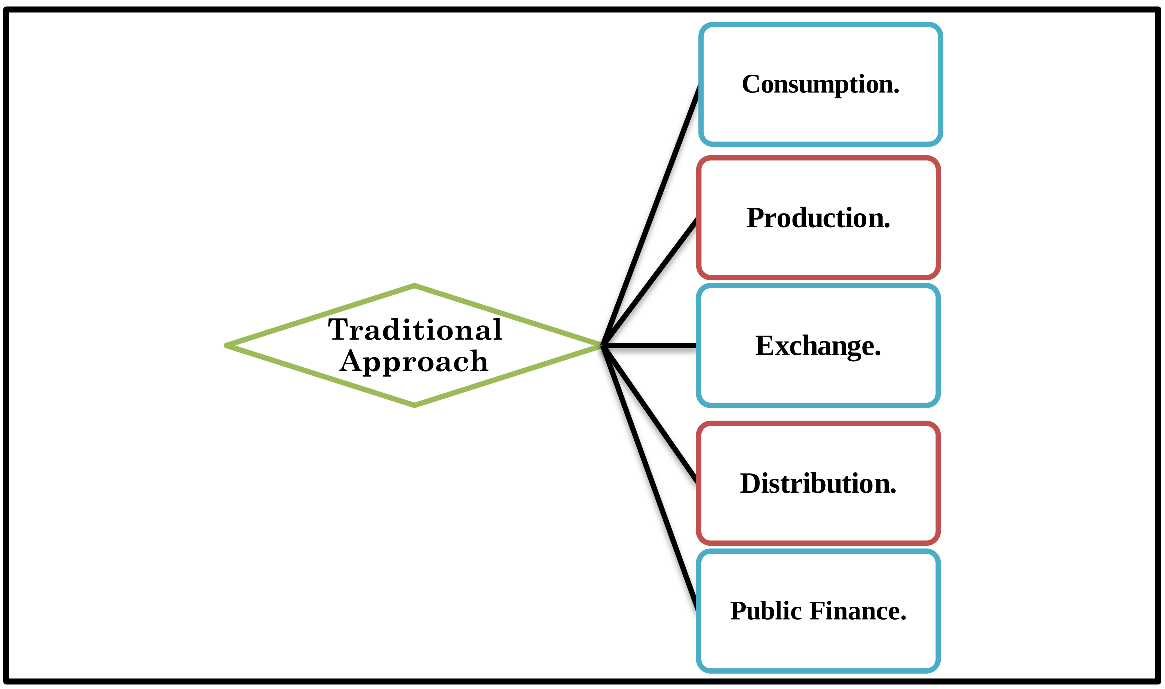
- Different economists have a different view regarding the subject matter of economics.
- The classical economist Adam Smith considered economics as a science that deals with wealth.
- Therefore the subject matter of economics is the study of nature and causes of wealth of nations.
- The leader of neoclassical economists Alfred Marshall considered economics as the science of welfare.
- Therefore the subject matter of economics is the study of mankind in the ordinary business of life.
- The economists L Robbins considered economics as a modern or scarcity and choice definition.
- Therefore the subject matter of economics is the study of human behavior as a relationship between ends and scarce means.



Questions.	Answers.
1. The subject matter of economics is studied on	The basis of definition.
2. Adam Smith considered economics as a science	That deals with wealth.
3. Marshall considered economics as a science	Of welfare.
4. Robbins considered economics as a science	Of scarcity or choice making.

2. Traditional Approach:

- According to traditional approach economics deals with the activities of man.
- It deals with those activities of man through which he tries to satisfy his wants.
- There are three fundamental economic wants such as food, cloth and shelter.
- As we know the human wants are unlimited but the means to satisfy them are limited.
- When the first want is satisfied second want arises and to fulfill the second urgent want effort should be done to get resources or means.
- Therefore according to the traditional approach the continuous circle of unlimited wants efforts and satisfaction are known as a subject matter of economics.



A. Consumption:

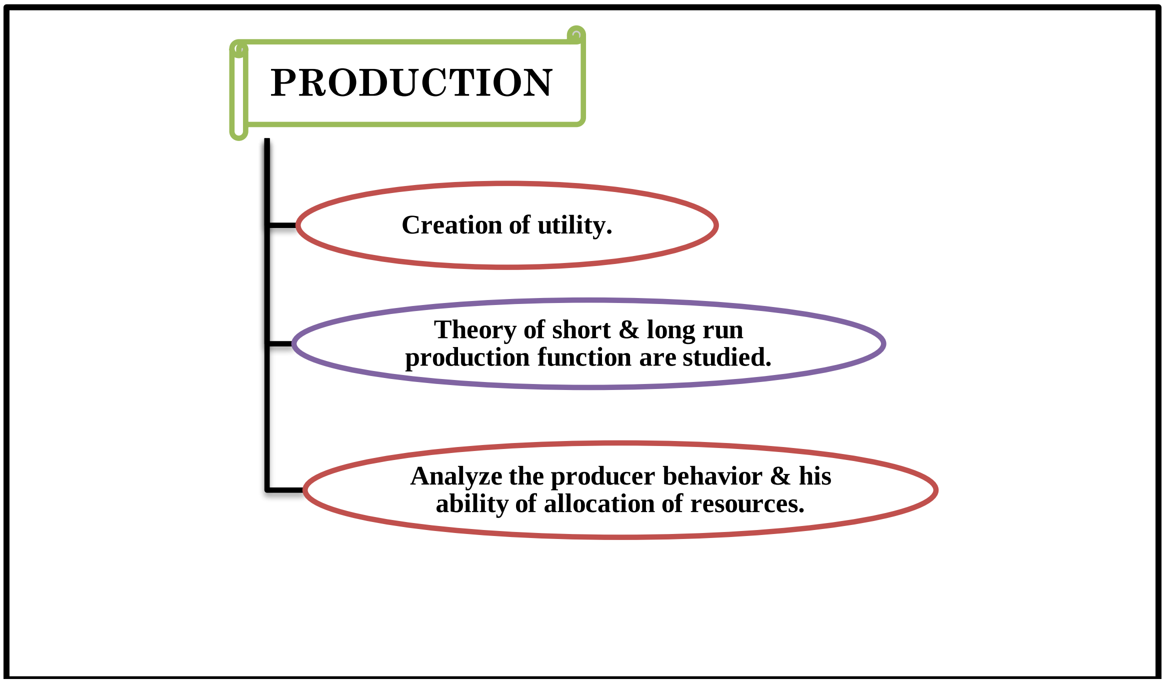
- Consumption means the process of destroying utility.
- In consumption we try to analyze the demand of the consumer regarding goods and services to drive the maximum satisfaction.
- Thus the laws and theory related to demand and consumer behavior are studied in consumption.

Consumption.

- **The process of destroying the utility.**
- **Try to analyze the demand of the consumer.**
- **The laws and theory are related to demand and consumer behaviour.**

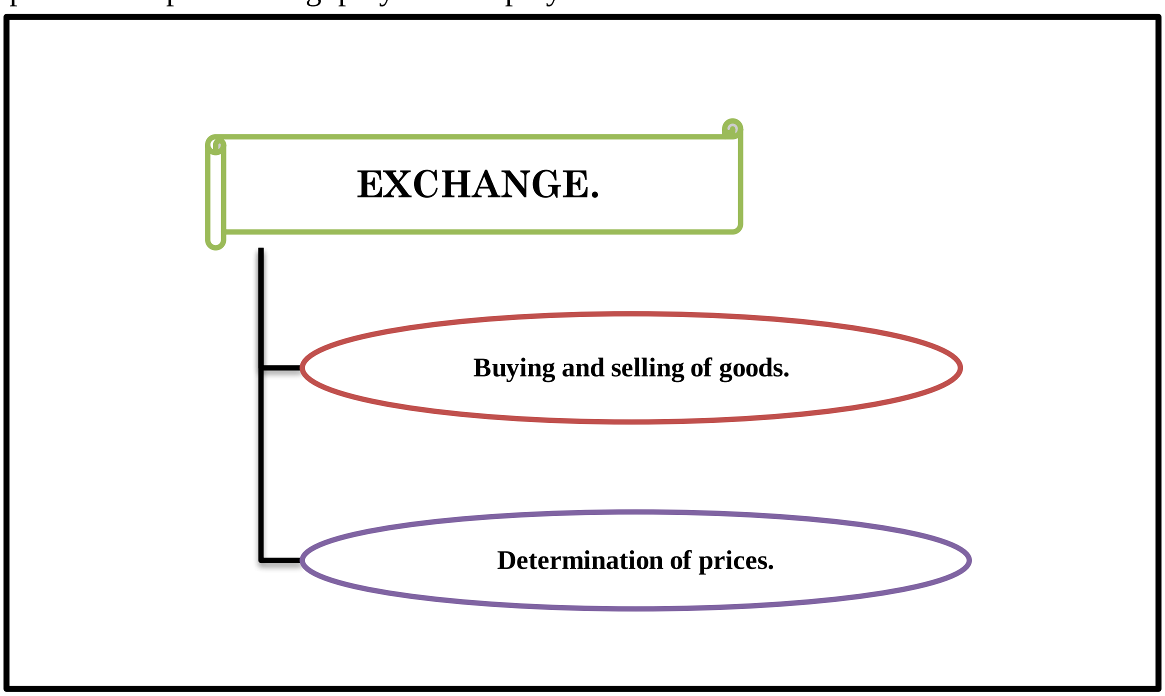
B. <u>Production:</u>

- It is the creation of utility.
- The theory based on short run and long run production functions are studied under it.
- In production we try analyze the behavior of the producer and how does a producer allocate his resources so as to get maximum profit out of hiss production.



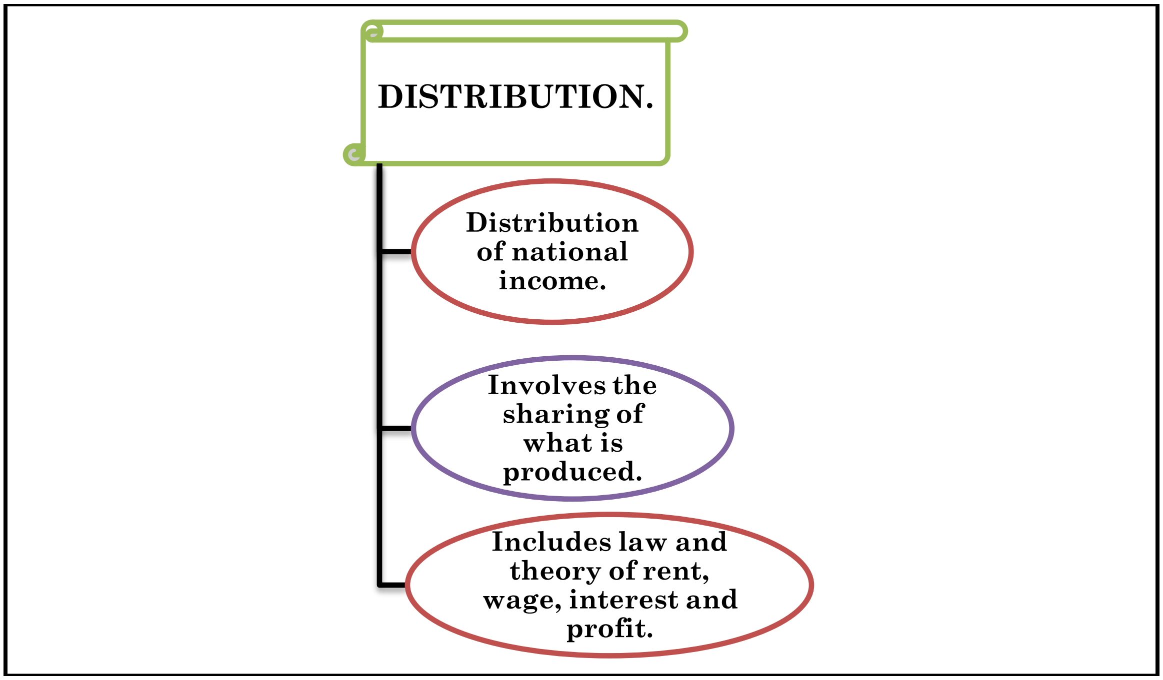
C. Exchange:

- In exchange we study the buying and selling process of goods and services and how the price of goods and services are determined by various markets like perfect competition, monopoly, monopolistic competition oligopoly and duopoly.



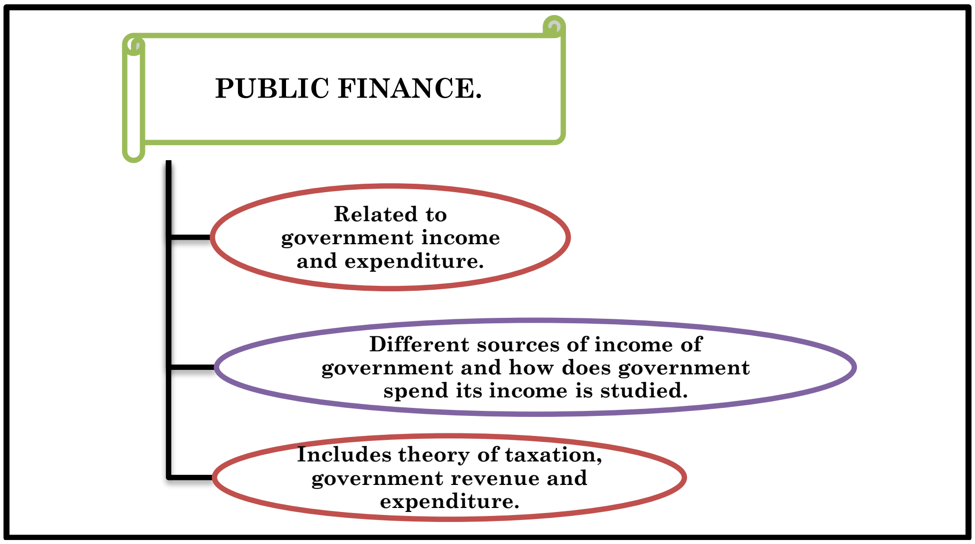
D. Distribution:

- In distribution we study the distribution of national income among the factors of production like land labor, capital and organization.
- It also involves the sharing of what is produced.
- It includes law and theory of wage, rent, interest and profit.



E. Public Finance:

- Public finance is related to the government income and expenditure.
- In public finance we study the different source of income of government and how does the government spend its income.
- It includes theory of taxation, government revenues and expenditure.



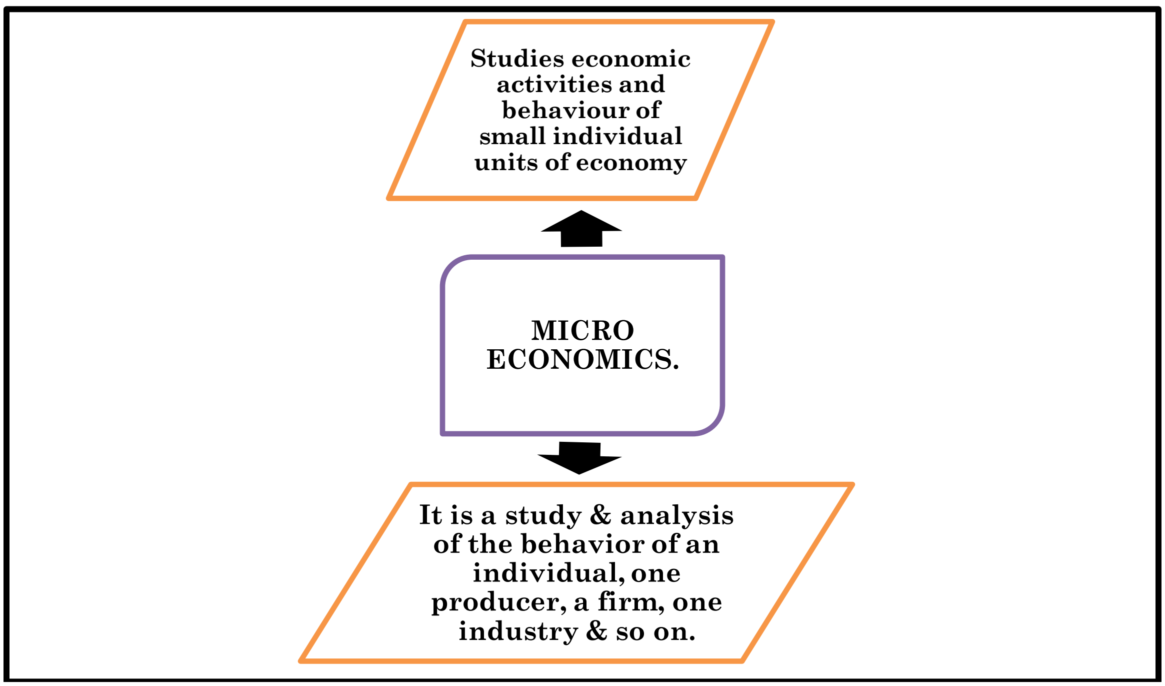
Questions.	***Answers.***
1. According to traditional approach economics deals with	Activities of man that tries to satisfy his wants.
2. 3 fundamental economic wants	Food, clothing & shelter.
3. Human wants are _________ but means to satisfy them are __________.	○ Unlimited. ○ Limited.
4. Consumption means the process of	Destroying the utility.
5. Consumption includes	Law and theory of demand.
6. Production means	Creation of utility.
7. Theory of __________ & _______ production function are studied.	○ Short run. ○ Long run.
8. Analyze the _________ & his ability of _________.	○ Behavior of producer. ○ Allocation of resources.
9. Exchange means	Buying and Selling of goods.
10. Distribution of ________ is studies	National income.
11. Distribution includes	Law and theory of rent, wage, interest & profit.
12. Public finance is related to	Government income & expenditure.
13. Public finance includes	Theory of taxation, government revenue & expenditure.

3. Modern Approach:

According to modern views the subject matter of economics is divided into

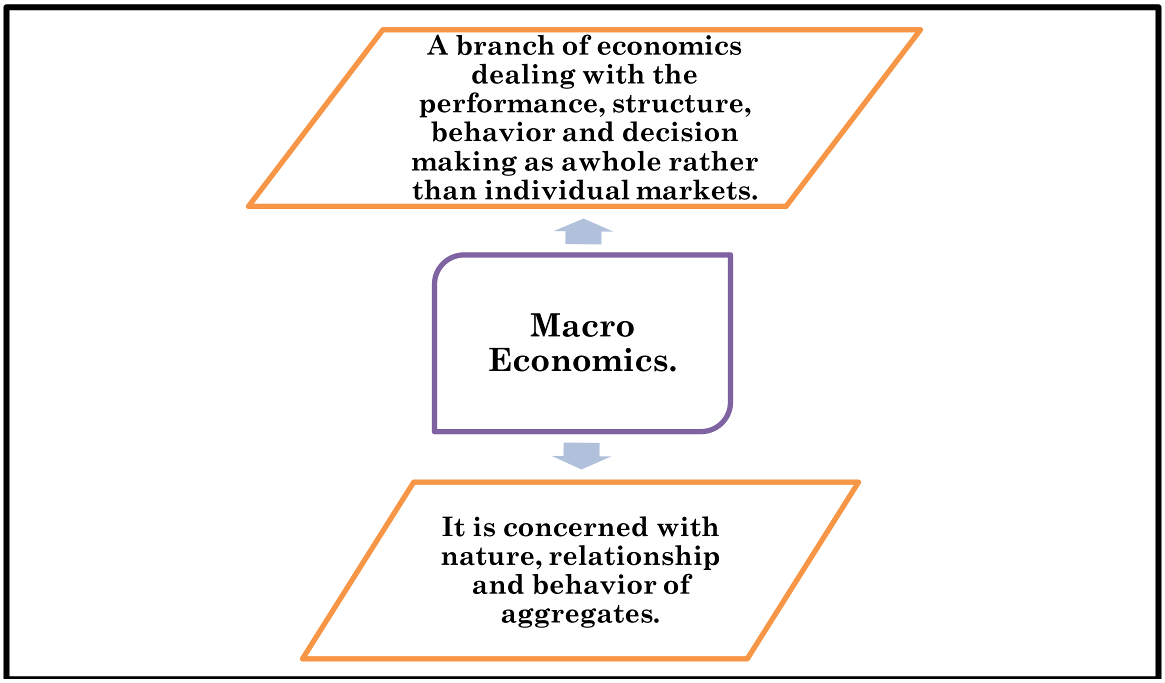
A. Micro Economics:

- It studies the economic activities and behavior of small individual units of economy.
- It means micro economics can be defined as the study and analysis of the behavior of an individual consumer, one producer, a firm, a household, one industry and so on.



B. Macro Economics:

- It is branch economics dealing with the performance, structure, behavior and decision making of an economy as a whole, rather than individual market.
- It is concerned with nature, relationship and behavior of aggregate quantities and averages such as national income, total consumption, savings, investment, total employment, general price level, aggregate expenditure and aggregate supply of goods and services.



Questions.	*Answers.*
1. According to modern view subject matter of economics is divided into.	○ Micro Economics. ○ Macro Economics.
2. Micro economics means.	Study and analysis of individual behavior.
3. Macro economics means.	Study of aggregates.

Q 2. Explain in detail the nature and limitation of economic laws?

Ans: Economics is a study of choice and choice making. Choice making is relevant for every individuals, families, societies, institutions, areas, states and nations and for the whole world.

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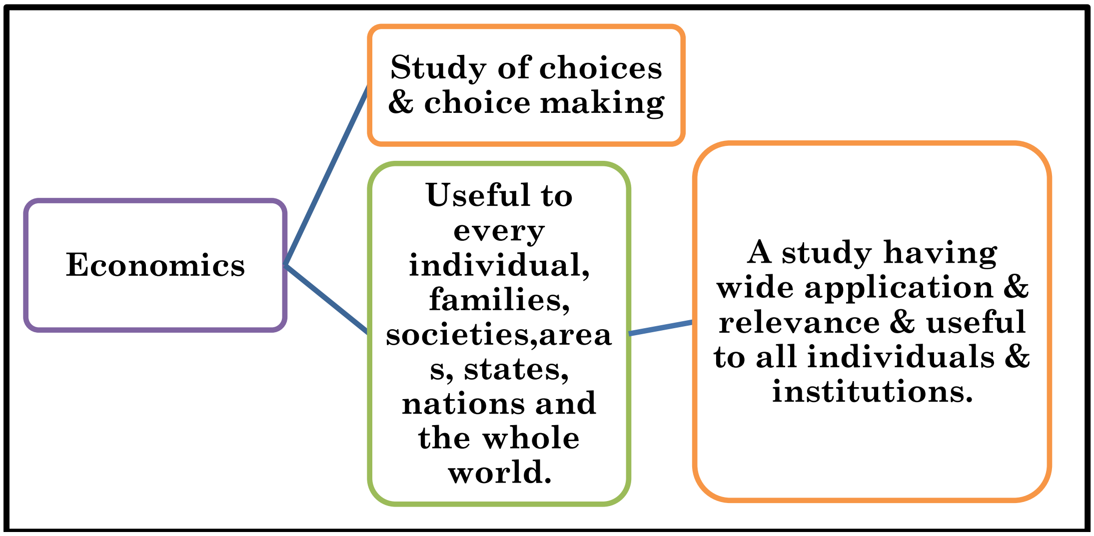

Questions	Answers.
5. Economics is a study of	Choices & Choice Making.
6. A study of choices or choice making is known as	Economics.
7. What is relevant for every individual, societies, institutions, nations and for the whole world?	Choice Making.
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The word **"economics"** originates from a **Greek word " Okionomikos" meaning household management.**

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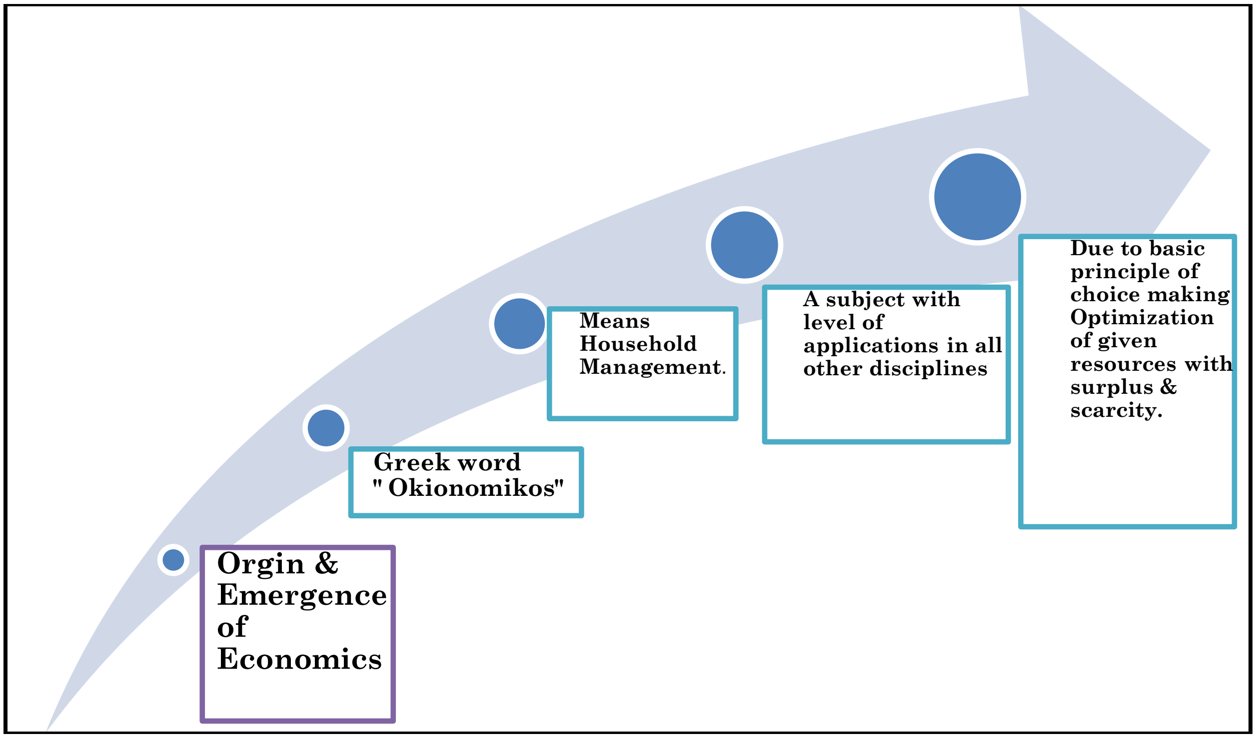

Questions	Answers
5. From which Greek word did economics originated	"Okionomikos"
6. Okionomikos means	Household Management.
7. Economics as a subject emerged with high level of application because of	Choice making.
8. Due to choice making optimization of given resources is possible with	Surplus & Scarcity

Like every other science, economics too has drawn its own set of generalization which are called **the laws of economics**. These laws are supposed to govern and explain all economics activity in the words of Marshall economic laws may be defined as,

"Economic laws or statements of economic tendencies, are social laws which relate to branches of conduct in which the strength of the motives chiefly concerned can be measured by money price'.

(1). Lack of exactitude (statements of tendencies) :-

The nature of economics laws is that they exact as compared to the laws of pure science like physics chemistry etc. the economist cannot predict with surely as to what will happen in future in the economic demand. They can only say what likely to happen in the near future.

(2). Economic laws are hypothetical :-

Economic laws are hypothetical as they are based in certain conditions. If these conditions are fullilled wise they will not good.

(3). Economic laws are qualitative not quantitative :-

Economics laws are qualitative in nature. They cannot be expressed in quantitative term. The laws of economics only tell the amount of change. Eg, according to law of demand the quantity demanded arises inversely with price. We do not say 10% rise in price will lead to 20% fall in quantity demand.

(4). Applies on the average in normal conditions :-

Economic laws do not deal with any particular term, condition etc. it takes an average economic unit. It also applies in normal conditions.

(5). Laws of economics are exact than the laws of other social science.

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Nature Of Economic Laws.

- **Lack of exactitude (statements of tendencies) .**
- **Economic laws are hypothetical .**
- **Economic laws are qualitative not quantitative .**
- **Applies on the average in normal conditions.**
- **Laws of economics are exact than the laws of other social science.**

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Questions.	Answers.
1. Like every other science, economics too has drawn its own set of generalization which are known as	Laws of economics.
2. The nature of economic laws is that they are	Less exact as compared to the laws of pure science.
3. Economic laws are _____ as they are based in certain condition.	Hypothetical.
4. Economic laws are ______ in nature they cannot bet be expressed in ______________ terms.	○ Qualitative. ○ Quantitative.
5. Economics laws are applied on ____ in normal conditions.	Average.

Limitation of economic laws :-

One major drawn back of economic laws is they lack generality. For eg, the laws developed to explain the nature and functioning of capitalist economics do not have any relevance for socialist.

There are some laws of economics which have been developed in the contest of advanced countries may not find application in developing countries like india.

That it is abundantly clear that, most of the economic laws and principles of economics which have been developed in contest of developed nations cannot be applied in developing countries.

Unit 2 : Various Definition Of Economics.

- **Adam Smith Definition Of Wealth.**
- **Alfred Marshall Definition Of Welfare.**
- **L Robbins Definition Of Scarcity.**

Q 1. Explain in detail the Adam Smith definition of economics?

Ans: Economics is a study of choice and choice making. Choice making is relevant for every individuals, families, societies, institutions, areas, states and nations and for the whole world.

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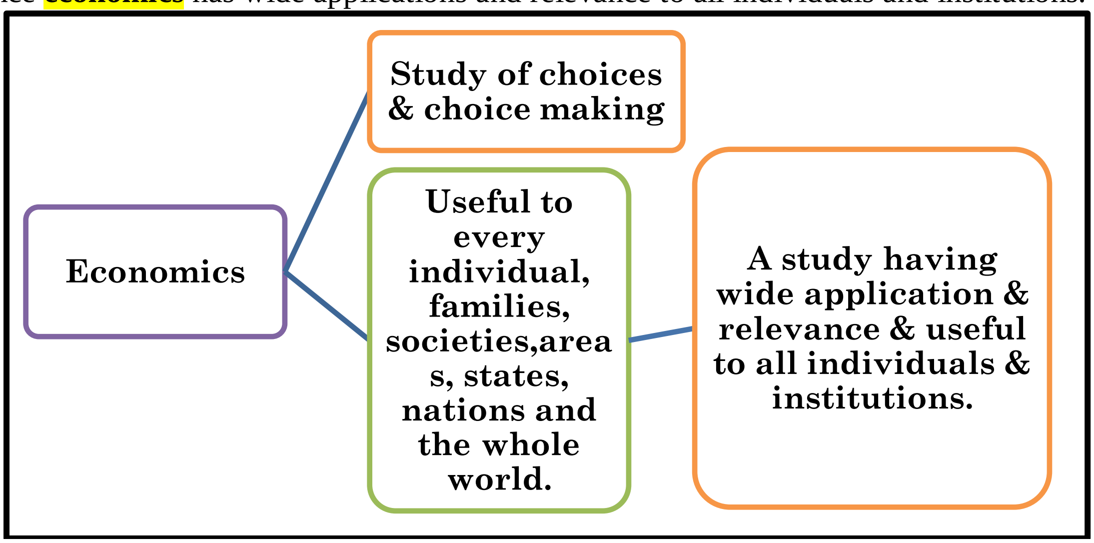

Questions	Answers.
9. Economics is a study of	Choices & Choice Making.
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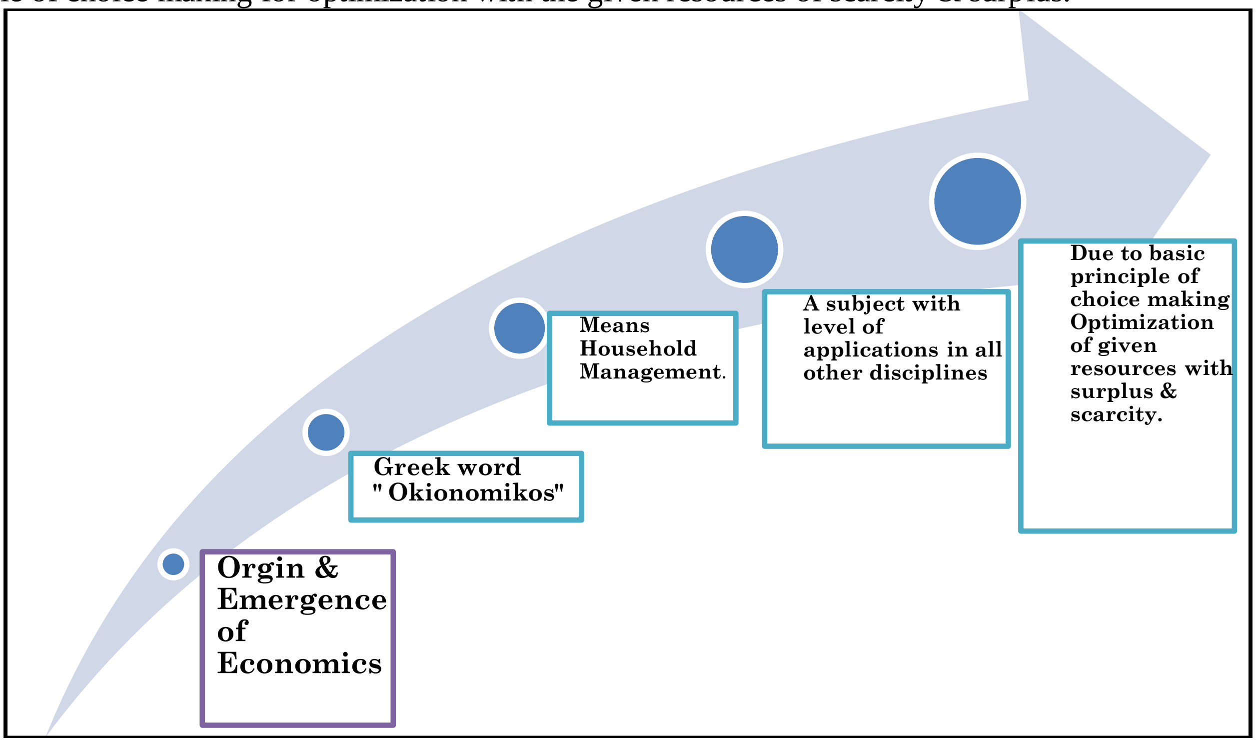

Questions	Answers
9. From which Greek word did economics originated	"Okionomikos"
10. Okionomikos means	Household Management.
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Adam Smith Definition Or Wealth Definition:

Adam Smith who is regarded as father of economics published a book titled " An Inquiry Into Nature & Causes Of Wealth Of Nations." in 1766.

He defined economics as **" A science which inquires into the nature and causes of wealth of nations."**

He emphasized the production and growth as the subject matter of economics.

Adam Smith Or Wealth Definition.

↓

An Inquiry into the nature & causes of wealth of nations.

↓

Emphasis on production & growth as subject matter of economics.

Questions.	Answers.
1. Adam Smith is known as	Father Of Economics.
2. Adam Smith published which book in 1776	An inquiry into nature & causes of wealth of nations.
3. Adam Smith defines economics as	“ A science which inquires into the nature and causes of wealth of nations”
4. Adam Smith emphasized on what as the subject matter of economics?	Production and growth of wealth.
5. Adam Smith definition of economics is also known as	Wealth Definition.
6. Wealth Definition of economics is given by	Adam Smith.
7. What does Adam Smith definition say	Economics is a study of wealth.

Merits & Demerits Of Adam Smith’s Definition Or Wealth Definition

The following are the merits of wealth definition:

- It takes into account only material goods.
- Exaggerated the emphasis on wealth.
- It inquires the causes behind creation of wealth.

The following are the demerits of wealth definition:

- It considered economics as a dismal or selfish science.
- It defined wealth in a very narrow & restricted sense.
- It considered only material & tangible goods.
- It gave emphasis only to wealth & reduced man to secondary place.

Merits Of Wealth Definition.

- **Material goods.**
- **Emphasis on wealth.**
- **Inquiers into the causes behind creation of wealth.**

Demerits Of Wealth Definition.

- **Economics as a dismal meaning of low quality or a selfish science.**
- **Defined wealth in a very narrow sense and considered only material goods.**
- **Emphasised only on wealth.**

Questions.	Answers.
1. Adam Smith's definition takes into account only	Material goods.
2. Adam Smith definition gave exaggerated emphasis on	Wealth.
3. Adam Smith definition inquires into	The causes behind creation of wealth.
4. Wealth definition considered economics as	A dismal or selfish science.
5. Wealth definition defined wealth in a	Very narrow & restricted sense.
6. Wealth definition considered only	Material & tangible goods.
7. Wealth definition gave emphasis only to	Wealth reducing man to secondary place.

Thus when we review the above definition and its evolution it indicates that the core of the subject economics is **"choice making."**
It is a subject concerned about achieving growth by optimizing the given resources based on choices.

Q 2. Evaluate in detail Alfred Marshall's Welfare Definition Of Economics?

Ans: Economics is a study of choice and choice making. Choice making is relevant for every individuals, families, societies, institutions, areas, states and nations and for the whole world.

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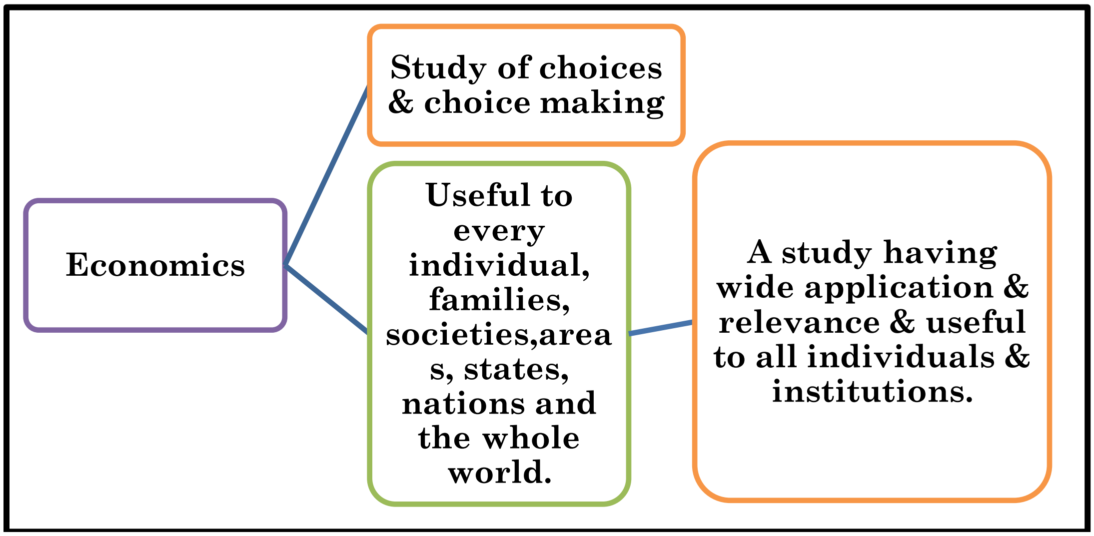

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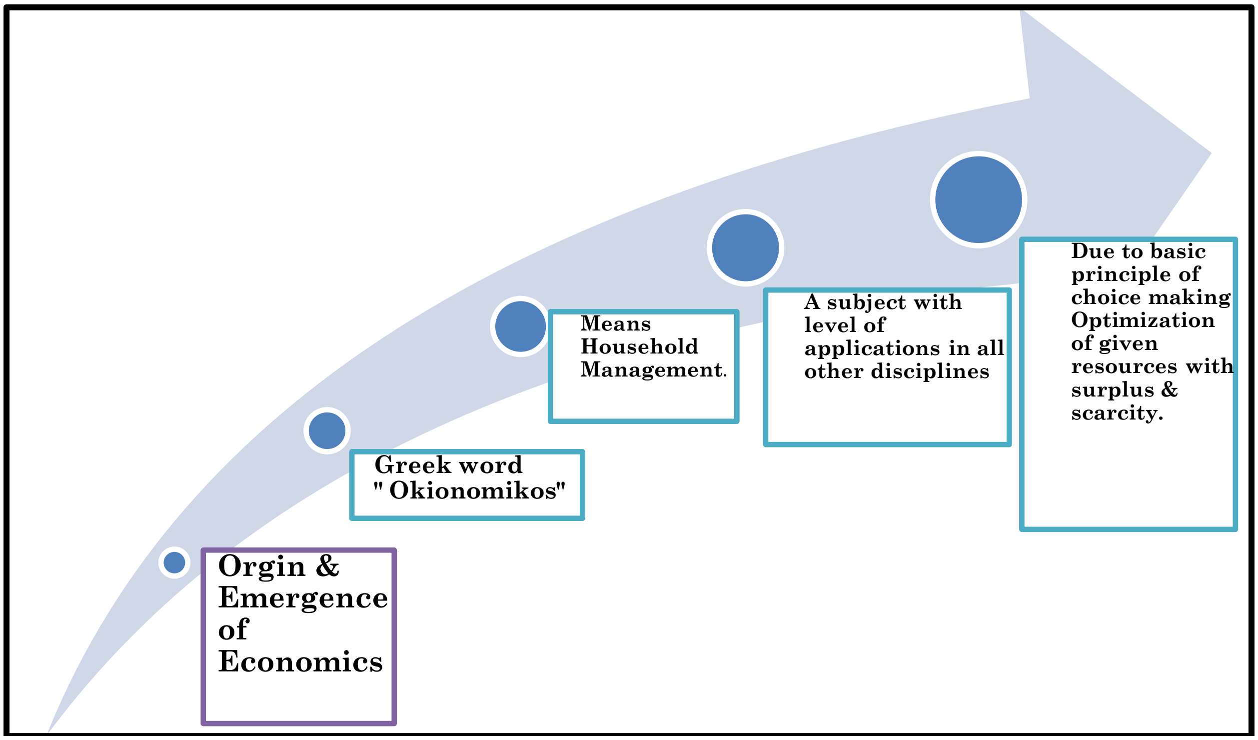

Questions	Answers
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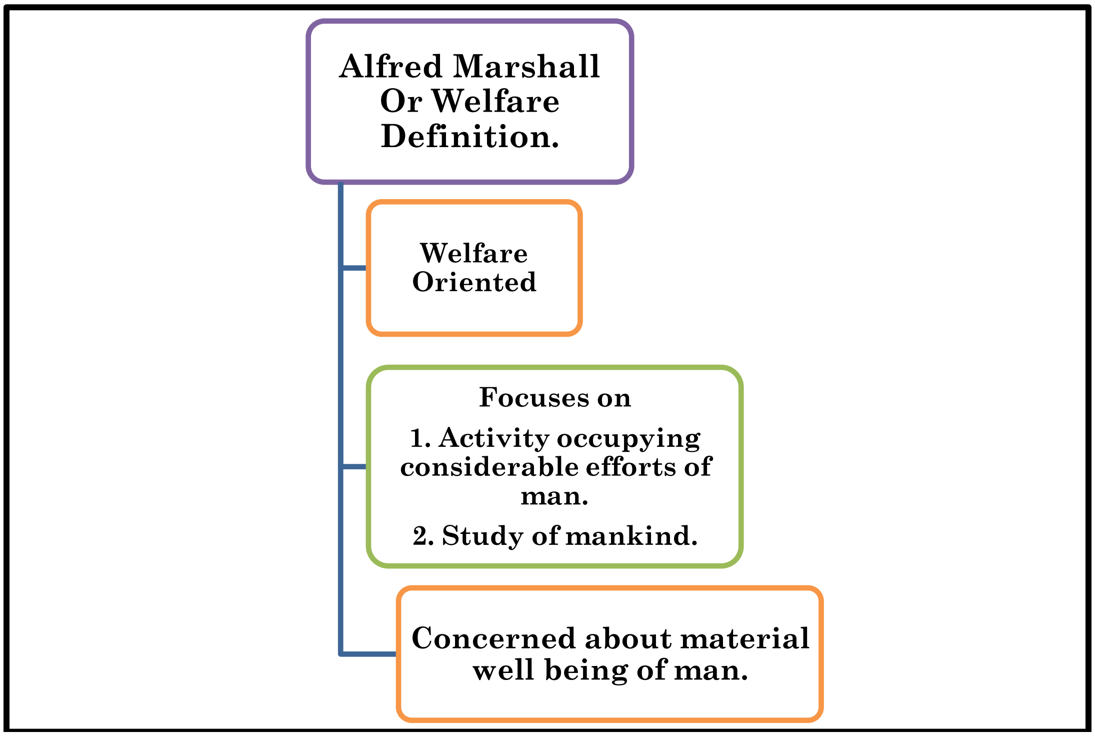
4. Due to choice making optimization of given resources is possible with	Surplus & Scarcity

Alfred Marshall Definition Or Welfare Definition:

In 1890 Alfred Marshall stated that **" Economics is a study of mankind in the ordinary business of life it examines that part of individual and social actions which is most closely connected with the attainment and with the use of material requisites and well being."**

It is on one side a study of wealth and other side a study of human welfare based on wealth.



Questions.	Answers.
1. Alfred Marshall stated the definition of economics in the year	1890.
2. Alfred Marshall's definition is also known as	Welfare definition.
3. Marshall's definition of economics is	Welfare oriented.
4. Marshall's definition focuses on	• Activity occupying efforts of man. • Study of mankind.
5. Marshall's definition of economics is concerned about	Material Wellbeing.
6. Economics is a study of mankind is stated by	Alfred Marshall.
7. Marshall definition states that	"Economics is a study of mankind in the ordinary business of life. It examines that part of individual & social action which is most closely connected with the attainment & with use of material requisites & wellbeing. It is on one side a study of wealth & on other side a study of human welfare based on wealth."

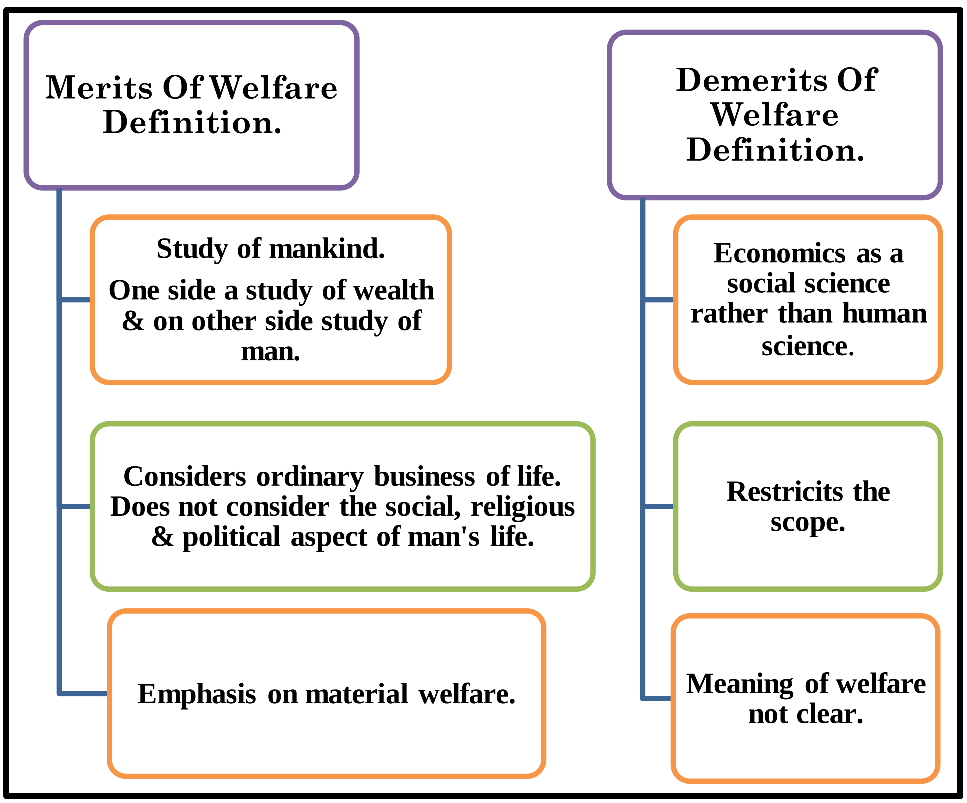
Merits & Demerits Of Marshall's Definition Or Welfare Definition

The following are the merits of welfare definition:

- It is primarily the study of mankind.
- It is on one side a study of wealth and on other side study of man.
- It takes into account ordinary business of life. It is not concerned with social, religious & political aspect's of man's life.
- It emphasis on material welfare i.e human welfare which is related to wealth.
- It limits the scope to activities amenable to measurement in terms of money.

The following are the demerits of welfare definition:

- It considers economics as a social science rather than a human science.
- It restricts the scope of economics to the study of persons living in organized communities only.
- Welfare in itself has a wide meaning which is not made clear in definition.



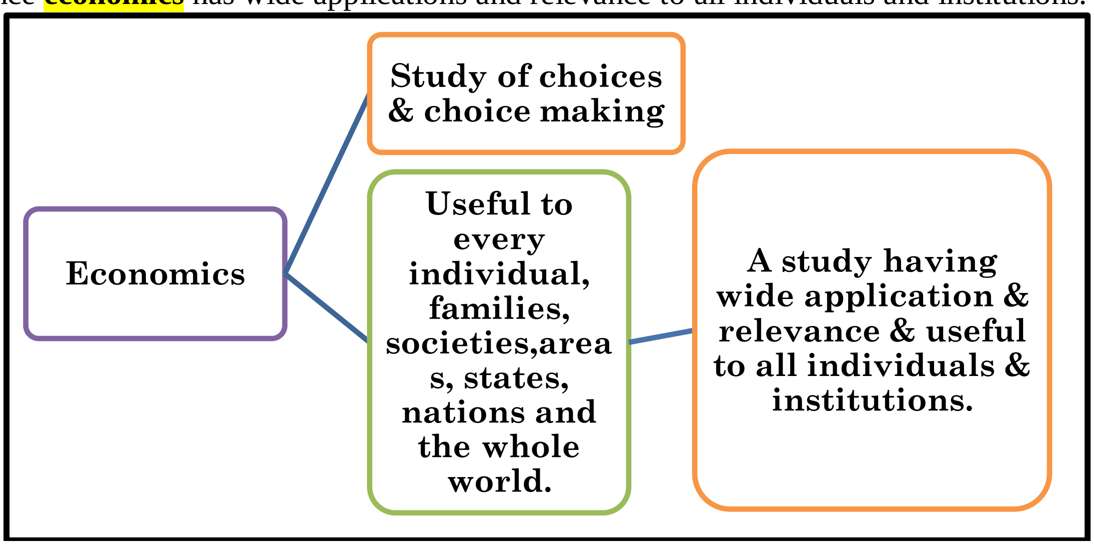
Questions.	Answers.
1. Marshall's definition primarily is a study of	Mankind.
2. One side it is a study of ______ & on other side study of _____________.	Wealth & man.
3. Marshall takes into account the	Ordinary business of life.
4. It is not concerned with	Social, religious & political aspect's of man's life.
5. Marshall's definition emphasis on	Material welfare.
6. Marshall's definition main limitation is that it considers economics as a _______ rather than a _____________	Social science & human science.
7. Marshall's definition does not give clear meaning of	Welfare.

Thus when we review the above definition and its evolution it indicates that the core of the subject economics is **"choice making."**
It is a subject concerned about achieving growth by optimizing the given resources based on choices.

Q 3. Critically evaluate the Robbins Scarcity Definition Of Economics?

Ans: : Economics is a study of choice and choice making. Choice making is relevant for every individuals, families, societies, institutions, areas, states and nations and for the whole world.

Hence **economics** has wide applications and relevance to all individuals and institutions.



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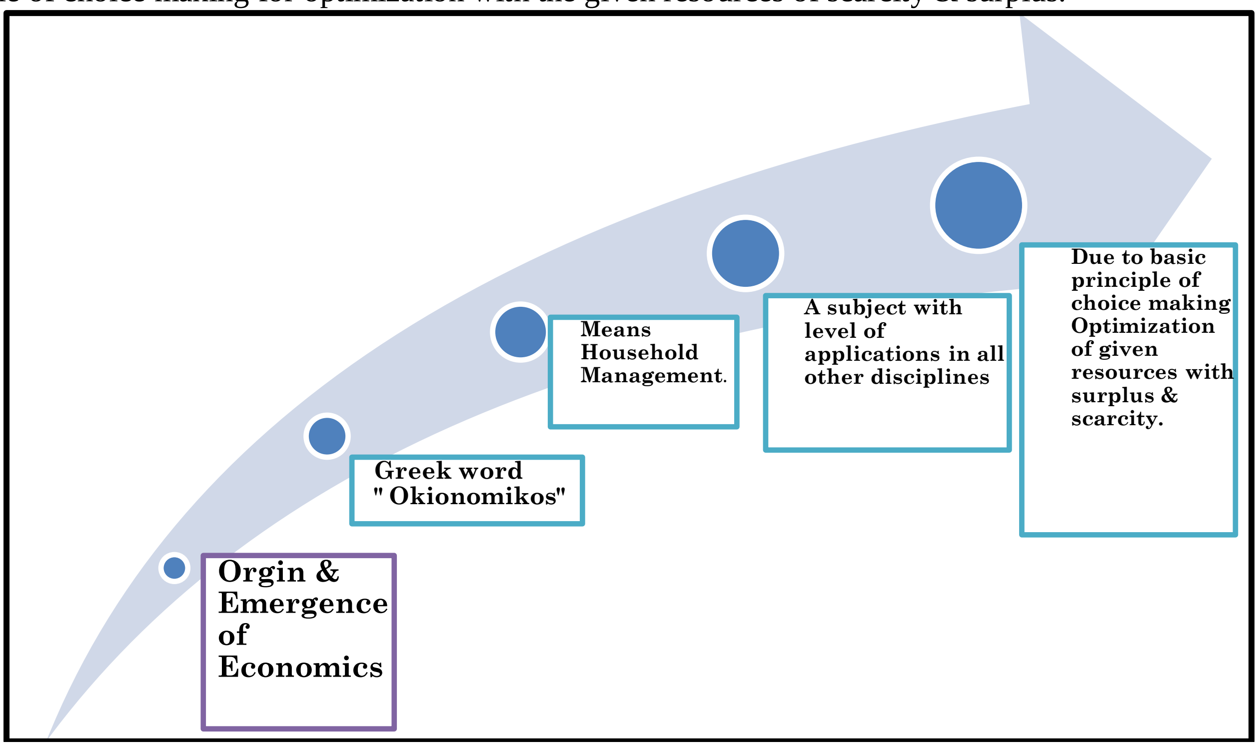
Questions	Answers.
1. Economics is a study of	Choices & Choice Making.
2. A study of choices or choice making is known as	Economics.
3. What is relevant for every individual, societies, institutions, nations and for the whole world?	Choice Making.
4. Which study has wide application & relevance to all individuals & institutions?	Economics.

The word **"economics"** originates from a **Greek word " Okionomikos" meaning household management.**

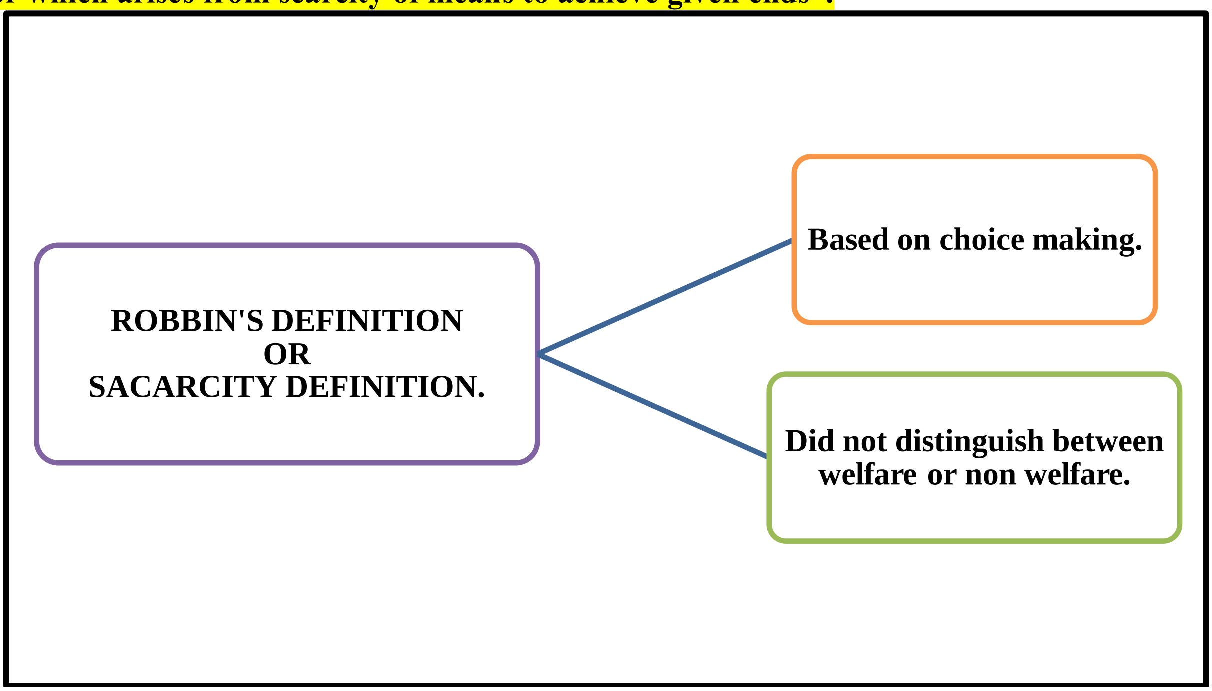
Economics emerged as a subject with a high level of applications in all other disciplines due to its basic principle of choice making for optimization with the given resources of scarcity & surplus.



Questions	Answers
1. From which Greek word did economics originated	"Okionomikos"
2. Okionomikos means	Household Management.
3. Economics as a subject emerged with high level of application because of	Choice making.
4. Due to choice making optimization of given resources is possible with	Surplus & Scarcity

Robbins Definition Or Scarcity Definition

According to Robbins **"Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses."**
He emphasized on **"choice making."** In his own words **" Economics is considered with that aspect of behavior which arises from scarcity of means to achieve given ends".**



Questions.	Answers.
1. Robbins definition is also known as	Scarcity definition.
2. Robbins definition is based on	Choice making.
3. Robbins definition included terms as	Ends, scarce means & alternative uses.

4. End means	Target.
5. Robbins definition does not differentiate between	Welfare & Non welfare.
6. Robbins definition states that	" Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses."

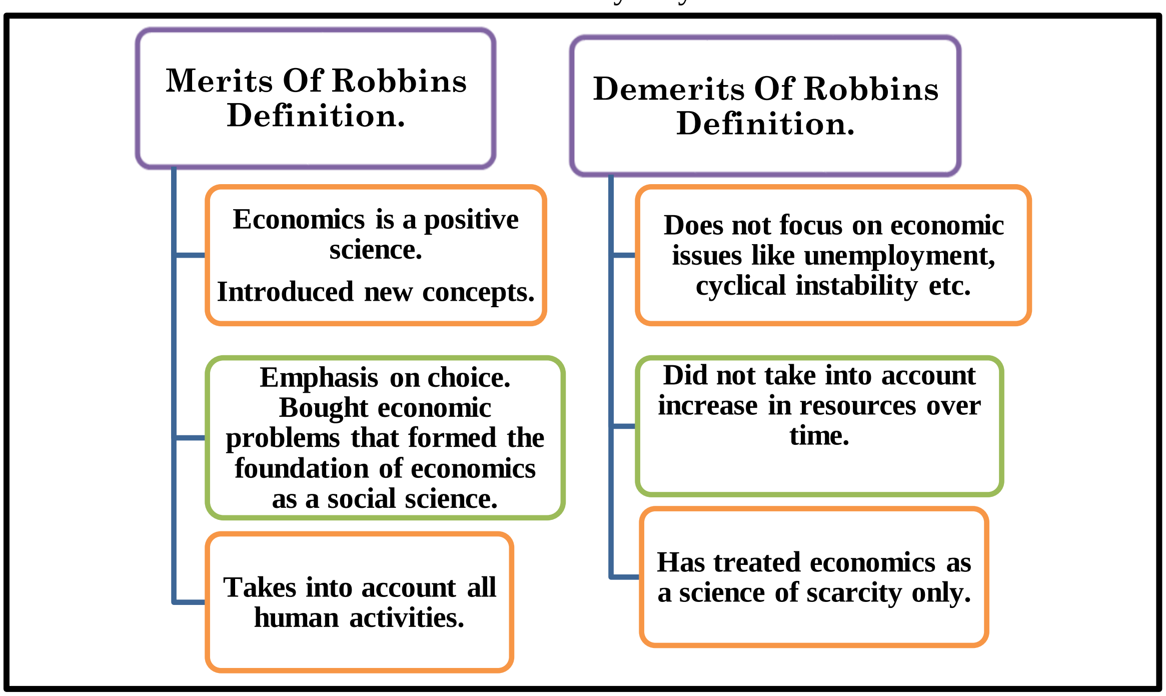
Merits And Demerits Of Robbins Definition Or Scarcity Definition

The following are the merits of Robbins definition:

- Economics is a positive science.
- New concepts are used such as unlimited ends, scarce means & alternative uses of means.
- It emphasis on choice a study of human behavior.
- It tried to bring the economic problems which forms the foundation of economics as a social science.
- It takes into account all the human activities.

The following are the demerits of Robbins definition:

- It does not focus on many important economic issues of cyclical instability, unemployment, income determination & economic growth & development.
- It did not take into account the possibility of increase in resources over time.
- It has treated economics as a science of scarcity only.



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Questions.	Answers.
1. Robbins definition regards economics as a	Positive science.
2. Robbins definition introduced	New concepts.
3. Scarcity definition emphasis on	Choice.
4. Scarcity definition bought _________ that formed ____________of economics as a _______	Economic problems & the foundation & social science.
5. Robbins definition takes into account all __________	Human activities.
6. Robbins definition of economics does not focus on	Economic issues like unemployment, cyclical instability etc.
7. Scarcity definition did not take into account	Increase in resources over time.
8. Robbins definition has treated economics as a	Science of scarcity only.

Thus when we review the above definition and its evolution it indicates that the core of the subject economics is **“choice making.”**
It is a subject concerned about achieving growth by optimizing the given resources based on choices.

Unit 3 Consumer Behavior.

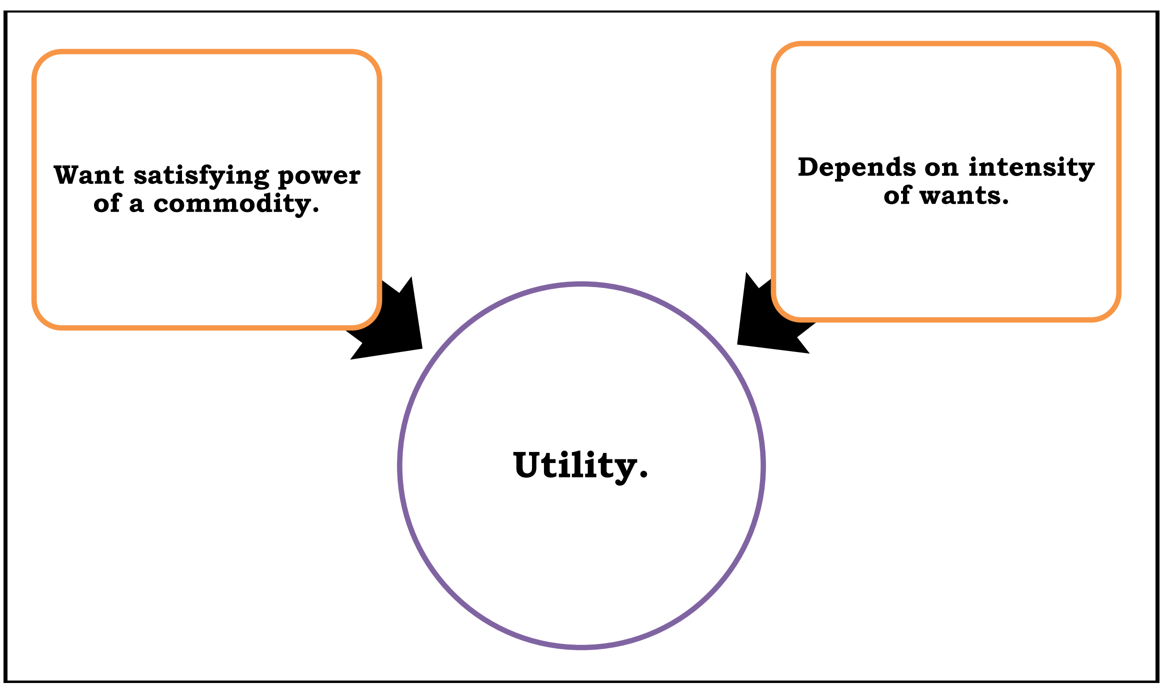
- Meaning & features of utility.
- Law of DMU.
- Law of EMU.

Q 1. Explain in detail the meaning & features of utility?

Ans:

There is consumption of commodities by the people because consumption leads to satisfaction of wants. It implies that commodities have capacity of satisfying power. Want satisfying power of a commodity is known as utility.

Utility of a commodity depends upon intensity of want. If intensity of want is lower utility of the commodity is lets.



Questions.	Answer.
1. Consumption leads to	Satisfaction of wants.
2. Want satisfying power of a commodity means	Utility.
3. Utility of commodity depends upon	Intensity of wants.

The following features can explain the concept of utility better: -

(1). Utility is a subjective concept :-

Utility derived from the consumption of a commodity cannot be expressed in numbers because utility is subjective concept. In other words it is a matter of feeling depending upon the psychology of the person.

(2). Utility is a relative term :-

Utility is relate to person, place and time. In other words, utility changes from person to person, place to place and time to time.

(3). Utility is different from usefulness :-

Utility is not same as usefulness. A commodity may be useful a harmful but it must have utility is it does satisfy a want.

(4). Utility is different from pleaser :-

Utility does not mean pleaser. Consumption of a commodity may be pleasure someor painful but it must have utility is it can satisfy a want.

(5). Utility is different from satisfaction :-

Utility is calculation by mind about want satisfying power of a commodity before its consumption and satisfaction is the real experience after the consumption. The two may be different from a commodity before the consumption is done but he may get more or less satisfaction after the consumption of the commodity.

(6). Utility is not based on ethics :-

The concept of utility is not based on ethics or moral consideration. A commodity may be good or bad but it must have utility it is can satisfy a want.

Features Of Utility.

- ***Utility is a relative term.***
- ***Utility is a subjective concept.***
- ***Utility is different from usefulness.***
- ***Utility is different from pleasure.***
- ***Utility is different from satisfaction.***
- ***Utility is not based on ethics.***

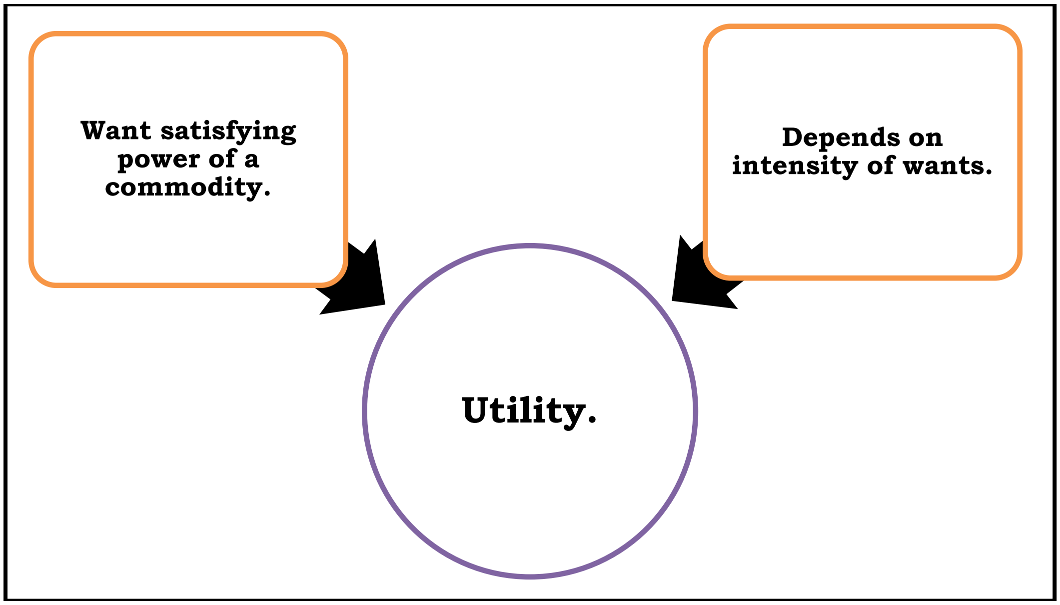
Questions	Answers.
1. Utility derived from the consumption of a commodity cannot be expressed in number because	Utility is a subjective concept.
2. Utility is not same as	Usefulness.
3. Utility is does not mean	Pleasure.
4. Utility is ___________ by mind about want satisfying power of a commodity.	Calculation.
5. Utility is related to	Person, place & time.
6. Utility is not based on _______ or _______.	Ethics or moral considerations.

Q 2 Evaluate in detail the law diminishing marginal utility?

Ans:

There is consumption of commodities by the people because consumption leads to satisfaction of words. It implies that commodities have capacity of satisfying power. Want satisfying power of a commodity is known as utility.

Utility of a commodity depends upon intensity of want. If intensity of want is lower utility of the commodity is lets.



Questions.	Answer.
1. Consumption leads to	Satisfaction of wants.
2. Want satisfying power of a commodity means	Utility.
3. Utility of commodity depends upon	Intensity of wants.

- **Total Utility:**

Total utility refers to total satisfaction derived from consumption of all units of a commodity. Total utility increases with increase in consumption,

TU = MU1 + MU2 + ………… MUn.

- **Marginal Utility:**

Marginal utility refers to extra satisfaction derived from the consumption of one extra unit. It is the additional unit satisfaction from the consumption of one additional unit. Marginal utility is the increase in total utility due to consumption of one more unit.

MU = TUn – Tun-1.

Total Utility

TU = MU1 + MU2 + ... MUn

Marginal Utility.

MU = TUn - TUn-1.

Questions.	Answers.
1. Total utility refers to	Total satisfaction derived from consumption of all units of a commodity.
2. Marginal utility refers to	Extra satisfaction derived from the consumption of one unit.

It is a common human behavior that as we go for the consumption of more and more units of a commodity we got less and less satisfaction from every extra unit. In other words more of a thing we have less is desire to have more of it. This common behavior is describe by marshal as law of diminishing marginal utility **(DMU).**

According to Marshall law of DMU status that **"Other thing being equal the additional benefits that a person derives from a given increase in the stock of a thing diminishes with every increase in the stock that he already has."**

It implies that under given conditions the extra satisfaction derived from consumption of every extra unit goes on diminishing.

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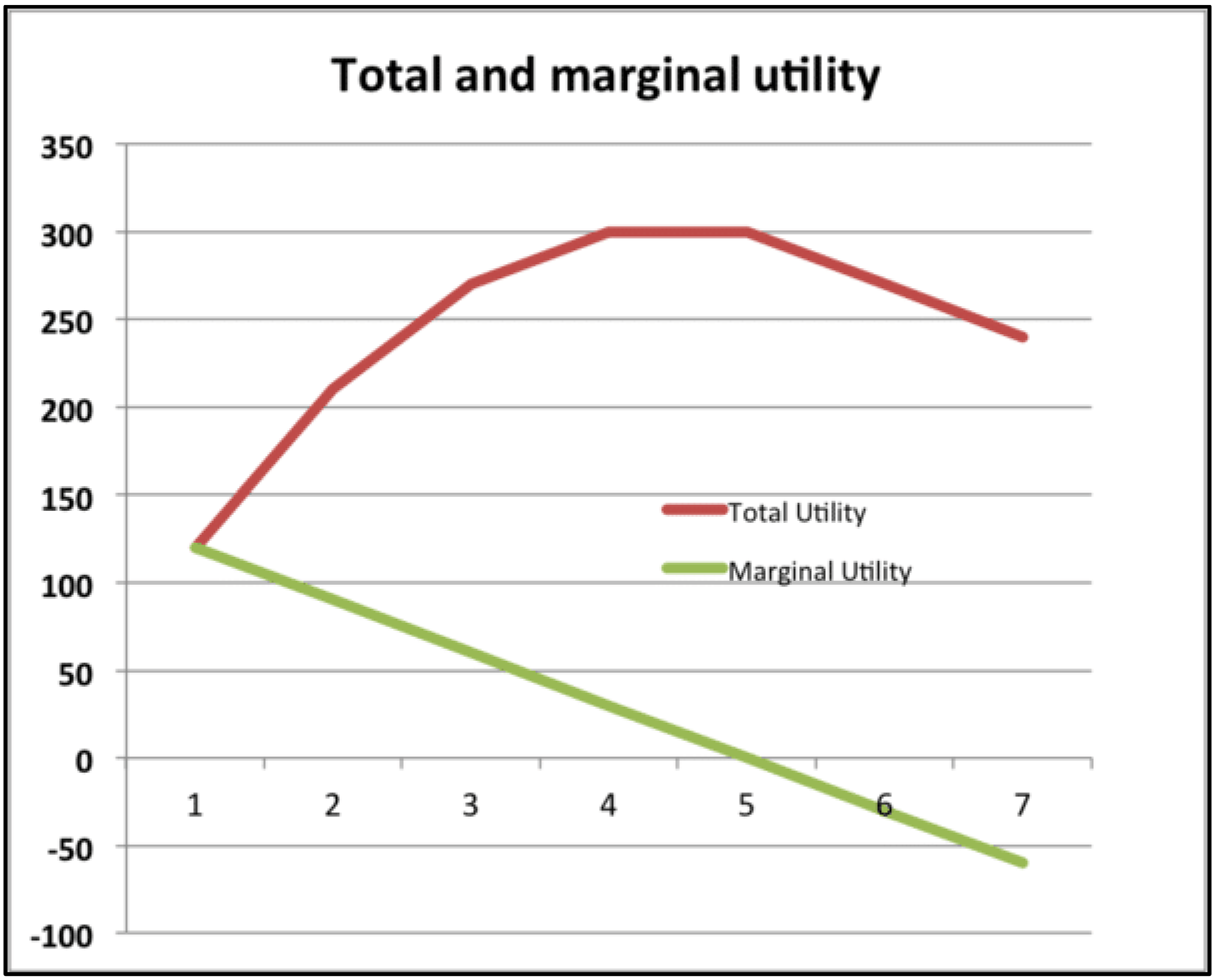
Units.	TU	MU
1	10	10
2	18	8
3	23	5
4	25	2
5	25	0
6	24	-1

From the table it is noticed that when first unit is consumed mu is 10 but as the consumption increases mu goes on diminishing. When the 5th unit is consumed mu is zero. This point at which tu is maximum & mu is zero is known as point of satisfy. After that is point mu will become negative. The following fig explain law of DMU in detail.



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The law of DMU is based on the following assumption.

(1). One commodity :-

There should be consumption of only one commodity. The consumer will not consume two or more commodities at a time.

(2). Homogenous unit :-

Various units of commodity must be same and similar. These should be no difference between two units regarding taste, weight etc.

(3). Quick consumption :-

These should not be any time gap between the consumption of two units in other words, these should be continuity in consumption.

(4). Reasonable size :-

The commodity must be of a reasonable size it should not be very small i.e
Eg a thirsty person should be given water in a standard size of glass not in a tea spoon.

(5). Constancy :-

There should not be any change in the price of the commodity, income of the consumer and taste and habit of the consumer.

(6). No psycho somatic effect :-

After the consumption of the commodity the behavior of consumer is normal. He should not behave abnormally. Thus, mental and physical behavior should exhibit a normal state of the consumer.

(7). Rationality :-

The consumer must be a rational person i.e, he must consume the commodity to get maximum satisfaction.

(8). Cardinal measurement :-

Law of DMU is based on the assumption of cardinal measurement of utility derived from the consumption of a commodity can be expressed in numbers.

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Assumptions Of Law Of DMU

- **One Commodity.**
- **Homogeneous Units.**
- **Quick Consumption.**
- **Reasonable Size.**
- **Constancy.**
- **No Psycho Somatic Effect.**
- **Rationality.**
- **Cardinal Measurement.**

Questions.	Answers.
1. There should be consumption of only ____ commodity.	1.
2. Various units of commodity must be ________ & ___________.	Same & similar.
3. There should not be any ____________ between the consumption i.e there should be ______ in the consumption.	○ Time gap. ○ Continuity.
4. The commodity must be of __________	Reasonable size.
5. There should not be any ___________in the price of the commodity, income of the consumer, taste & habit of the consumer.	Constancy.
6. After the consumption of the commodity the behavior of the consumer is ______.	Normal.
7. The consumer must be ___________ person.	Rational.
8. Law of DMU is based on the assumption of ________________ of utility derived from the consumption of a commodity can be expressed in numbers.	Cardinal measurement.

There are certain cases where law of DMU is not applicable. Such cases are known as exceptions to law of DMU. The following are certain exceptions to law of DMU.

(1). Hobbies :-

It is pointed out that in case of hobbies such as collection of stamps and coins marginal utility does not diminish. A person will always wish to increase his collection. But in this case assumption of homogeneous units is violated. If the assumption of homogeneous units is considered law is not applicable in case of hobbies.

(2). Music and literature :-

Law of DMU is not applicable to music and literature. A music lover always enjoys music and a person who loves literature will always like to read more and more books. But in this case also assumption of homogeneous units is violated.

(3). Misers :-

Misers are regarded as exception to law of DMU. This is because a miser person always wants more and more of everything. But in this case assumption of rationality is violated. A miser is not interested in consumption to maximum this satisfaction. He wants accumulation of things. Hence his behavior is not rational.

(4). Liquor and drugs :-

Law of DMU is not applicable to liquor and drugs. A drunkard enjoys every extra peg more and more.

Similarly a drug addict never says no to drugs. But in this case the assumption of no psychosomatic effect is violated.

(5). Money :-

Law of DMU is not applicable to money. In case of money desire to earn more increases with the increase in income. But in case of money assumption of one commodity is violated.

Exceptions To Law Of DMU.

↓

- **Hobbies.**
- **Music & Literature.**
- **Misers.**
- **Liquor & Drugs.**
- **Money.**

Questions.	Answers.
1. In which cases the assumption of homogeneous units is violated	○ Hobbies. ○ Music & Literature.
2. In which case assumption of rationality is violated.	Misers.
3. No psycho somatic effect assumption is violated in the case of	Liquor & drugs.
4. In case of money assumption of _____ is violated.	One commodity.

There are various limitation of law of DMU. They are as follows :-

(1). Cardinal measurement :-

Law of DMU is based on cardinal measurement but in reality cannot be expressed in numbers because utility is a subjective concept.

(2). Unrealistic assumption :-

Law of DMU is based on various unrealistic assumption such as one commodity, homogeneous units, constancy etc.

(3). Comparison of utility :-

Law of DMU is based on comparison of utility of every successive unit. But in real life a consumer does not compare the utility of every successive unit. A consumer is interested in maximizing his total satisfaction through consumption, not in satisfaction of every successive unit.

(4). Utility is relative :-

Marshall did not realize the fact that utility of a commodity depend not only on the stock that a person himself has but also depends on the stock that others have. If a person compares his smaller stock of goods with the larger stock of other person MU will not diminish with the increase in stock.

(5). Indivisible good :-

Law of DMU is irrelevant to invisible a bulky goods such as refrigerator. This is because in case of such goods a person will get satisfaction with only one unit. He will not require additional units. Hence it is meaningless to say that MU diminishing with increase in consumption.

Limitations To Law Of DMU.

- **Cardinal Measurement.**
- **Unrealistic Assumption.**
- **Comparison Of Utility.**
- **Utility Is Relative.**
- **Indivisible Goods.**

Questions.	Answers.
1. Law of DMU is based on ______.	Cardinal Measurement.
2. ________ is based on various unrealistic assumptions.	Law of DMU.
3. Law of DMU is based on comparison of utility of every _____.	Successive Unit.
4. Marshall did not realize the fact that utility of a commodity depend not only on the ____ that a person himself has but also depends on the stock that others have.	Stock.
5. Law of DMU is _______ to indivisible or bulky goods.	Irrelevant.

Law of DMU is very important law. Its importance is explained as follows :-

A . Practical uses

Practical uses of law of DMU are explained as follows :-

(1). A seller :-

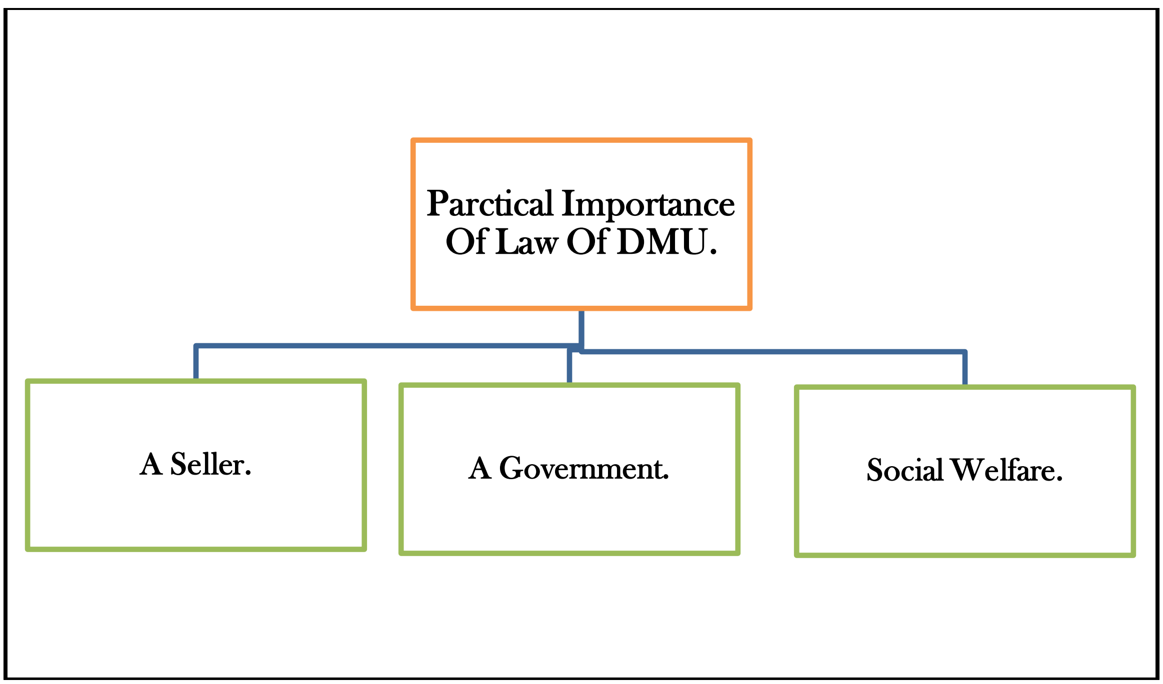
Behavior of a seller is guided by law of DMU While he is going to fix price of his commodity. When a seller has a large stock of goods, he keeps a lower price but if he has a smaller stock of goods, he keeps a higher price. This is because when stock is large MU is low, hence price is low. But if stock is small MU is high, hence price is high.

(2). A government :-

A government is guided by law of DMU while framing the taxation policy. A government imposes more tax on rich & less on poor. This is because for rich people MU of money is low and for poor people MU of money high. When a rich person paying more tax, he feels little sacrifice and poor person paying less tax feels more sacrifice. Therefore there will be equal sacrifice or social justice when rich pays more tax and poor pays less tax.

(3). Social welfare :-

A government can increase social welfare by transferring wealth and income from rich to poor. This is because MU of money for rich is low and for poor is high. When income is taken away from rich by imposing taxes there is little sacrifice for them as they have large amount of income. But when same money is used to benefit the poor they get lot of satisfaction. Hence overall welfare is the society is increased.



Questions.	Answers.
1. Behavior of a _____ is guided by law of DMU.	Seller.
2. A government is guided by law of DMU in framing the	Taxation Policy.
3. A government can increase __________ by transferring wealth & income from rich to poor.	Social Welfare.
4. Law of DMU is practically useful to	○ A seller. ○ A government. ○ For Social welfare.

B. Theoretical importance

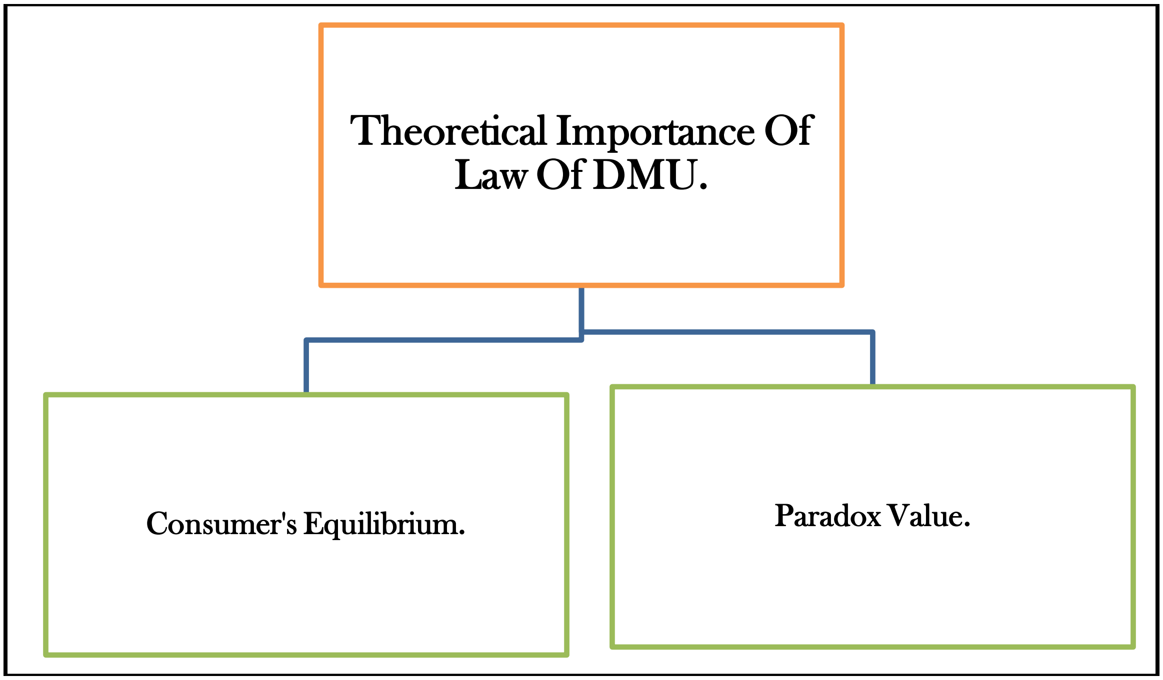
In economic theory, law of DMU has important place. It is explained as follows :-

(1). Consumers equilibrium :-

Study of consumer's equilibrium is an important part of economic theory. Consumer's equilibrium is a point where a consumer will get maximum satisfaction. According to Marshall a consumer will get equilibrium at the point where price is equal to MU. Thus, at a given price a consumer will go on buying more and more until price and MU become equal.

(2). Paradox of value :-

It refers to air diamond paradise. A community like air which has greater value in life has no price but a commodity like diamond which has little value in life has a high price. This is explained by Marshall with the help of law DMU. According to Marshall, in case of air stock is unlimited, therefore MU is zero. Hence price is zero. In opposite case stock of diamond is limited, its MU high. Therefore price is high. Marshall distinguished between **value in use and value in exchange.** In case of air value in use is high and value in exchange is low but in case of diamond value in use is low and value of exchange is high.



Question.	Answer.
1. ______ is a point where a consumer will get maximum satisfaction.	Consumer's Equilibrium.
2. Paradox value refers to	Air Diamond Paradox.
3. Air which has ___ in life has no price.	Greater Value.
4. Diamond which has little value in life has a	High Price.
5. In case of air _______ is high and ______ is low.	○ Value in use. ○ Value in exchange.
6. In case of _______ value of use is low & value of exchange is high.	Diamond.

Q 3 Explain in detail the concept of equi marginal utility?

Ans: Economics is a study of choices and choice making. Choice making is relevant for every individual, families, societies, institutions, areas, states and nations and for the whole world.

Hence economics has wide application and relevance to all individuals and institutions.

- The concept of **equi marginal utility** was propounded by Marshall.
- In case of **law of diminishing marginal utility which is related to consumption of only one commodity income level is not taken into account.**
- Law of equi marginal utility is based on th**e level of income of consumer which he will use to buy a number of commodities.**
- The main objective of the consumer is to get maximum satisfaction hence he should spend his money income on the purchase of different goods in such a way that he will get maximum satisfaction.

Equi Marginal Utility.

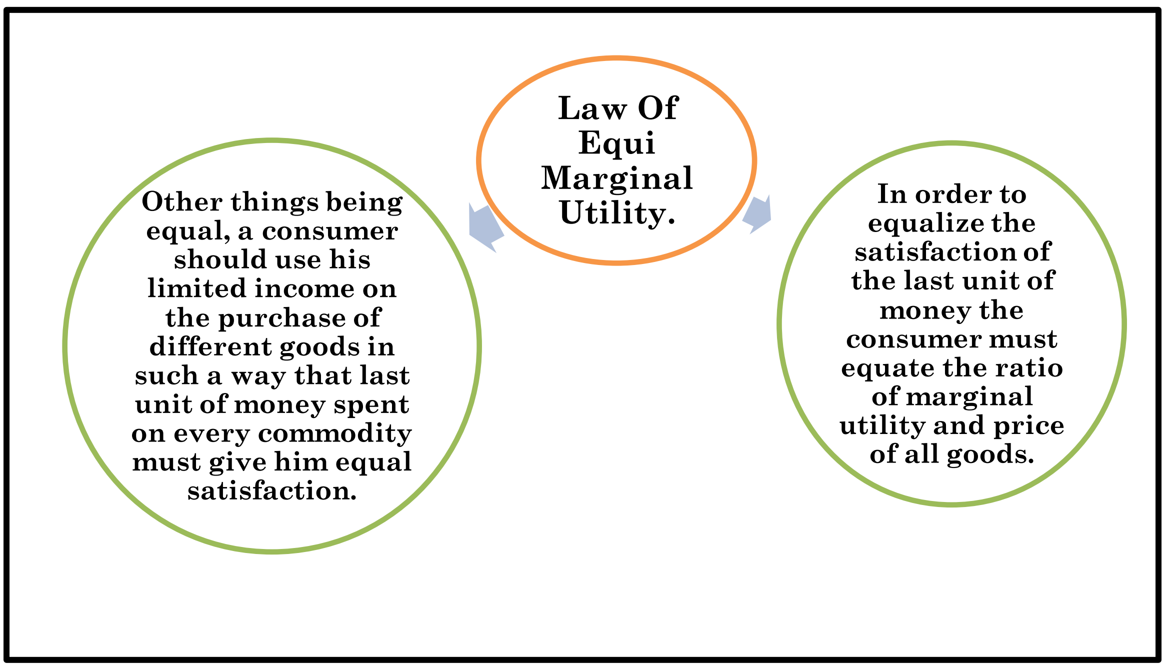
- **Propounded by Marshall.**
- **Based on the level of income of consumer which he will use to buy number of commodities.**
- **The main objective of consumer is to get maximum satisfaction.**

Questions.	Answers.
1. The concept of Equi Marginal Utility of propounded by	Marshall.
2. Equi Marginal Utility is based on	The level of income of consumer which he will use to buy number of commodities.

3. What is the main objective of the consumer?	To get maximum satisfaction.

According to Marshall law of equi marginal utility states that **" Other things being equal, a consumer should use his limited income on the purchase of different goods in such a way that last unit of money spent on every commodity must give him equal satisfaction."**

- In order to equalize the satisfaction of the last unit of money the consumer must equate the ratio of marginal utility and price of all goods.
- If we assume that consumer is spending his income on the purchase of four goods A,B,C, & D then $\frac{\mathbf{MUA}}{\mathbf{PA}} = \frac{\mathbf{MUB}}{\mathbf{PB}} = \frac{\mathbf{MUC}}{\mathbf{PC}} = \frac{\mathbf{MUD}}{\mathbf{PD}}$.



Question.	Answer.
1. What does law of equi marginal utility state?	Other things being equal, a consumer should use his limited income on the purchase of different goods in such a way that last unit of money spent on every commodity must give him equal satisfaction.
2. Law of equi marginal utility was given by	Marshall.
3. To equalize satisfaction of the last unit of money	Consumer must equate the ratio of marginal utility and

what does the consumer must do.	price of all goods.

This can be explained by the following illustration:

- Suppose there is a consumer with total income of Rs 55/-. He wants to spend it for the purchases of four commodities.
- Their prices are Rs 3/- Rs4/- Rs2/- and Rs 12/- respectively.
- With the help of the following table it can be explained.

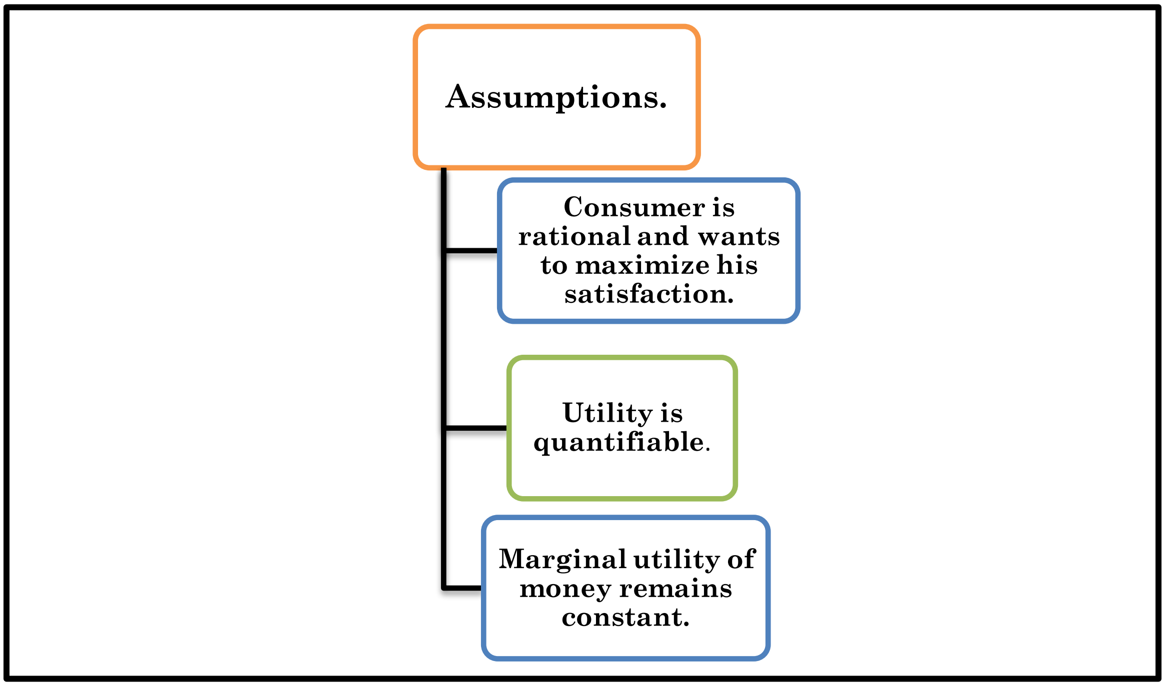
Units	MUA	MUB	MUC	MUD
1	52	75	**18**	120
2	45	62	12	**108**
3	**27**	55	8	92
4	20	43	5	70
5	12	**36**	2	50

- From the table we can notice that when consumer will buy 3 units of commodity A, 5 units of commodity B, 1 unit of commodity C and 2 unit of commodity of D he will get maximum satisfaction because the ratio of marginal utility and price for all goods be equal i.e **9.**
- Total utility from 3 units of A will be **52+45+27=124.**
- Total utility from 5 units of B will be **75+62+55+43+36=271.**
- Total utility from 1 unit of C will be **18.**
- Total utility from 2 unit of D will be **120+108=228.**
- Thus total utility derived from consumption of 4 commodities will be **124+271+18+228=641.**
- This is the maximum satisfaction that can be derived with the limited income of the consumer.

The law of equi marginal utility is based on the following assumption:

- Consumer is rational and wants to maximize his satisfaction.
- Utility is quantifiable.

- Marginal utility of money remains constant.



Questions.	Answers.
1. Consumer is _________ and want to maximize his satisfaction.	Rational.
2. Utility is ____________.	Quantifiable.
3. Marginal Utility of money remains___________.	Constant.

The following are the limitations to law of equi marginal utility.

- The law assumes that every consumer acts rationally and weighs the relative utilities of the various commodities.
- However in practice it may be beyond the mental and natural facilities of individual to practice such an arithmetical exercise of calculations.
- Consumer's ignorance is a potent factor that always results in other than equilibrium position.
- Consumer's at times are not even aware of the substitutes and accept whatever is made available to them.
- Consumer's behavior is often influenced by habits, customs and fashions.

- More often his decisions are dictated more by these considerations rather than by an economic considerations.

Limitations.

- The law assumes that every consumer acts rationally and weighs the relative utilities of the various commodities. However in practice it may be beyond the mental and natural facilities of individual to practice such an arithmetical exercise of calculations.
- Consumer's ignorance is a potent factor that always results in other than equilibrium position. Consumer's at times are not even aware of the substitutes and accept whatever is made available to them.
- Consumer's behavior is often influenced by habits, customs and fashions. More often his decisions are dictated more by these considerations rather than by an economic considerations.

Questions.	Answers.
1. What does the law assumes?	○ The law assumes that every consumer acts rationally and weighs the relative utilities of the various commodities. ○ However in practice it may be beyond the mental and natural facilities of individual to practice such an arithmetical exercise of calculations.
2. What is the result of consumers ignorance?	○ Consumer's ignorance is a potent factor that always results in other than equilibrium position. ○ Consumer's at times are not even aware of the

	substitutes and accept whatever is made available to them.
3. What influences the consumers behavior?	○ Consumer's behavior is often influenced by habits, customs and fashions. ○ More often his decisions are dictated more by these considerations rather than by an economic considerations.

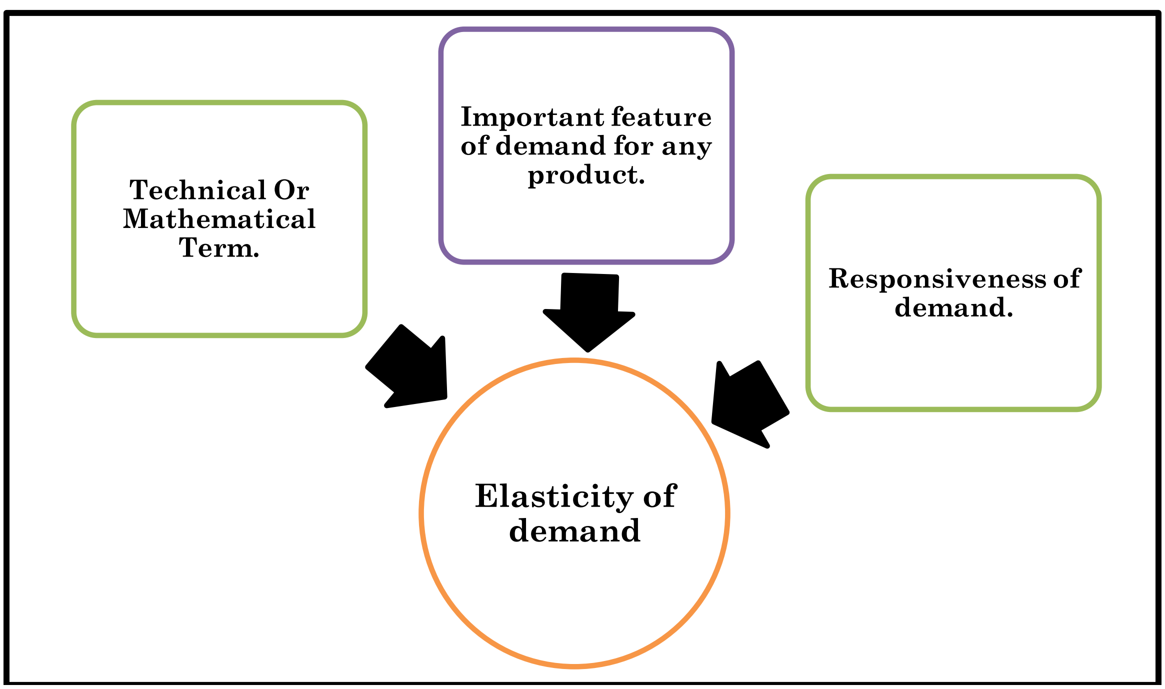
Unit 4: Elasticity Of Demand.

- **Meaning.**
- **Types of elasticity of demand.**
- **Price elasticity of demand and its types.**
- **Methods to measure price elasticity of demand.**
- **Factors affecting price elasticity of demand.**
- **Importance of price elasticity of demand.**
- **Income elasticity of demand.**
- **Factors affecting income elasticity of demand.**
- **Importance of income elasticity of demand.**
- **Cross elasticity of demand.**
- **Importance of cross elasticity of demand.**

Q1. Explain in detail the meaning of elasticity of demand and its various types?

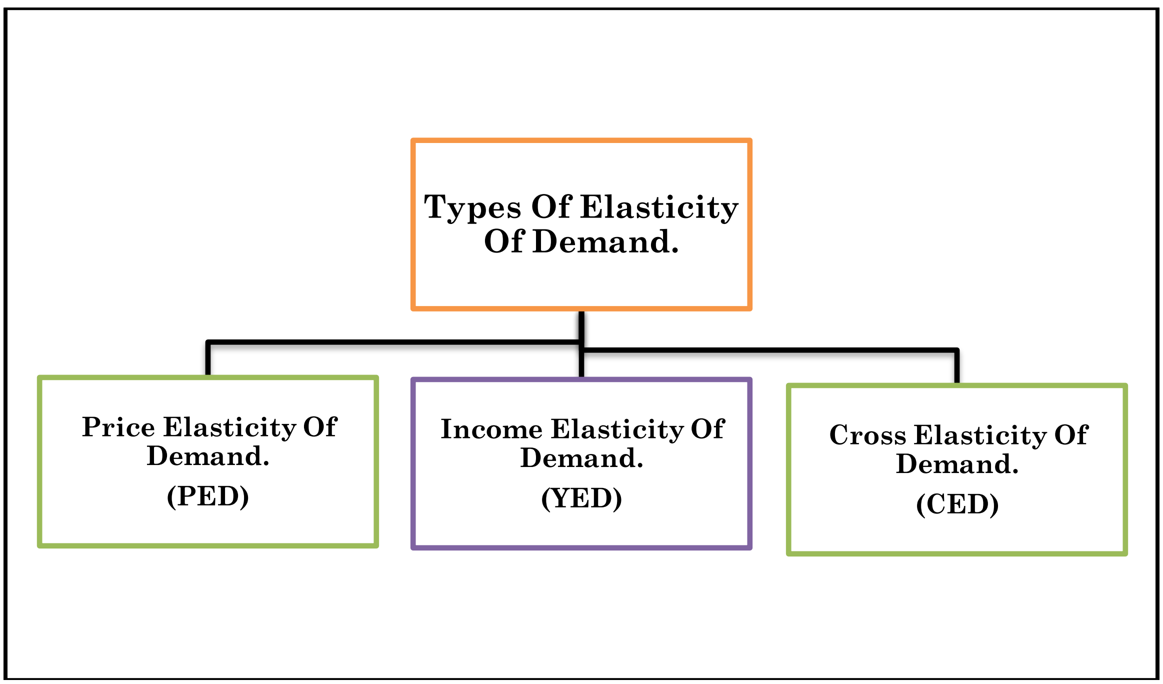
Ans: Elasticity of demand is a **technical or mathematical term.** One of the most important feature of demand for any product is that it changes with change in any determinant like price, income of the buyer and prices of related goods or products.

This responsiveness of demand is called elasticity of demand.



Questions.	Answers.
1. Elasticity of demand is a	• Technical. • Mathematical.
2. Which is one of the important feature of demand for any product.	Elasticity of demand.
3. This ____ of demand is called ____ of demand.	• Responsiveness. • Elasticity.

The following are the various types of elasticity of demand.



1. Price Elasticity Of Demand (PED:

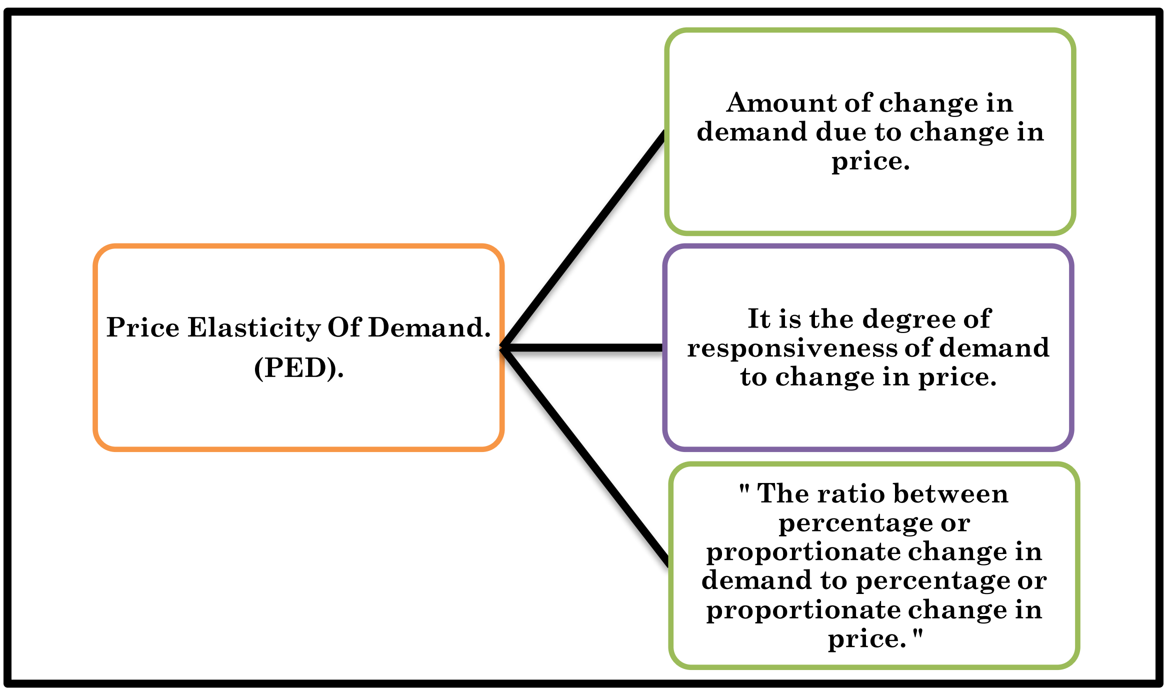
- Price elasticity of demand (PED) refers to amount of change in demand due to change in price.
- It is the degree of responsiveness of demand to change in price.

- Price elasticity of demand is defined as **" The ratio between percentage or proportionate change in demand to percentage or proportionate change in price".**

$$\textbf{PED} = \frac{\text{\% or proportionate change in demand}}{\text{\% or proportionate change in price.}}$$

$$E_P = \Delta Q/Q / \Delta P/P$$

$$= \Delta Q/\Delta P . P/Q$$



2. <u>Income Elasticity Of Demand (YED):</u>

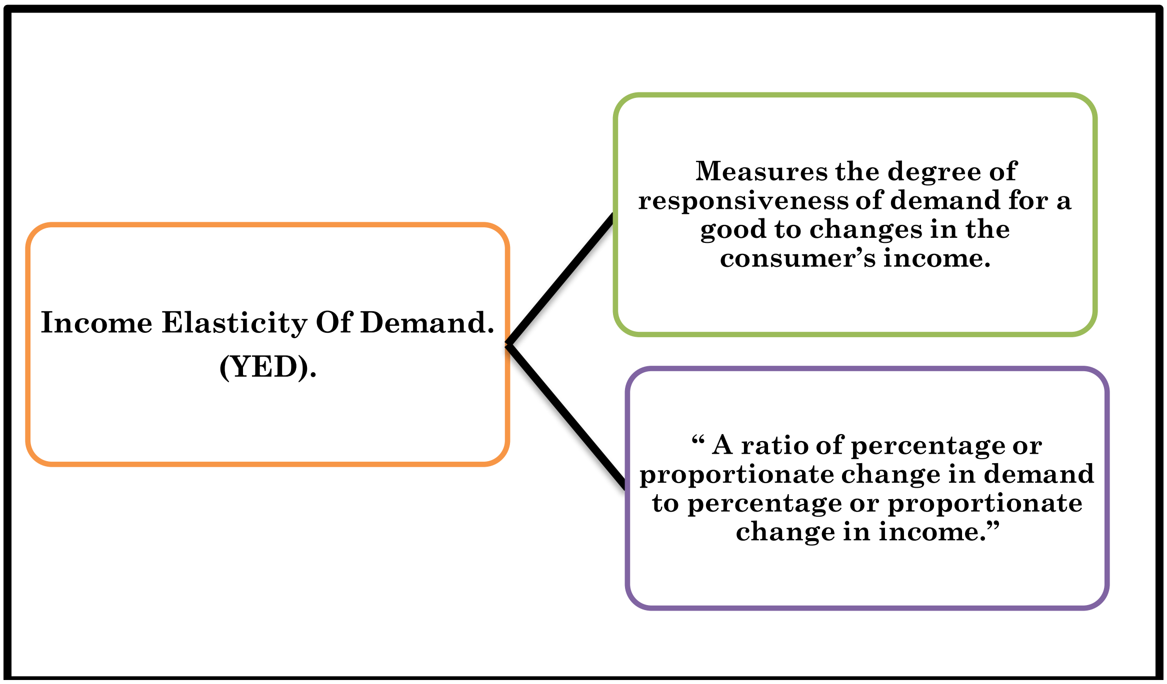
- The income elasticity of demand measures the degree of responsiveness of demand for a good to changes in the consumer's income.
- The income elasticity of demand is defined as **" A ratio of percentage or proportionate change in demand to percentage or proportionate change in income."**

YED = <u>% or proportionate change in demand</u>

% or proportionate change in income.

$$E_p = \Delta Q/Q/\Delta Y/Y$$

$$= \Delta Q/\Delta Y . Y/Q$$



3. <u>Cross Elasticity Of Demand (CED):</u>

- Cross elasticity of demand measures a change in the quantity demanded of a particular commodities in response to change in the price of related commodity.
- It can be defined as **"Proportionate change in demand of x in response of a proportionate change in the prices of a related commodity y".**

CED = <u>% or proportionate change in demand of x</u>

% or proportionate change in price of y.

$$= E_p = \Delta Qx/Qx/\Delta Py/Py$$

$$= \Delta Qx/\Delta Py . Py/Qx$$

Cross Elasticity Of Demand. (CED).

- **Measures a change in the quantity demanded of a particular commodities in response to change in the price of related commodity.**
- **"Proportionate change in demand of x in response of a proportionate change in the prices of a related commodity y".**

Question.	Answers.
1. Price elasticity of demand is defined as	" The ratio between percentage or proportionate change in demand to percentage or proportionate change in price".
2. Income elasticity of demand is defined as	" A ratio of percentage or proportionate change in demand to percentage or proportionate change in income."
3. Cross elasticity of demand is defined as	"Proportionate change in demand of x in response of a proportionate change in the prices of a related commodity y".
4. $\frac{\text{\% or proportionate change in demand of x}}{\text{\% or proportionate change in price of y.}}$ =	Cross elasticity of demand.

5. % or proportionate change in demand / % proportionate change in income. =	Income elasticity of demand.
6. % or proportionate change in demand / % or proportionate change in price. =	Price elasticity of demand.

Q2. Evaluate in detail the concept of price elasticity of demand and its various types?

Ans: Elasticity of demand is a **technical or mathematical term.** One of the most important feature of demand for any product is that it changes with change in any determinant like price, income of the buyer and prices of related goods or products.

This responsiveness of demand is called elasticity of demand.

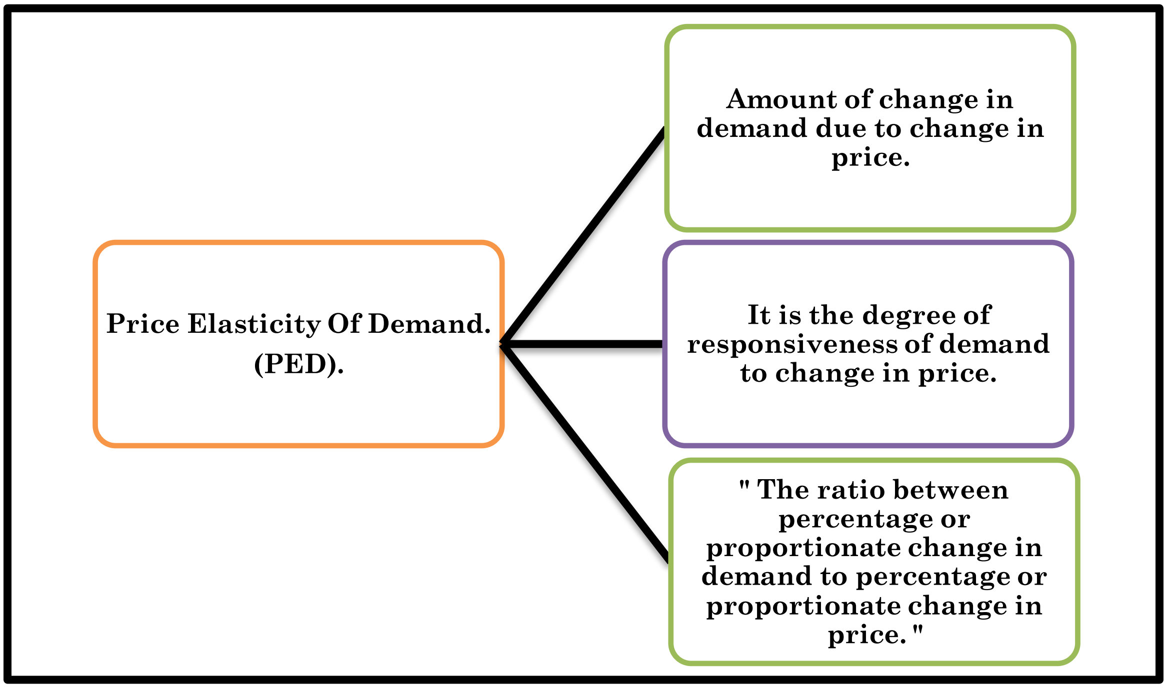
Price Elasticity Of Demand (PED):

- Price elasticity of demand (PED) refers to amount of change in demand due to change in price.
- It is the degree of responsiveness of demand to change in price.
- Price elasticity of demand is defined as **" The ratio between percentage or proportionate change in demand to percentage or proportionate change in price".**

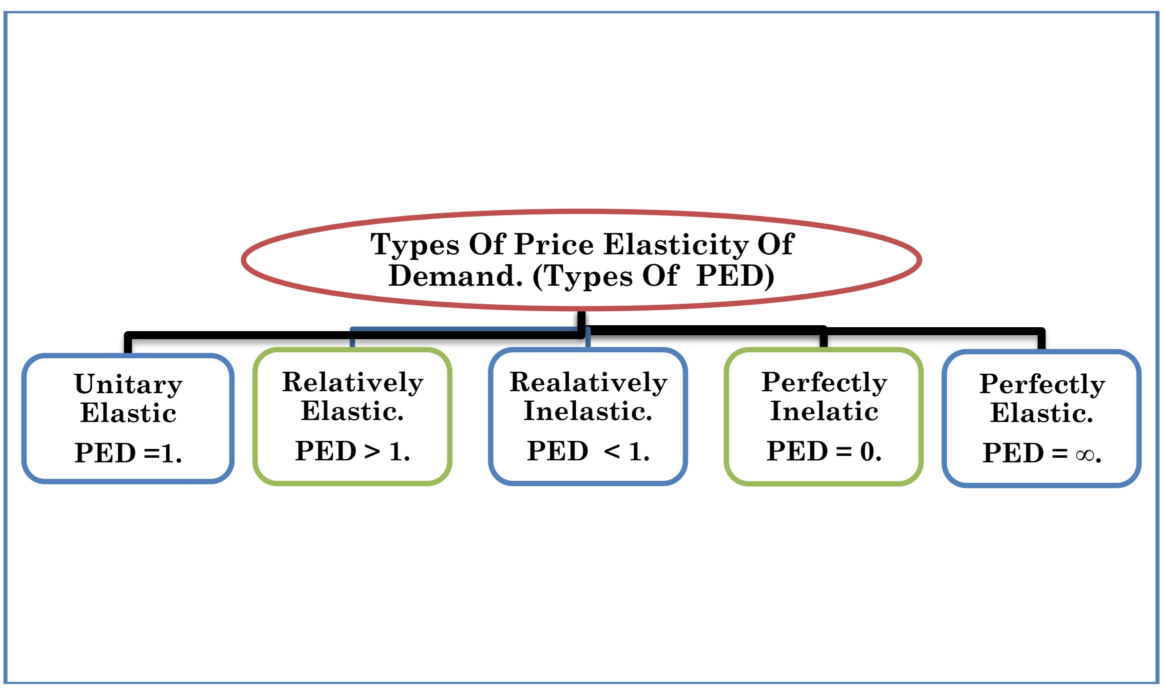
$$\text{PED} = \frac{\text{\% or proportionate change in demand}}{\text{\% or proportionate change in price.}}$$

$$E_P = \Delta Q/Q/\Delta P/P$$

$$= \Delta Q/\Delta P.P/Q$$

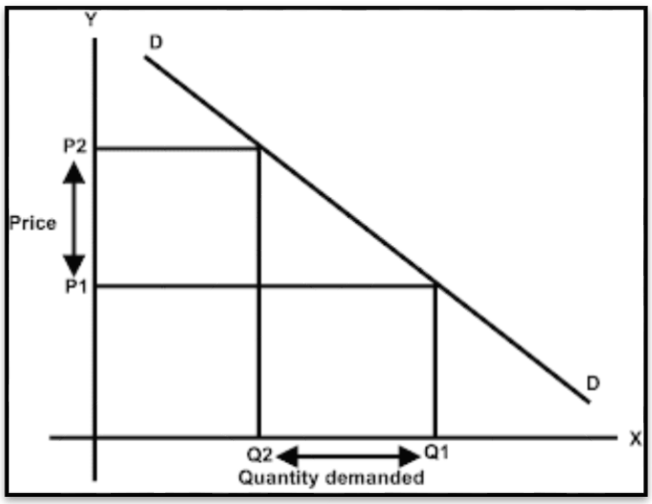


The following are the various types of price elasticity of demand:



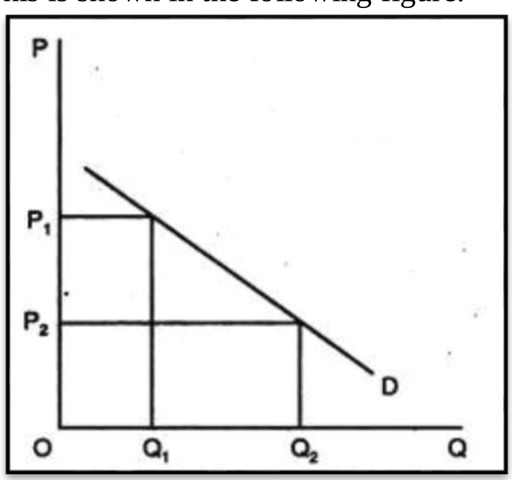
A. Unitary elastic demand.

If change in price and change in demand are equal it is described as unitary elastic demand. In other words PED = 1. This is shown with help of the following figure.



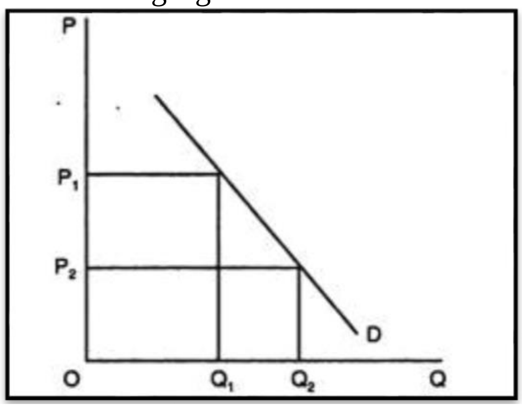
B. Relatively elastic demand.

When change in demand for a commodity is greater than change in price it is described as relatively elastic demand. In other words PED > 1 . This is shown in the following figure.



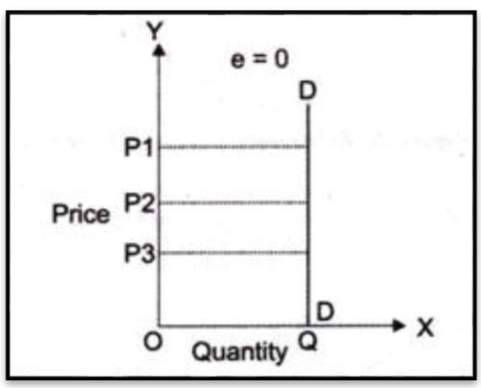
C. Relatively inelastic demand.

When change in demand is lesser than change in price of a commodity it is described as relatively inelastic demand i.e. PED < 1. This is shown in following figure.



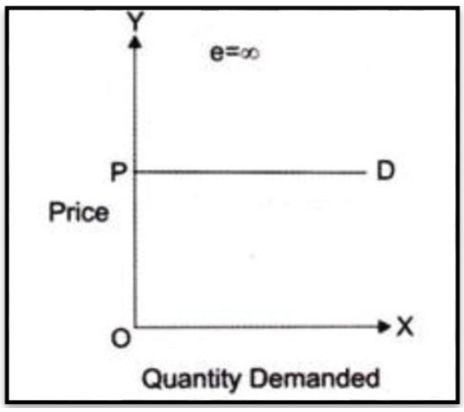
D. Perfectly inelastic demand.

When demand for a commodity is fixed and it does not change for any change in price it is described as perfectly inelastic demand such that PED = 0
The following figure shows perfectly inelastic demand curve.



E. Perfectly elastic demand.

If demand for a commodity changes by infinity even due to a small change in price it is called as perfectly elastic demand such that PED = ∞.
The following figure depicts a horizontal perfectly elastic demand curve.



Questions.	Answers.
1. Price elasticity of demand id defined as	" The ratio between percentage or proportionate change in demand to percentage or proportionate change in price".
2. Elasticity of demand of a product is unitary elastic when	PED = 1.
3. Elasticity of demand of a product is relatively elastic when	PED > 1.
4. Elasticity of demand of a product is relatively inelastic when	PED < 1.
5. Elasticity of demand of a product is perfectly inelastic when	PED = 0.
6. Elasticity of demand of a product is perfectly elastic when	PED = ∞
7. When PED = 1 it is called	Unitary elastic demand.

8. When PED > 1 it is called	Relatively elastic demand.
9. When PED < 1 it is called	Relatively inelastic demand.
10. When PED = 0 it is called	Perfectly inelastic demand.
11. When PED = ∞ it is called	Perfectly elastic demand.

Q3. Explain in detail the various methods or measurements to measure price elasticity of demand?

Ans: Elasticity of demand is a **technical or mathematical term.** One of the most important feature of demand for any product is that it changes with change in any determinant like price, income of the buyer and prices of related goods or products.

This responsiveness of demand is called elasticity of demand.

Price Elasticity Of Demand (PED:

- Price elasticity of demand (PED) refers to amount of change in demand due to change in price.
- It is the degree of responsiveness of demand to change in price.
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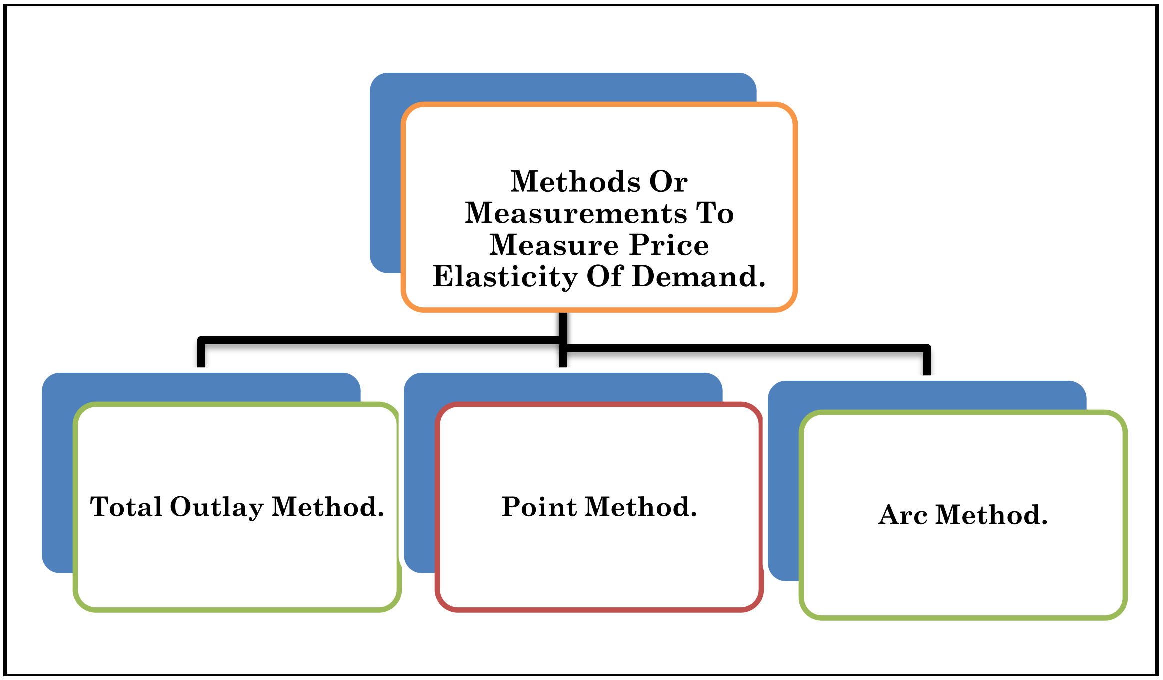
$$\text{PED} = \frac{\text{\% or proportionate change in demand}}{\text{\% or proportionate change in price.}}$$

$$E_P = \Delta Q/Q/\Delta P/P$$

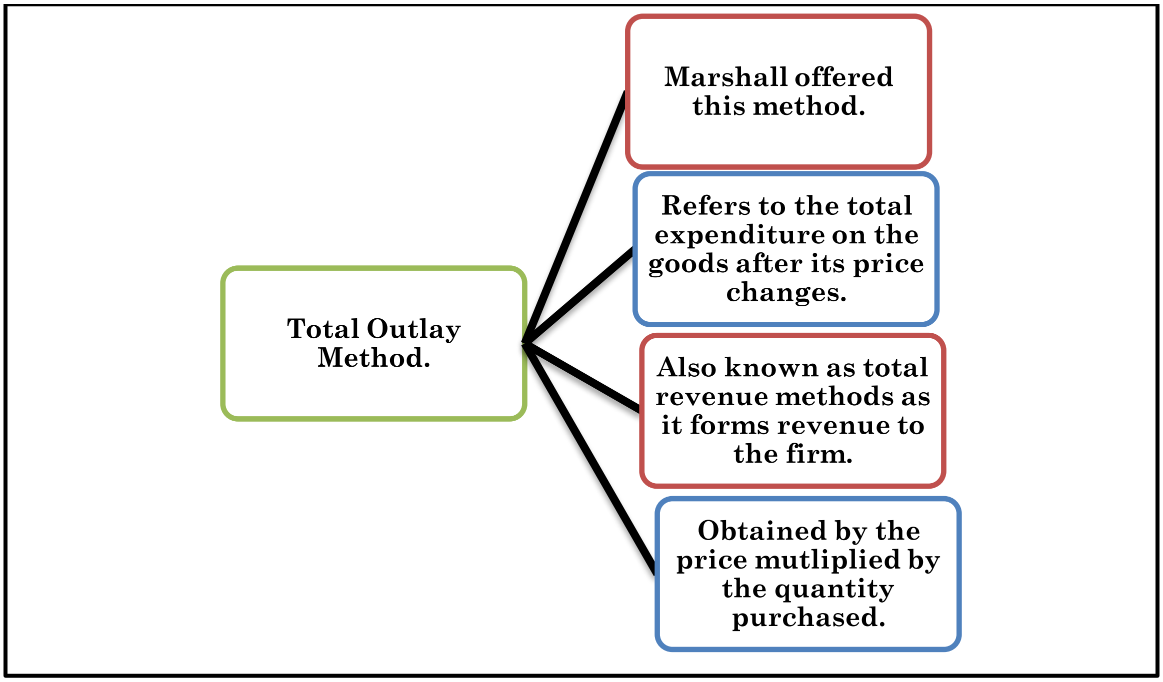
$$= \Delta Q/\Delta P.P/Q$$

The following the three methods or measurements to measure price elasticity of demand:



A. Total Outlay Method:

- Marshall offered this method.
- Total outlay method refers to total expenditure on the goods after its price changes.
- It is also known as total revenue method since it forms revenue to the firms.
- Total outlay or revenue is obtained by multiplying the number of units sold by price of a product i.e TR = total units sold X Price.
- Thus, total outlay or revenue is price multiplied by the quantity purchased.

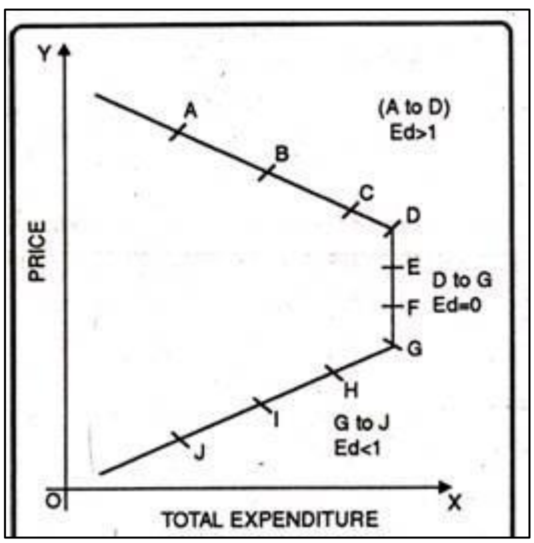


- Here we want to measure how much total outlay changes following a change in price.
- It depends upon the elasticity of demand.
- With the help of this method price elasticity of demand is measured on the basis of the following rules:

- If TR increases with a rise in price or decreases with a fall in price PED < 1.
- If TR decreases with a rise in price or increases with a fall in price PED > 1.
- If TR is constant whether price rises or falls PED = 1.

This is explained in the table and diagram below:

Price (P)	Quantity Demanded (Q)	Total Outlay (PQ)	Elasticity of demand (Ed)
10	1	10	
9	2	18	
8	3	24	$Ed > 1$
7	4	28	
6	5	30	
5	6	30	$Ed = 1$
4	7	28	
3	8	24	
2	9	18	
1	10	10	$Ed < 1$

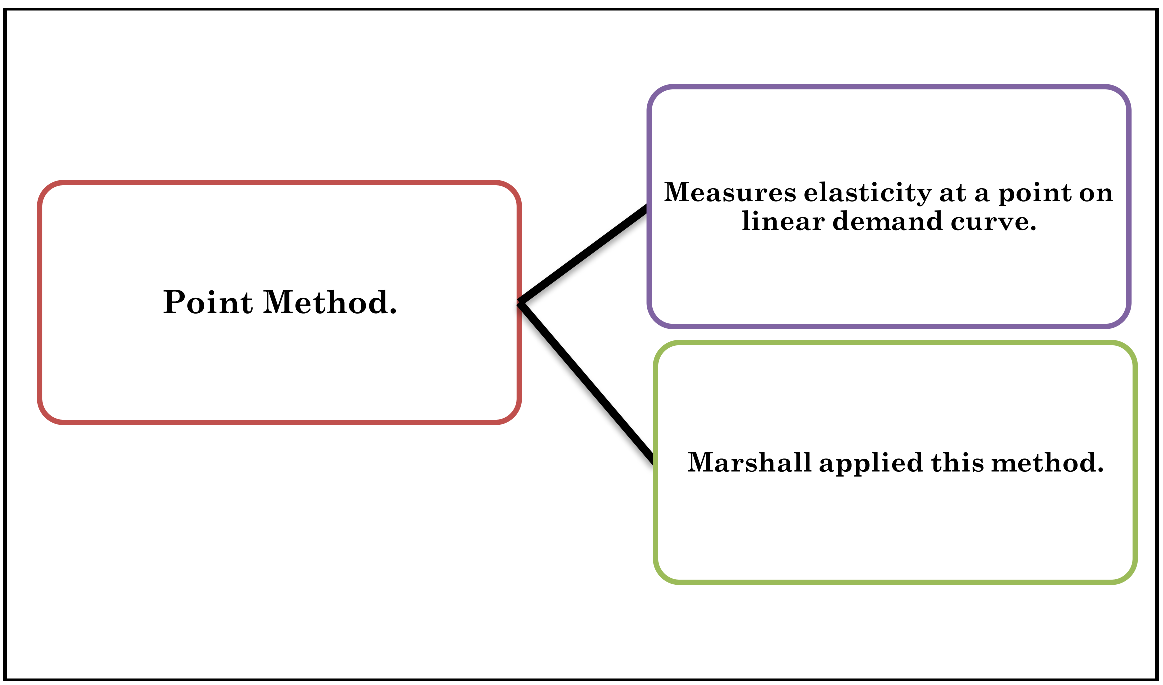


Questions.	Answers.
1. Total outlay method is offered by	Marshall.
2. Total outlay method refers to	The total expenditure on the goods after its price changes.
3. Total outlay method is also known as	Total revenue method.
4. Total revenue is obtained by	TR = P x Q.
5. Name the three rules on the basis of which	○ If TR increases with a rise in price or decreases

PED is measured.	with a fall in price PED < 1. ○ If TR decreases with a rise in price or increases with a fall in price PED > 1. ○ If TR is constant whether price rises or falls PED = 1.

B. Point Method:

- Point elasticity method is used to measure the elasticity of demand at a point on a demand curve when the change in price is very small.
- The price change is so small that the initial price and the changed price can be represented by the same point on price axis under the rule of approximation.
- According to Marshall this method is applied to measure elasticity on a linear demand curve.
- Point elasticity on a point of a linear demand curve depends on the slope of the curve and the price-output ratio at that point.
- Thus, elasticity of demand will be different at different points on the demand curve since the price-output ratio will be very.



- To show it geometrically, let us consider a point P on a linear demand curve DD1, as shown in Figure

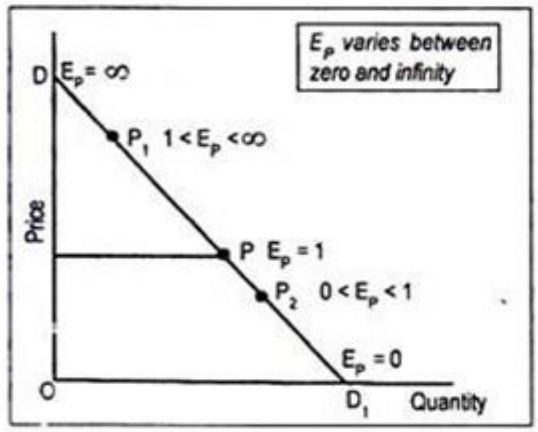


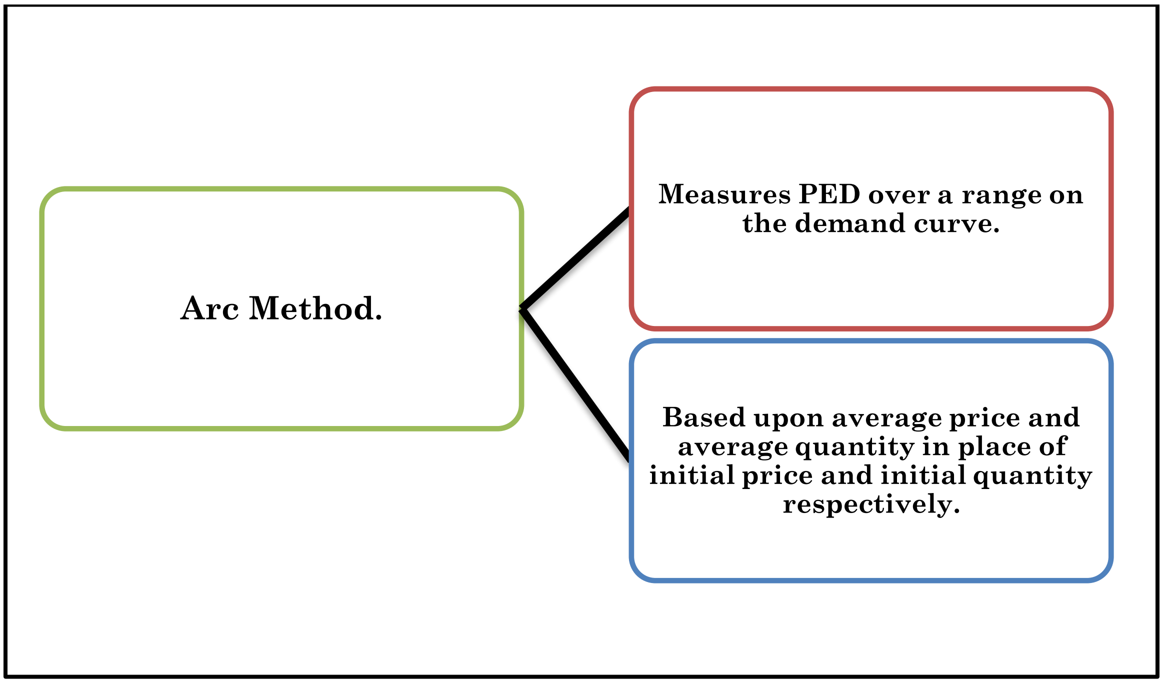
Fig. 2.52: Elasticity of Demand ($O \rightarrow \infty$)

- Here, DD_1 is a linear demand curve. Elasticity of demand varies from point to point on a demand curve.
- At point P, elasticity of demand is PD_1/PD. As the distance between PD_1 and PD is the same, it is unit elastic (i.e., $E_p = 1$).
- As we move downwards along the curve DD_1 from the mid-point, say point P_2, elasticity declines. At P_2 it is, inelastic (i.e., $0 < E_p < 1$) since $P_2D_1 < P_2D$.
- At point D_1, elasticity is zero since $0/DD_1$ is equal to zero. Further, as we move upwards from the mid-point, elasticity increases.
- At P_1, it is elastic (i.e., $1 < E_p < \infty$) since $P_1D_1 > P_1D$. On the other hand, at point D, it is infinite since $DD_1/0$ is equal to infinity. Thus, at lower prices it is inelastic, and at higher prices it is elastic.
- Thus, elasticity of demand on a straight line demand curve varies from zero to infinity ($0 \leq E_p \leq \infty$).

Questions.	**Answers.**
1. When elasticity of demand is measured at a point on linear demand curve it is called	Point method.
2. Who applied this method	Marshall.
3. The demand curve has __ slope but the price elasticity of demand _____ from point to point.	○ Negative. ○ Varies.

C. Arc Method:

- This method measures the price elasticity of demand over a range on the demand curve rather than at a point on demand curve.
- The arc elasticity method is based upon average price and average quantity in place of initial price and initial quantity respectively.



- In Figure- points A and B on the demand curve DD represent new and initial points with the price levels as P_2 and P_1 and quantity levels as Q_2 and Q_1 respectively.

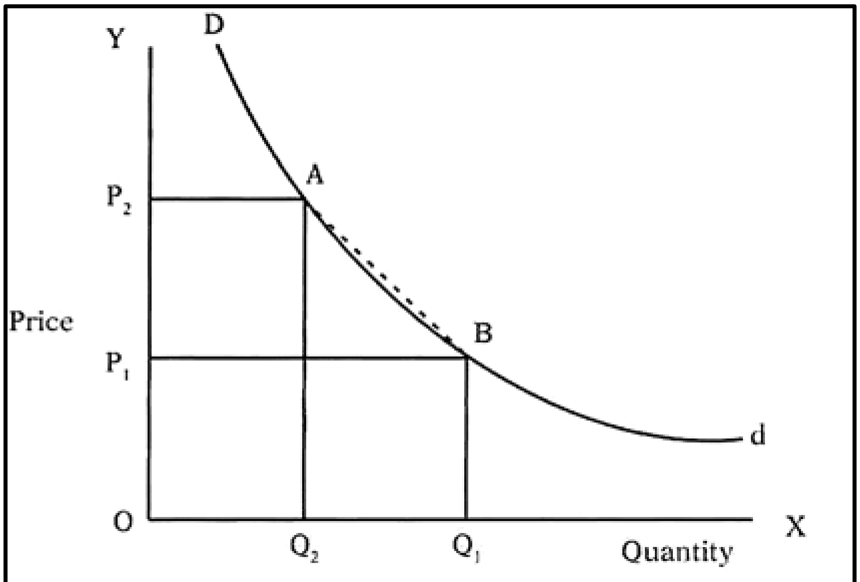


Figure-5.4: Arc elasticity of demand on a demand curve

- In reality we often come across a situation where price changes are substantial.

Questions.	Answers.
1. ___________ measures the price elasticity of demand over a range on the demand curve.	Arc elasticity method.
2. The arc elasticity method is based upon average ____ and average______ in place of initial price and initial quantity respectively.	○ Price. ○ Quantity.
3. In reality we often come across a situation where price changes are ____	Substantial.

Q4. Explain in detail the factors affecting prices elasticity of demand?

Ans: Elasticity of demand is a **technical or mathematical term.** One of the most important feature of demand for any product is that it changes with change in any determinant like price, income of the buyer and prices of related goods or products.

This responsiveness of demand is called elasticity of demand.

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Price Elasticity Of Demand (PED:

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$$\text{PED} = \frac{\text{\% or proportionate change in demand}}{\text{\% or proportionate change in price.}}$$

$$E_P = \Delta Q/Q/\Delta P/P$$

$$= \Delta Q/\Delta P.P/Q$$

The following are the factors affecting price elasticity of demand:

1. **Nature of the commodity.**

- Elasticity of demand for the a commodity depends upon its nature.
- If a commodity is a type of necessary good like food grains demand will be inelastic but for luxurious goods demand will be elastic.

2. **Durability.**

- In case of durable goods that are purchased once in a while elasticity of demand is low.
- But for all perishable goods elasticity of demand is high.

3. **Level of income.**

- In case of high income group people demand for all goods is inelastic but for low income people demand is elastic for all goods.

4. **Custom and habit.**

- In case of commodity which is demanded under the influence of custom or habit demand will be inelastic.

5. **Proportion of expenditure.**

- If proportion of expenditure on a particular commodity is less demand for this commodity will be inelastic.

- But if proportion expenditure on a commodity is large elasticity of demand for the commodity will be high.

6. **Level of price & change in price.**

- When price level of a commodity is too high and change in price is smaller demand for the commodity will be inelastic.
- If price level is low and change in price is large demand will be elastic.

7. **Number of uses.**

- If a commodity can be used to satisfy several wants it will have elastic demand but if a commodity has a single use it will have inelastic demand.

8. **Substitutes.**

- If a product has several substitutes its demand will be elastic but in absence of substitutes demand will be inelastic.

Factors Affecting PED.

- **Nature of commodity.**
- **Durability.**
- **Level of income.**
- **Custom & habit.**
- **Proportion of expenditure.**
- **Level of price & change in price.**
- **Number of uses.**
- **Substitutes.**

Questions.	Answers.
1. Elasticity of demand for a commodity depend upon its	Nature.
2. In case of ___________ elasticity is low.	Durable goods.
3. __________ people demand is elastic all goods.	Low income.
4. Commodities which are demanded under the influence _______ & ____________ their demand will be inelastic.	○ Custom. ○ Habit.
5. __________ plays as an important role on demand.	Proportion Of Expenditure.
6. ______ & ______ plays as an important determinant of elasticity of demand.	○ Level of price. ○ Change in price.
7. ____ is one of the important factor affecting elasticity of demand.	Number of uses.

Q 5. Evaluate in detail the importance or significance or uses of price elasticity of demand?

Ans: Elasticity of demand is a **technical or mathematical term.** One of the most important feature of demand for any product is that it changes with change in any determinant like price, income of the buyer and prices of related goods or products.

This responsiveness of demand is called elasticity of demand.

Price Elasticity Of Demand (PED:

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$$PED = \frac{\text{\% or proportionate change in demand}}{\text{\% or proportionate change in price.}}$$

$$E_P = \Delta Q/Q/\Delta P/P$$

$$= \Delta Q/\Delta P.P/Q$$

The concept of price elasticity of demand is of great practical importance to firms, government and other institutions.

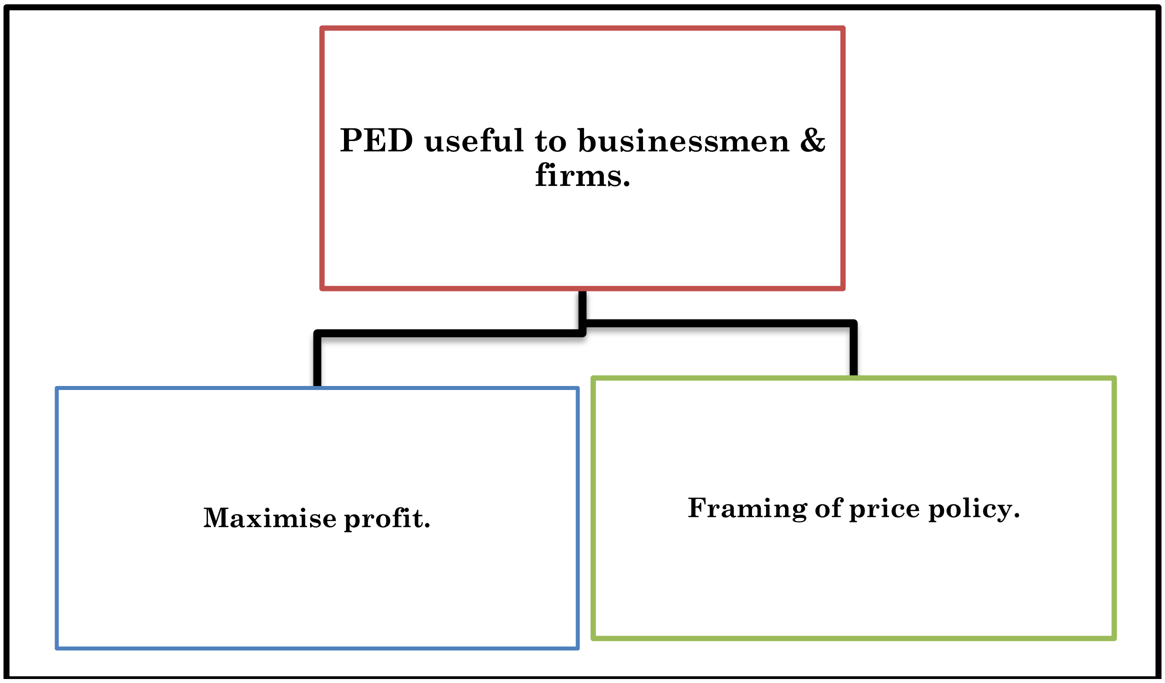
The following are the various areas where price elasticity of demand plays an important role.

Areas Where Price Elasticity Of Demand Plays An Important Role.

- **Businessmen & Firms.**
- **Government Authority.**
- **Determining Factor Prices.**
- **Foreign Trade.**
- **Trade Union.**
- **Monopolist.**
- **Nationalization of industries.**
- **Foreign exchange rate.**
- **Policy Makers.**

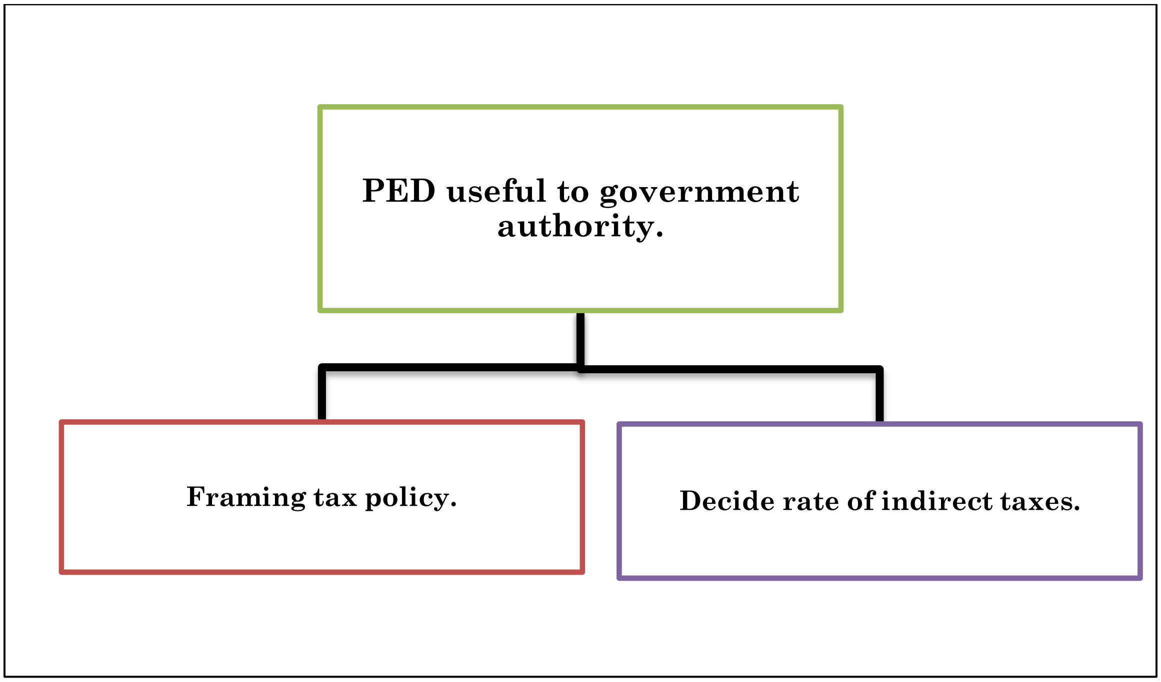
1. Businessmen & Firms:

- The concept of price elasticity of demand is useful to businessmen and firms.
- The crucial objective of a firm is to maximize profit.
- Firms would like to reduce prices of products, demand for which is inelastic or less elastic.
- The profit of a firm will fall if they reduce price in order to sell more.
- If the demand for products is inelastic a firm can raise the price and get more profit.
- If demand for product is elastic a firm can reduce the price and increases the sales in order to get more profit.



2. Government Authority:

- The concept of price elasticity of demand is useful to the government.
- It also helps to decide about the rate of indirect taxes.
- If the purpose is to collect more revenue the government must impose low taxes on those goods whose demand is elastic and high taxes on those goods whose demand is inelastic.
- If the purpose is to reduce inequality then necessary goods should not be taxed instead luxury goods should be taxed.



3. Determining factor prices:

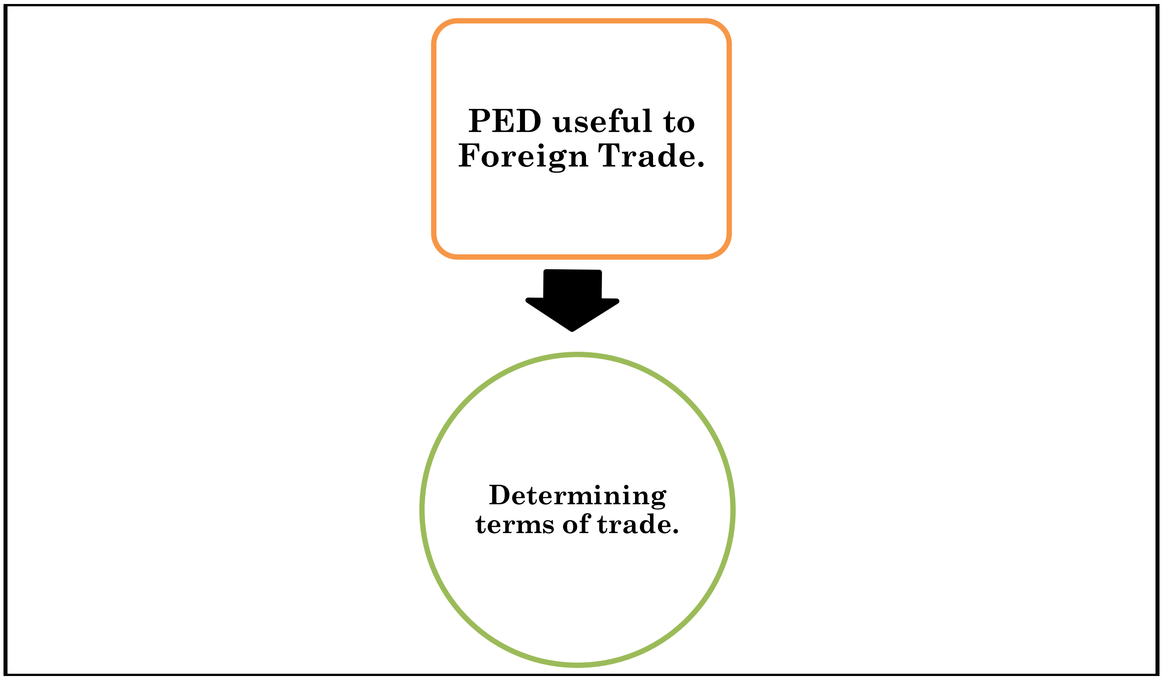
- The concept of price elasticity of demand has a great influence on determining the factor prices.
- If demand for factor is inelastic factor price would be high & vice versa.

PED useful in determining factor prices.

Has great influnce.

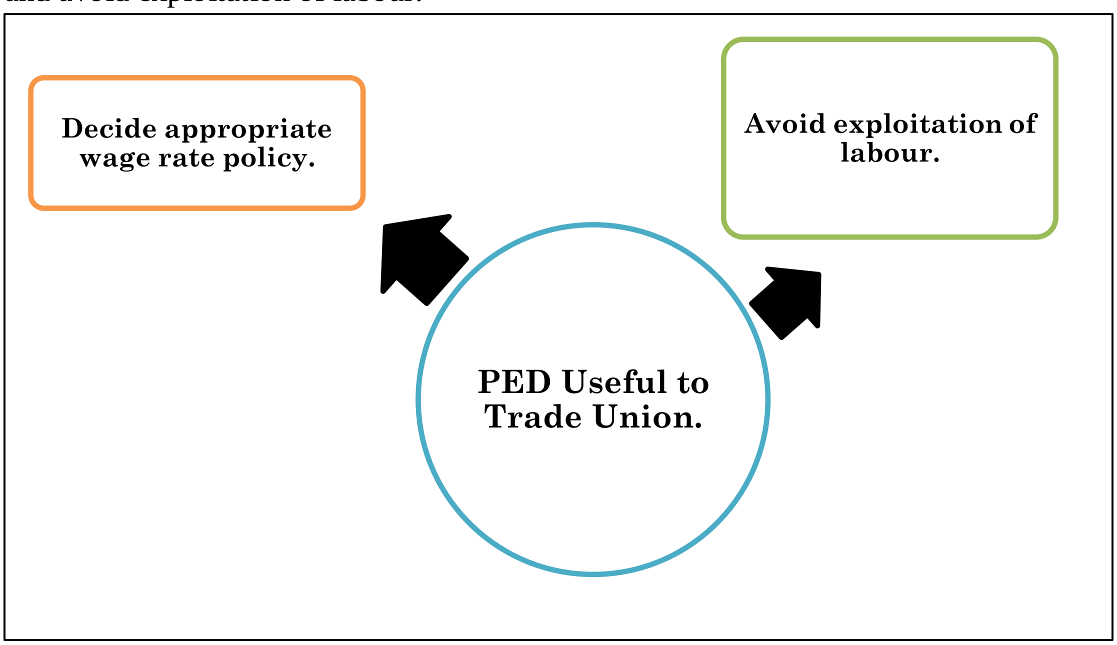
4. Foreign Trade:

- The concept of price elasticity of demand is also useful to determine terms of trade between two countries, especially import export policy.
- If a country has inelastic demand for imports and elastic demand for imports then a country's terms of trade will be favorable and vice versa.



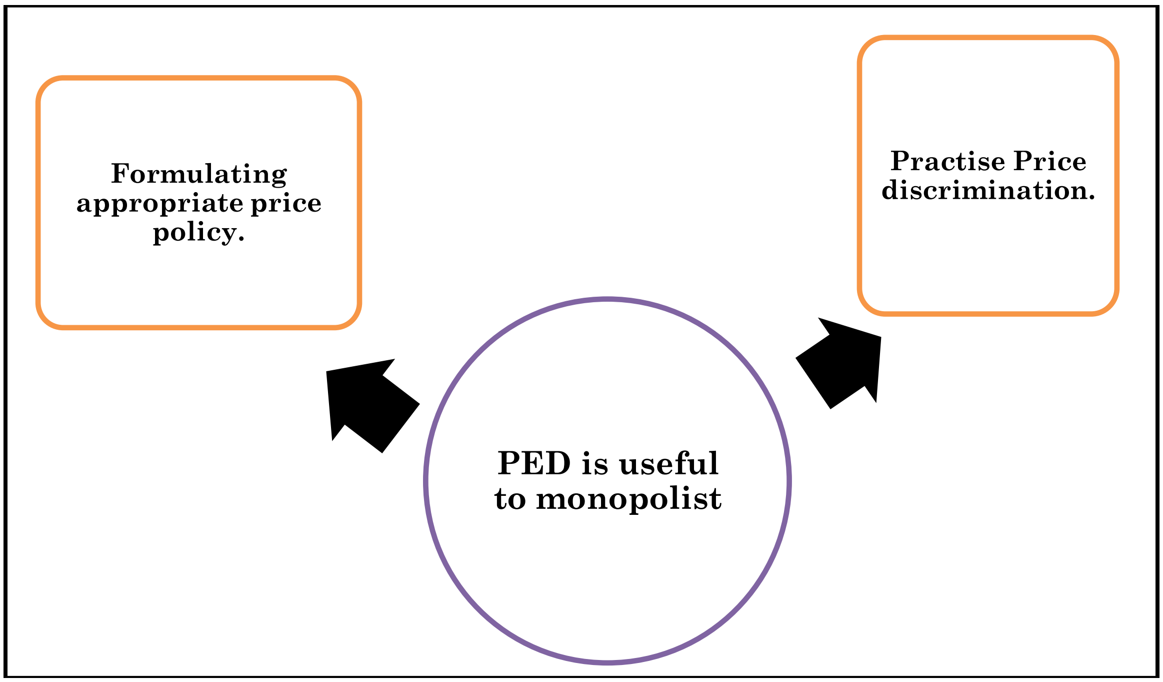
5. <u>Trade Union:</u>

- Concept of price elasticity of demand is useful to trade unionist to decide appropriate wage rate policy and avoid exploitation of labour.



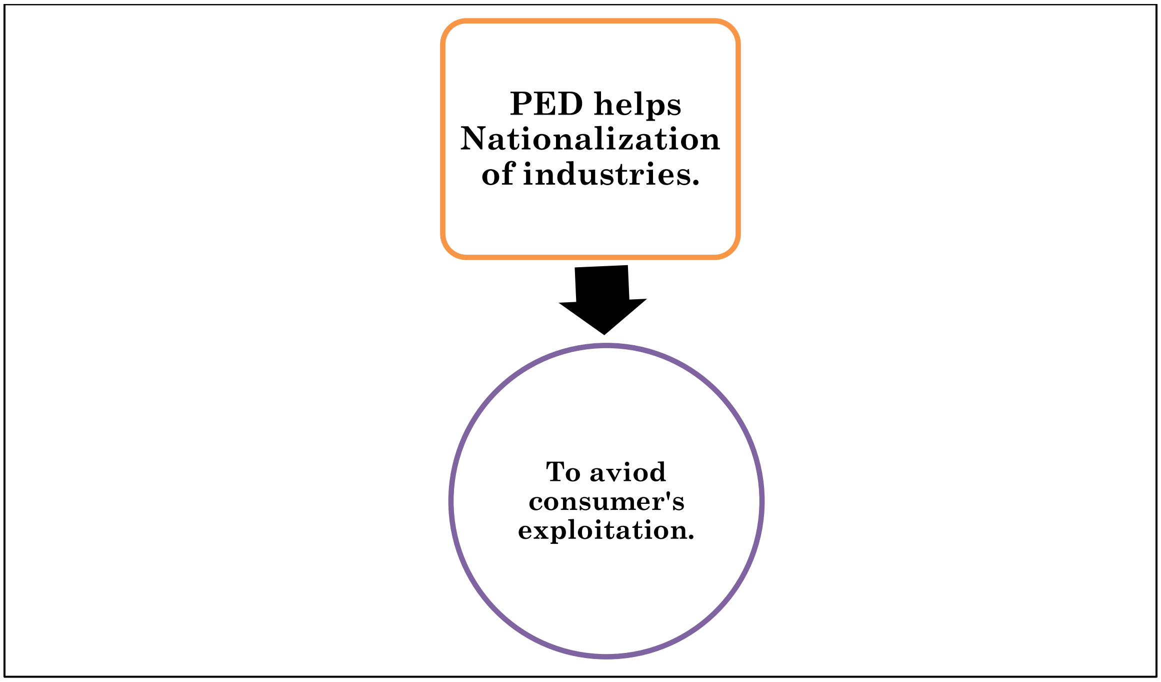
6. Monopolist:

- The concept of price elasticity of demand is useful to the monopolist in formulating appropriate price policy.
- It also helps to the monopolist while practicing price discrimination.



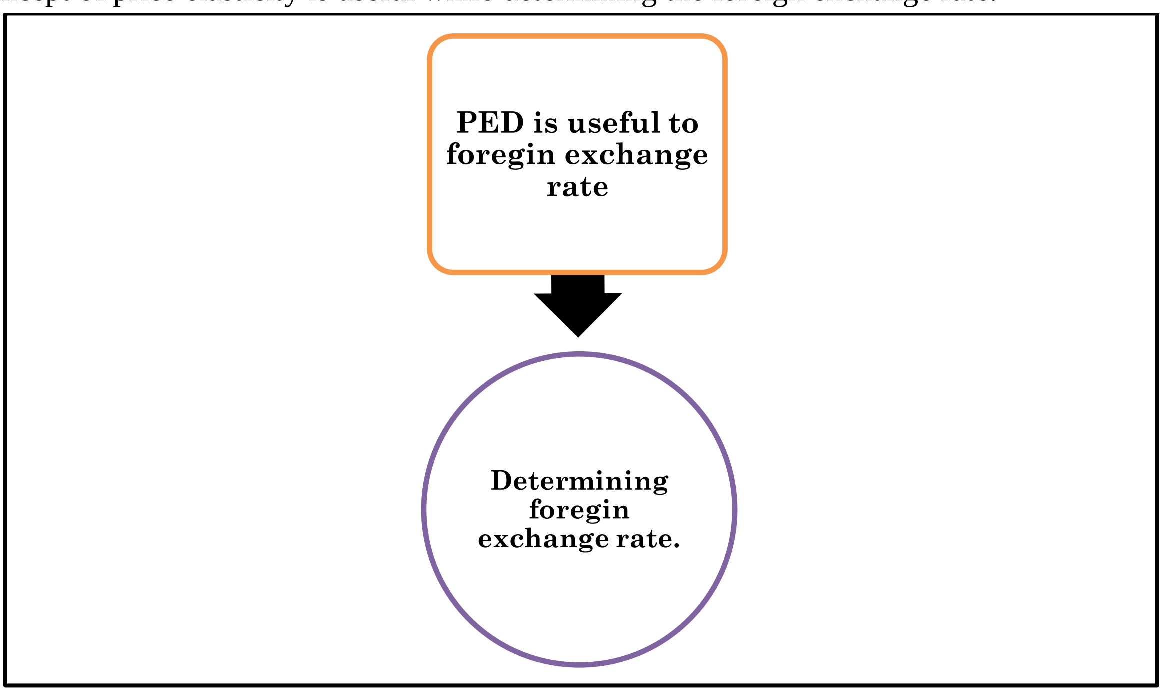
7. Nationalization of industries:

- If an industry is a monopoly one and the demand for its products is inelastic then such enterprises is taken over by the government to avoid consumer's exploitation. Eg: BEST service in Mumbai was privately run.
- It was later taken over by the Municipal Corporation Of Mumbai. (BMC).



8. Foreign Exchange Rate:

- The concept of price elasticity is useful while determining the foreign exchange rate.



9. Policy Maker:

- The concept of price elasticity of is useful to policy makers.
- It is useful while determining prices of agricultural commodities, framing the fiscal & monetary policy, commercial policy etc.

Questions.	Answers.
1. PED is useful to businessmen & firms as it helps in	Maximizing profits.
2. PED is useful to government authorities while framing the	Tax policy.
3. PED has a great _____ on determining factor prices.	Influence.
4. PED is useful to determine _____ between two countries.	TOT.
5. PED is useful to trade unionists to decide appropriate _____ policy & avoid exploitation of labor.	Wage rate.
6. PED is useful to monopolist in formulating ________ price policy.	Appropriate.
7. PED is useful while determining the _____ rate.	Foreign exchange.
8. PED is useful to policy makers in framing the ____ & ____________ policy.	Fiscal & Monetary.

Q6 . Explain in detail the concept of income elasticity of demand?

Ans: Elasticity of demand is a **technical or mathematical term.** One of the most important feature of demand for any product is that it changes with change in any determinant like price, income of the buyer and prices of related goods or products.

This responsiveness of demand is called elasticity of demand.

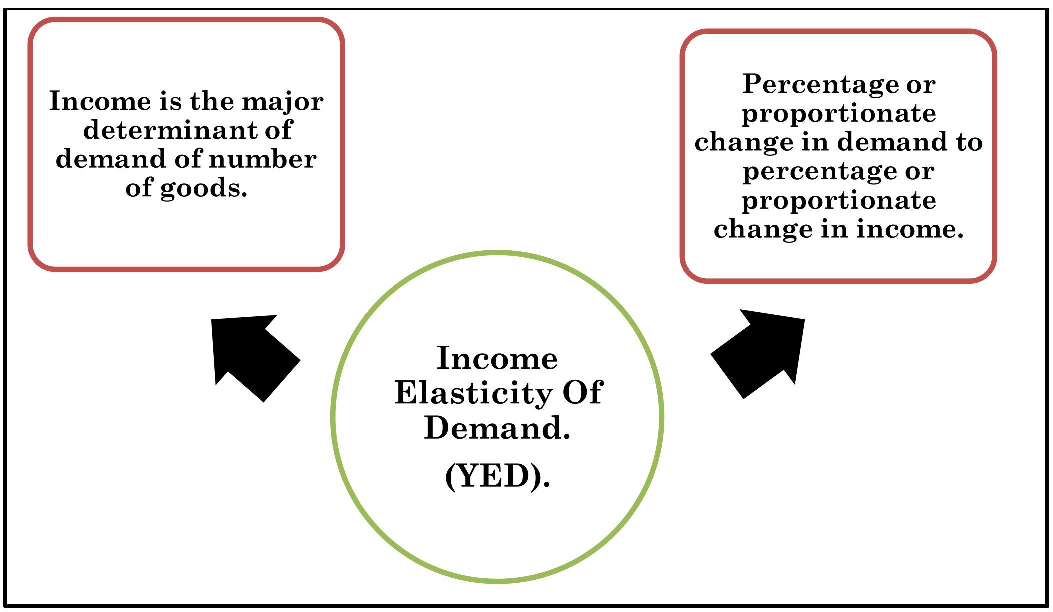
- Income is the **major determinant of demand for a number of goods.**
- It suggests that the demand may change due to a change in the consumer's income, other factors remaining constant.
- The concept of income elasticity of demand is thus introduced to ascertain the extent of such change.

- The income elasticity of demand measure **the degree of responsiveness of demand for a good to changes in the consumers income.**
- The income elasticity of demand is defined as **"A ratio of percentage or proportionate change in demand to percentage or proportionate change in income."**

$$\text{YED} = \frac{\text{\% or proportionate change in demand}}{\text{\% or proportionate change in income.}}$$

$$E_P = \Delta Q/Q/\Delta Y/Y$$

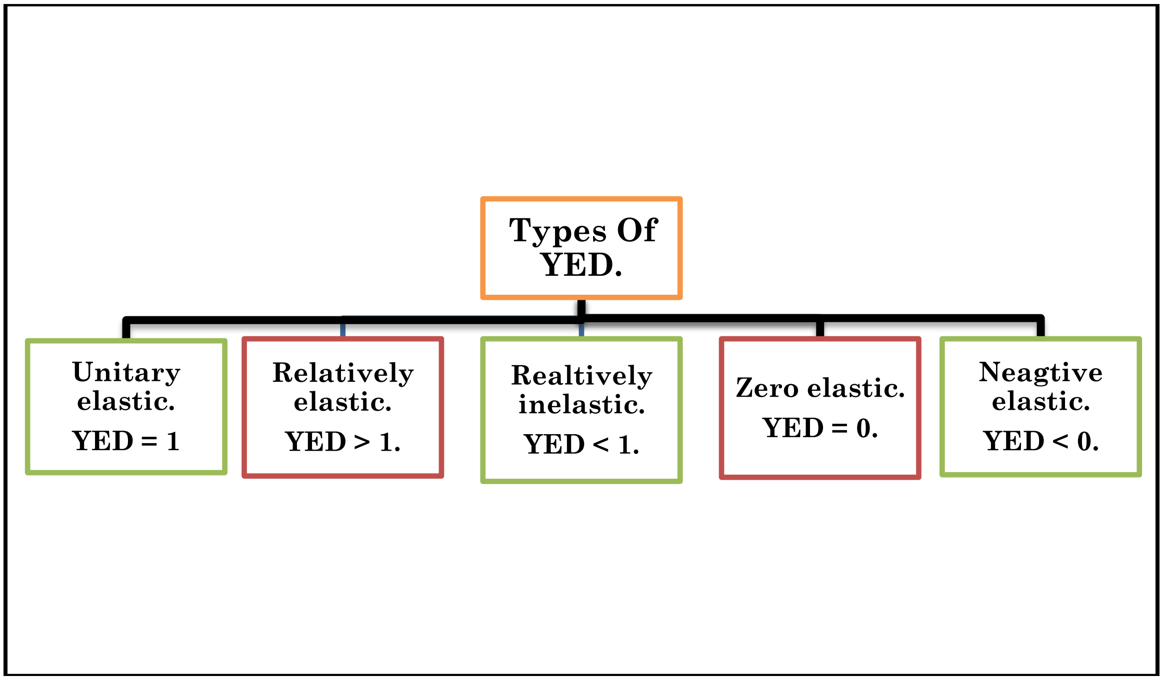
$$= \Delta Q/\Delta Y.Y/Q$$



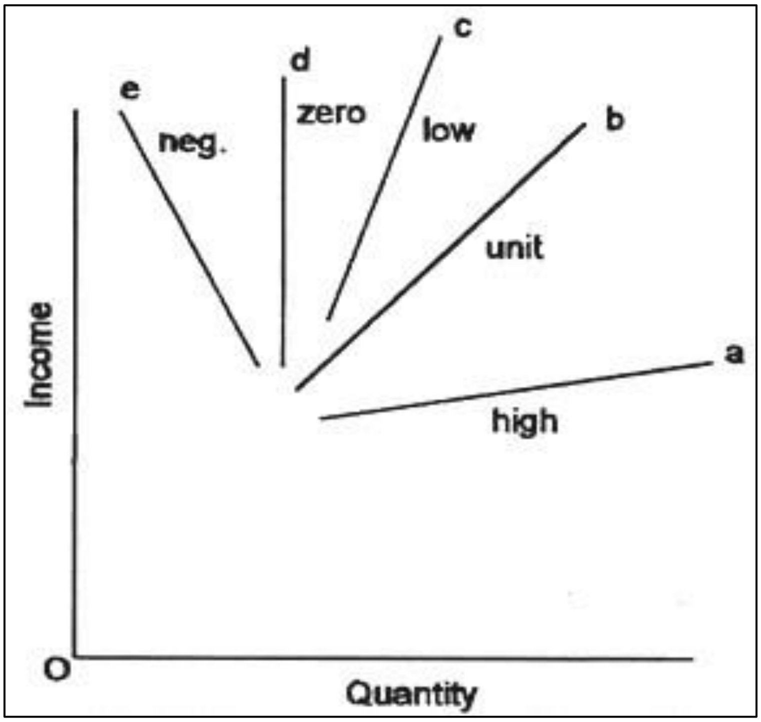
Questions.	Answers.
1. Is determinant of demand for a number of goods.	Income.
2. The concept of income elasticity of demand is thus to _______ the extent of such changes.	Ascertain.
3. Percentage or proportionate change in demand to percentage or proportionate change in income is known as	Income Elasticity Of Demand (YED).

Types of income elasticity of demand:

The following are the various types of income elasticity of demand.



1. **<u>Unitary income elasticity of demand. YED = 1.</u>**
   - When the percentage change in demand is equal to the percentage in income, the demand is unitary income elastic. i.e YED = 1.
2. **<u>Relatively elastic demand. YED > 1.</u>**
   - When percentage change in demand is greater than percentage change in income it relatively elastic demand. i.e YED > 1.
3. **<u>Relatively inelastic demand. YED < 1.</u>**
   - When percentage change in demand is less than percentage change income it is relatively inelastic demand. i.e YED < 1.
4. **<u>Zero income elastic demand. YED = 0.</u>**
   - When the income changes in any direction or in any proportion but carries no effect on demand so that quantity demanded remains unchanged it is referred to as zero income elastic demand. i.e YED = 0.
5. **<u>Negative income elastic demand. YED < 0.</u>**
   - When an increase in income causes a decrease in the demand for a commodity the deemand is said to be negative income elastic demand .i.e YED < 0.



The above diagram explains the various types of income elasticity of demand.

Questions.	Answers.
1. When percentage change in demand is equal to percentage change in income it is said	Unitary elastic demand.
2. When percentage change in demand is greater than percentage change in income it is said	Relatively elastic demand.
3. When percentage change in demand is less than percentage change in income it is said	Relatively inelastic demand.
4. When income changes in any direction & has no effect on demand it is said	Zero elastic demand.
5. When an increase in income causes a decrease in demand for a commodity it is said	Negative elastic demand.
6. The income elasticity of demand is unitary when	YED = 1.
7. The income elasticity of demand is relatively elastic when	YED > 1.
8. The income elasticity of demand is relatively inelastic when	YED < 1.

9. The income elasticity of demand is zero elastic when	YED = 0.
10. The income elasticity of demand is negatively elastic when	YED < 0.

Q 7. Explain in detail the factors affecting income elasticity of demand and the importance or significance of income elasticity of income elasticity of demand?

Ans: Elasticity of demand is a **technical or mathematical term.** One of the most important feature of demand for any product is that it changes with change in any determinant like price, income of the buyer and prices of related goods or products.

This responsiveness of demand is called elasticity of demand.

- Income is the **major determinant of demand for a number of goods.**
- It suggests that the demand may change due to a change in the consumer's income, other factors remaining constant.
- The concept of income elasticity of demand is thus introduced to ascertain the extent of such change.
- The income elasticity of demand measure **the degree of responsiveness of demand for a good to changes in the consumers income.**
- The income elasticity of demand is defined as **"A ratio of percentage or proportionate change in demand to percentage or proportionate change in income."**

$$YED = \frac{\text{\% or proportionate change in demand}}{\text{\% or proportionate change in income.}}$$

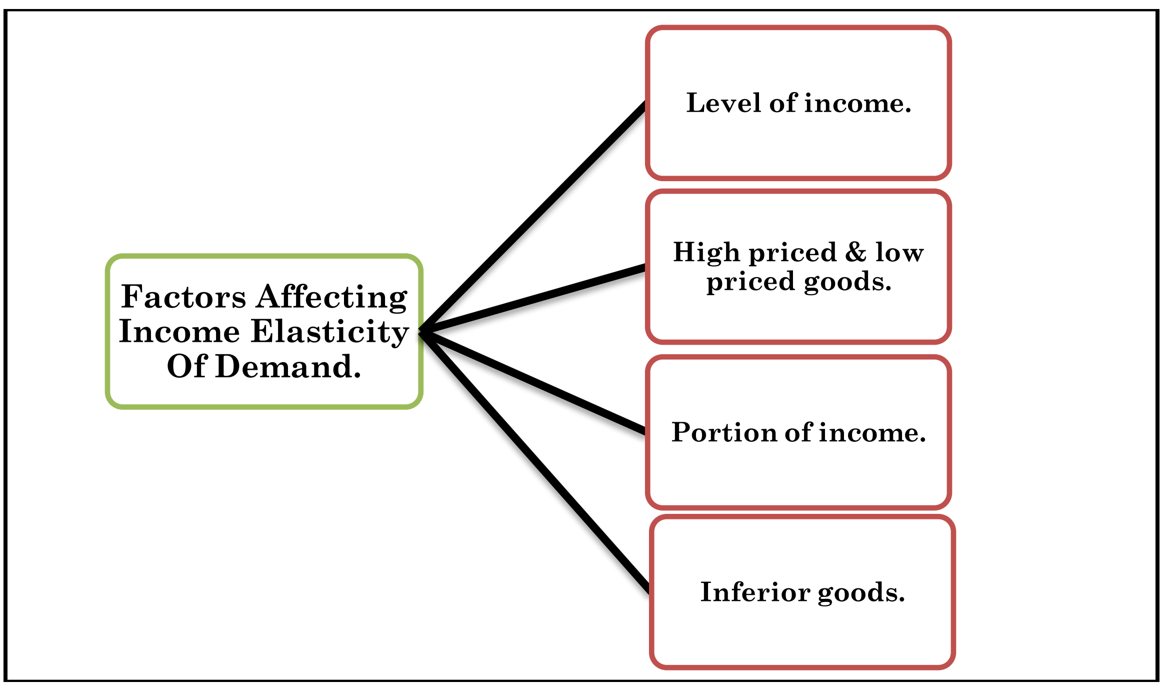
$$E_P = \Delta Q/Q/\Delta Y/Y$$

$$= \Delta Q/\Delta Y.Y/Q$$

Factors affecting income elasticity of demand.

1. The main factor influencing income elasticity of demand is the level of income itself.
   - At very high levels of income elasticity of demand is likely to be low.
   - Lipsey has pointed out an initial increase in the income of a poor family is more likely to be spent than saved.

  - Thus the demand for certain essentials will increase more than proportionately with the increase in the income of a poor household.
  - But as income goes on increasing the elasticity which is positive will go on diminishing.
  - It may become zero and even negative at a very high level of income.
2. Generally the income elasticity of demand for jewellery, cars, refrigerator etc is high where as the same for low priced necessaries is like food, matches or cheap food is low.
3. If a very small portion of the income of the family is spent on the given commodity the income elasticity for it would be low.
  - Conversely the income elasticity would be high for the commodities on which a significant portion of the family's income is spent.
4. In cases where such commodities happened to be inferior goods for the family the income elasticity may turn out to be negative.



Question.	Answers.
1. Main factor influencing income elasticity of demand is	Level of income.
2. Pointed out an increase in the income of a poor family is more likely to spent then saved.	Lipsey.
3. Income elasticity of luxurious goods is	High.
4. Income elasticity of demand for inferior goods is	High.

Significance of income elasticity of demand.

1. Classification of goods:

- It helps in classifying the commodities.
- For instance if income elasticity of demand is positive the commodity is normal.
- If it is negative the commodity is inferior.
- If it is positive and greater than one the commodity is a luxury.
- If it is positive and less than one commodity is a necessity.

2. Identification of industries:

- The numerical values of income elasticity of demand are highly useful to individual producer's with help of these value they can identify expanding and contracting industries.
- If income elasticity of demand for product x is positive its demand can be expressed to increase with the increase in people's income.
- Hence producer's can plan beforehand to increase productive capacity in x industry.
- If income elasticity of demand for product y is negative its demand can be expected to decline with the increase in people's money incomes.
- Hence producer's can take steps to reduce productive capacity of y.

3. Programme of resource allocation:

- Similarly income elasticity of demand is helpful to the government or planning commission also.
- They can project future level of demand for various goods on the basis of the information about the values of their income elasticity of demand and possible increase in money income of the people.
- Then these demand projections can be used to fix output targets for different industries.

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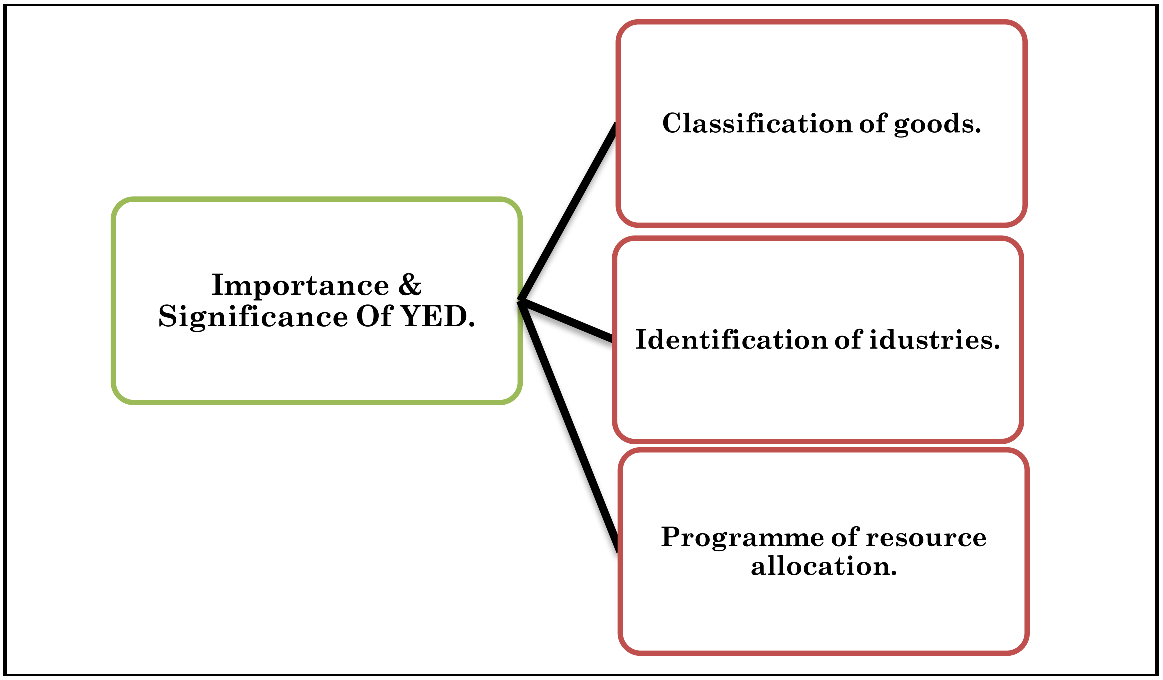
- They can prepare a programme of resource allocation among industries so that output targets may be realized on time.



Questions.	Answers.
1. Income elasticity of demand is useful in	Classification of goods.
2. Income elasticity of demand is important in	Identification of industries.
3. Income elasticity of demand has great significance in	Programme of resource allocation.

Q8. Explain in detail the concept of cross elasticity of demand?

Ans: Elasticity of demand is a **technical or mathematical term.** One of the most important feature of demand for any product is that it changes with change in any determinant like price, income of the buyer and prices of related goods or products.

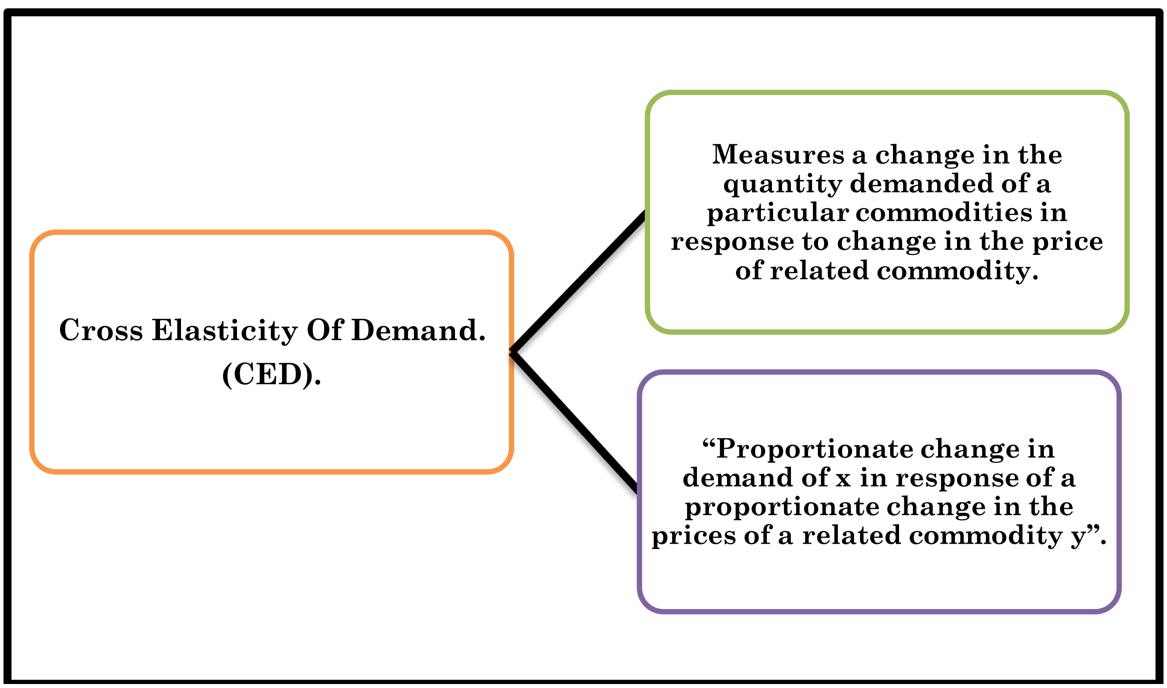
- **This responsiveness of demand is called elasticity of demand.** Cross elasticity of demand measures a change in the quantity demanded of a particular commodities in response to change in the price of related commodity.

- It can be defined as **"Proportionate change in demand of x in response of a proportionate change in the prices of a related commodity y".**

CED = <u>% or proportionate change in demand of x</u>
% or proportionate change in price of y.

$$= E_P = \Delta Qx/Qx/\Delta Py/Py$$

$$= \Delta Qx/\Delta Py.Py/Qx$$

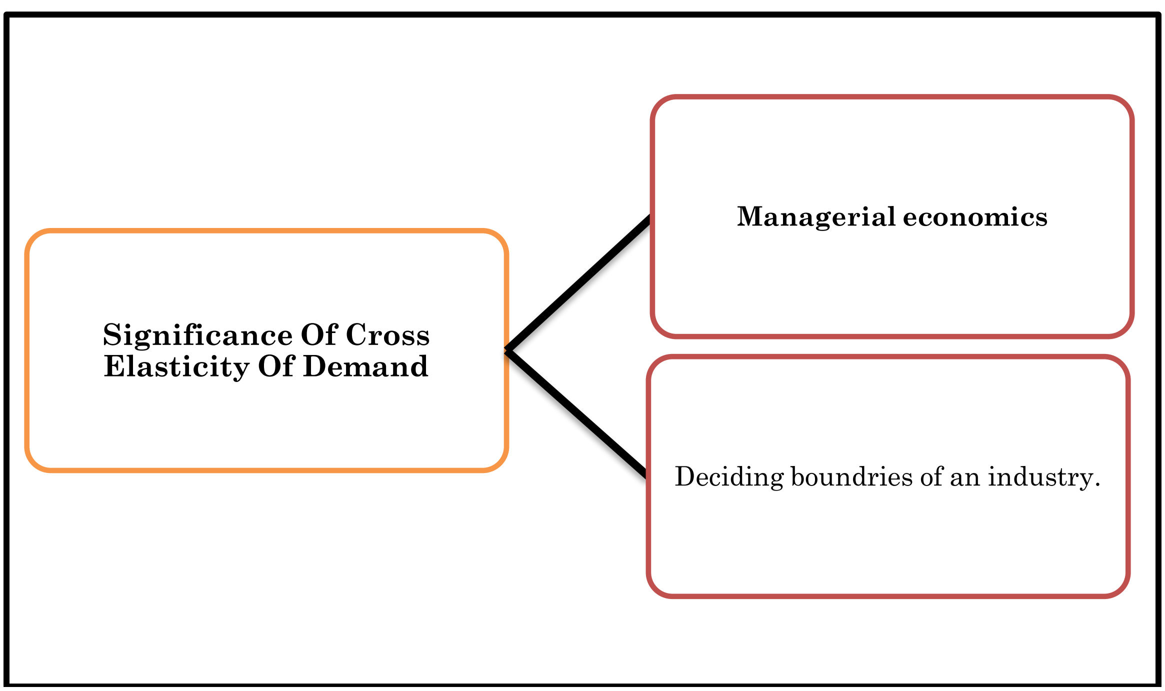


Question.	Answer.
1. When there is proportionate change in demand of x resulting proportionate change in price of y is said as	Cross elasticity of demand.
2. Cross elasticity of demand means	Measures a change in the quantity demanded of a particular commodities in response to change in the price of related commodity

Significance.

- This concept is of great importance in managerial economics, decision making and also in formulation of appropriate price strategy. The multi product firms often use this concept to measure the effect of the change in the price of one product on the demand for their other products. Suppose a firm produces A B C products which are close substitutes with high cross elasticity of demand among them. Hence if the firms lowers the price of a product say A it will have adverse effect on demand for B and C. On other hand suppose a firm produces goods A and B which are complements with high cross elasticity of demand. If the firm reduces the price of A demand for B will also increase along with that of A. If it follows that the multi product firms will have to be very careful in fixing prices of its various products.

- The concept of cross elasticity of demand is helpful in deciding boundaries of an industry and also in measuring interrelations among various industries. An industry is defined as a group of firms producing similar products so that cross elasticity of demand is positive and strong. For eg cross elasticity of demand for Phillips TV, Sony TV, Samsung TV, and LG TV is positive and high and that is why they are said to be the components of the same industry. In this case a firm cannot raise price without losing sales to other rival firms in the industry.



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Questions.	Answers.
1. CED is useful in	Managerial economics.
2. CED has great significance in	Deciding boundaries of a industry.