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FEDERAL UNIVERSITY OF TECHNOLOGY MINNA

GST 104/EBS 114
Introduction to Economics

NOTE:
GST 104 is a first and second semester course offered by 100L students of FUTMinna.

GST 104/EBS 114
Introduction to Economics

STUDY OBJECTIVE

At the end of this course, students are expected to understand the following basic concepts in economics

1. Scope and nature of economics
2. The price system;
3. Theory of cost and production
4. The market structure
5. Business organizations
6. Money
7. Inflation
8. National income
9. Microeconomics and
10. Macroeconomics.

Introduction

THE SCOPE AND NATURE OF ECONOMICS

We have now formed an idea about the meaning of economics. This at once leads to a general definition of economics. Economics is the social science that studies economic activities. This definition is however too broad. It does not specify the exact manner in which the economic activities are to study. Economic activities essentially mean production, exchange and consumption of goods and services. However, with the progress of civilization, the complexity of the production, exchange and consumption processes in societies have increased manifold. Economists at different times have emphasized different aspects of economics.

MEANING AND DEFINITIONS OF ECONOMICS

Adam Smith definition

Adam Smith considered being the founding father of modern Economics, defined Economics as the **study of the nature and causes of nations wealth or simply as the study of wealth**. The central point in Smith's definition is **wealth creation**. **Implicitly, Smith identified wealth with welfare**. He assumed that the wealthier a nation becomes the happier are its citizens. Thus, it is important to find out, how a nation can be wealthy. Economics is the subject that tells us how to make a nation wealthy. Adam Smith's definition is a wealth-centered definition of Economics

Main Characteristics of Wealth Definitions

1. **Exaggerated Emphasis on Wealth:**
   This wealthy centered definition gave too much importance to the creation of wealth in an economy. The classical economists like Adam Smith, J. S Mill, JB Say and others believed that economic prosperity of any nation depends only on the accumulation of wealth.

2. **Inquiry into the creation of wealth:**
   These definition shows that economics also deals with an inquiry into the causes behind the creation of wealth. For example, wealth of a nation may be increased through raising the level of production and export.

3. **A study on the nature of wealth:**
   These definitions have indicated that wealth of a nation includes only material good (e.g. different manufactured items). Non-material goods were not included, hence, non-material goods like services of teachers, doctor, engineers etc are not considered as "wealth"

Alfred Marshall's Definition

Alfred Marshal also stressed the importance of wealth. But he also emphasized the role of the individual in the creation and the use of wealth. He wrote **"Economics is a study of man in the ordinary business of life. It enquires how he gets his income and how he uses it. Thus, it is on the one side, the study of wealth and on the other and more important side, a part of the study of man."** Marshal, therefore stressed the supreme importance of man in the economic system. Marshal's definition is considered to be material-welfare centered definition of Economics.

Feature of Material Welfare Definitions

The main features of material welfare-centered definition are as follow;

1. **Study of material requisites of well-being**
   |These definitions indicate that economics studies only the material aspect of well-being. Thus, these definitions emphases the materialistic aspect of economic welfare.

2. **Concentrate on the ordinary business of life**
   These definitions show that economics deals with the study of man in the ordinary business of life. Thus, Economics enquires how an individual gets his income and how he uses it.

3. **A stress on the role of man:**
   These definitions stressed on the role of man in the creation of wealth or income.

A.C Pigou Definition

He defined economics as a study of welfare (good health, happiness and prosperity)

Lionel Robbins' Definition

The next important definition of economics was due to Prof. Robbins in his book "essay on the nature and significance of the economic science" published in 1932; Robbins gave a definition which has become one of the most popular definitions of economics. According to Robbins "Economics is a science which studies human behaviour as a relationship between ends and scarce means which have alternative uses" A long line of economists after Robbins, including Scitovsky and Cassel agreed with this definition and carried on their analysis in line with this definition. It is a scarcity-base definition of Economics.

Main features of scarcity definition:

The principal features of scarcity definition are as follows;

1. **Human Wants are unlimited:**
   The scarcity definition of economics states that human wants are unlimited. If one want is satisfied, another want crops up. Different wants appear one after another,

2. **Limited Means to Satisfy Human Wants:**
   Though, wants are unlimited, yet the means for satisfying these want s are limited. The resources needed to satisfy these wants are limited for example, the money income (per month) required for the satisfaction of want of an individual is limited. Any resource is considered as scarce if its supply is less than its demand.

3. **Alternative uses of scarce resources**:
   Same resource can be devoted to alternative lines of production thus, same resources can be used for the satisfaction of different types of human wants, for

exam, a piece of land can be used for either cultivation, or building a dwelling place or building of a factory shed etc.

4. **Efficient Use of Scarce Resources:**
Since wants are unlimited, so one has to choose order of priorities. On the basis of such priorities, the scarce resources are to be used in an efficient manner for the satisfaction of these wants.

5. **Need for choice and optimization:**
Since human wants are unlimited, so one has to choose between the most urgent and less urgent wants. Hence, economics is also called a science of choice. So, scarce resources are to be used for the maximum satisfaction (i.e. optimization) of the most urgent human wants.

BASIC CONCEPT OF ECONOMICS

The basic concept or elements of economics are;

i. **wants**
ii. **Scale of Preference**
iii. **Choice and**
iv. **Opportunity Cost**

Wants

Want may be defined as an insatiable desire or need by human beings to won goods or services that gives satisfaction. The basic needs of man include; food, housing and clothing. Human needs are many. They include tangible goods like house, cars, chairs, television set, radio etc. while the others are in form of services e.g. tailoring, carpentry, medical etc. **Human wants and needs are many and are usually described as insatiable because the means of satisfying them are limited or scarce.**

Scarcity

Scarcity is defined as the limited supply of resources which are used for the satisfaction of unlimited wants. In other words, scarcity is the inability of human beings to provide themselves with all the things they desire or want. These resources are scarce relative to their demand. As a student you will need to buy school material e.g. books worth $100 but you have only $50. It can be seen that the money you have, which is your resources, will not be sufficient to buy all you need. The available resources within the environment can never at any time be in abundance to satisfy all human wants. Since wants are numerous and insatiable, relative to the available resources, human beings have to choose the most important ones and leave the less important ones. There would be no economic problem if resources were not scarce hence economics is sometimes defined as the study of scarcity.

Scale of Preference

It is defined as a list of unsatisfied wants arranged in the order of their relative importance in other words; it is list showing the order in which we want to satisfy our wants arranged in order of priority. In the scale of preference, the most pressing wants come first and the least pressing ones come last. It is after the first in the list has been satisfied that there will be room for the satisfaction of the next. Choice therefore arises because human wants are unlimited or numerous while the resources for satisfying them are limited or scarce.

Choice

Choice can be defined as a system of selecting or choosing one out of a number of alternatives.

Human wants are many and we cannot satisfy all of them because of our limited resources. We therefore decide which of the wants we can satisfy first. Choice arises as a result of the resources used in satisfying these wants. **Choice therefore arises as a result of scarcity of resources**. Since it is extremely difficult to produce everything one wants. Choice has to be made by accepting or taking up the most pressing want for satisfaction based on the available resources.

Opportunity Cost

Opportunity cost is defined as an expression of cost in terms of forgone alternatives. It is the satisfaction of one's want at the expense of another want. It refers to the want that are left unsatisfied in order to satisfy another more pressing need. Human wants are many while the means of satisfying them are scarce or limited. We are therefore faced with the problem where we have to choose one from a whole set of human wants to choose one means to forgo the other. A farmer who has only $20 and wants to buy a cutlass and a hoe may discover that he cannot get both materials for $20. He would therefore choose which one he has to buy with the money he has. If he decided to buy cutlass, it means he has decided to forgo the hoe. The hoe is thus what he has sacrificed in order to own a cutlass. The hoe he has sacrificed is the forgone alternative and this is what is referred to as opportunity cost. Opportunity cost should not be confused with money cost. Money cost refers to the total amount of money that is spent in order to acquire a set of goods and services. For example a customer who spent $20 to buy a pair of trouser has dispensed with cash. The $20 spent is the money cost.

ECONOMICS AS A SCIENCE

Is economics a science? If yes, is it positive science or normative science?

A science is a systematized body of knowledge ascertainable by observation and experimentation. It is the body of generalizations, principles, theories or laws which traces out the relationship between causes and effect.

i. It must be a systematized body of knowledge
ii. Have its own laws and theories
iii. Can be tested by observation and experiment
iv. Can make predictions
v. Be self correcting and
vi. Have universal validity

If these features of science can be apply to economics, then, we can say economics is a science.

POSITIVE VS NORMATIVE ECONOMICS

Positive Economics:

This is an approach to economics that ask to understand behaviour of the economic system without making judgments. It describes what exist and how it works

Normative Economics:

This is an approach to economics that analyze outcome of economic behaviour, evaluate them as good or bad and may include recommendations on how to improve outcomes. It is also called policy economics. When economists disagree the point they disagree about are often normative points (differences of opinion and values). For example, raising the minimum wage is the best way to get families out of poverty is a normative statement.

CENTRAL PROBLEMS OF AN ECONOMICS

Central problems arise in an economy due to scarcity of resources having alternative uses in relation to unlimited wants

The Central problem of all economies is scarcity
Limited Resources + Unlimited Wants = Scarcity

Scarcity forces individual firms, government and societies to make choices.

Three basic questions must be answered in order to understand an economic system

What to produce?
Every society has some system or mechanism that transforms that society's scarce resources into useful goods and services. Every society decides whether to produce more of food, clothing, housing or to have more luxury goods, whether to have more of consumption goods or to have investment goods

How is it produced?
Society decides the technology to be used in production of goods and services. Whether it should be labour intensive or capital intensive, e.g. in India, we have unemployment and labour is unemployed.

For whom is it produce?
Who gets how much of the goods that are produced in the economy? How should the produce of the economy be distributed among the individuals in the economy? Who get less? Demand is an important factor which determines for whom the things are produced but the society determines how the products is evenly distributed so that it fulfills the need of everyone in the society.

Types of Economic System:

This handout shows some basic differences between capitalism, socialism and mixed economy

CAPITALISM

This is an economic system where the means of production are owned by private individuals

Features:

1. Government control and interfered at a minimum
2. Private ownership of natural resources permitted
3. Allocation of national resources determined by supply and demand
4. Competition eliminates inefficient producers, improves products, and reduces costs.
5. Private ownership of property permitted.

SOCIALISM

Socialism is an economic system which most means of production is owned and controlled by the government

Features:

1. Even distribution of income
2. Property nationalized, owners compensated
3. Government plans production by determining what produced and what quantity
4. Production determined by need not profit
5. Because government own production, production can be planned and waste eliminated.
6. Overproduction, duplication of effort and depression avoided as competition replaced by cooperation and planning.

MIXED ECONOMY

This is an economic system in which means of production are own partly by private individual and partly by government. It embedded features of both capitalism and socialism.

THE PRICE SYSTEM

It refers to the process by which the interplay of demand and supply determine the price of goods and services

DEFINITION OF DEMAND

Demand can be define as quantity of commodities that consumer are willing and able to buy at difference prices and a particular time.

Effective Demand:

This occurs when a consumer desire to buy goods can back it up by his ability to afford or pay fort.

Effective Demand = willingness + ability to pay

Individual Demand Schedule and Curve:

An individual demand schedule is a table showing the different quantities of a commodity that an individual consumer is willing and able to buy at different prices at a particular time. While an individual demand curve is the graphical representation of individual demand schedule.

Market Demand Schedule and Curve

A market demand schedule is a table showing the quantity of goods different consumers will buy at every different price. A market demand schedule for a product indicates that there is an inverse relationship between price and quantity demanded. The graphical representation of demand schedule is called a demand curve.

FACTORS AFFECTING DEMAND

Innumerable factors and circumstances could affect a buyer's wiliness or ability to buy goods. Some of the more common factors are:

1. Price of the commodity
2. Price of other related commodity
   a. Substitute Commodity (e.g. close up vs. Maclean)
   b. Supplementary commodities (e.g. car and petrol)
3. The consumer's income
4. Taste and preference of the consumer
5. The size of the population

TYPES OF DEMAND

There are four types of demand namely;

- Competitive Demand
- Joint or Complementary Demand
- Composite Demand
- Derive Demand.

NB:

Demand is the quantity of products buyers are willing and able to purchase at a given price over a particular period of time.

Competitive Demand

Commodities are substitute if one can be used in place of the other. Substitute goods serve the same purpose and therefore compete for the consumer's income. They are said to have competitive demand because of the fact that they compete for the consumer's income. Examples of substitute goods are Milo and Bournvita, Butter and Margarine and others. A change in the price of one affects the demand for the others. If for instance there is an increase in the price of butter, demand for margarine does not will increase which will ultimately increase in the price of margarine provided the supply of margarine does not change. On the other hand a decrease in the price of butter will lead to a decrease in the demand for margarine and hence a fall in its price given the supply.

Joint or Complementary Demand

Two or more goods are said to be jointly demanded when they must be consumed together to provide a given level of satisfaction. Some examples are cars and fuel, compact disc players and CD. There are perfect complementary goods and imperfect or poor complementary goods. For perfect complementary goods, the consumer practically cannot do without the other. An example is car and fuel. On the other hand, for imperfect complementary goods, a consumer can do without other so long as a substitute is obtained. For complementary demand, a change in the price of one goods affects the demand for the other. If there should be an increase in the price of compact disc players, there will be a decrease in the demand for disc, other things being equal.

Derived Demand

When the demand for a commodity is derived from the demand for the final commodity, that commodity is said to have derived demand. Wood may be demanded for the purpose of manufacturing furniture and not for its own sake. Here, the demand for wood is derived from the demand for furniture. Demand for wood is therefore a derived demand. Factors of production such as land, labour and capital have derived demand. This is because an increase in the demand for a commodity will result in an increase in the factors of production used in producing the goods. The price of the factors of production will increase, other things being equal.

Composite Demand

Composite demand applies to commodities which have several uses or are demanded for several and different purpose. Wood as mentioned in the example above is used for furniture – table, chairs, beds, windows, doors and others. A change in demand for one of them will affect all others. If there is an increase in demand for table, this will result in higher prices being paid for wood. The high price for wood will increase the cost of production of chairs, bed, windows and doors and any other thing for which wood is used in manufacturing.

CHANGE IN QUANTITY DEMANDED

A movement along a given demand curve caused by a change in the price of the commodity itself. The only factor that can cause a change in quantity demanded is price.
A change in quantity demanded is a change in the specific quantity of goods that buyers are willing and able to buy. This change in quantity demanded is caused by a change in the price of that commodity. It is illustrated by a movement along a given demand curve

As the commodity price induces a change in the quantity demanded and a movement along the demand curve, other demand determinants (buyers' income, buyers' preferences, other prices, population, etc) remain unchanged.

Graphically, the demand curve remains the same. The change is only shown by **a "movement along the demand curve"**

Change in Demand

A shift of demand curve caused by a change in one of the demand determinants. A change in demand is caused by any factors affecting demand **EXCEPT IT OWN PRICE.**

Other demand determinants (buyer's income, buyer's preferences, other prices, population, etc.) are responsible for causing a change in demand. In fact, **the only thing that does not cause a change in demand is the commodity price.**

Graphically, a change in demand involves a shift of the demand curve. This means greater/smaller quantities demanded than before at the original prices.

LAW OF DEMAND

It expresses the relationship between the quantity demanded and price. Its states that the higher the price, the lower the quantity demanded and vis-à-vis.

Exception to the law of Demand

The law of demand does not apply in every case and situation. The circumstances when the law of demand becomes ineffective are known as **exception of the law**. Some of these important exceptions are as follow;

Giffen goods

Some special varieties of inferior goods are termed as Giffen goods. Cheaper varieties of this category like bajra, cheaper vegetable like potato come under this category. Sir Robert Giffen of Ireland first observed that people used to spend more of their income on inferior goods like potato and less of their income on meat. But potatoes constitute their staple food. When the price of potato increased, after purchasing potato they did not have so many surpluses to buy meat. So the rise in price of potato compelled people to buy more potato and thus raised the demand for potato. This is against the law of demand. This is also known as Giffen Paradox.

Conspicuous Consumption

This exception to the law of demand is associated with the doctrine propounded by Thorsten Veblen. A few goods like diamond etc. are purchased by the rich and wealthy sections of the society. The prices of these goods are so high that they are beyond the reach of the common man. **The higher the price of the diamond, the higher the prestige value of it.** So when price of these goods falls the consumers think that the prestige value of these goods comes down so quantity demanded of these goods falls with fall in their price and thus, the law of demand does not hold in this case.

Conspicuous necessities

Certain things become necessities of modern life. So we have to purchase them despite their high price. The demand for TV sets, automobiles and refrigerators etc. has not gone down in spite of the increase in their price. These things have become the symbols of status. So they are purchased despite their rising price. These can be termed as “U” sector goods.

Ignorance

Consumer ignorance is another factor that at times induces him to purchase more of the commodity at a higher price. This is especially so when the consumer is hunted by the phobia that a high-priced commodity is better in quality than a low-priced one.

Emergency

Emergencies like war, famine etc., negate the operation of the law of demand. At such times, households behave in an abnormal way, households accentuate scarcities and induce further price rise by making increased purchased even at higher prices during such periods. During depression, on the other hand, no fall in price is a sufficient inducement for consumer to demand more.

Future changes in price

Household also act speculator, when the prices are rising, households tend to purchase large quantities of the commodity out of the apprehension that prices may still go up. When prices are expected to fall further, they will wait to buy goods in future at still lower prices. So quantity demanded falls when prices are falling.

Change in Fashion

A change in fashion and tastes affect the market for a commodity. When a broad toe shoe replaces a narrow toe, no amount of reduction in the price of the latter is sufficient to clear the stocks. Broad toe on the other hand, will have more customers even though its price may be going up. The law of demand becomes ineffective.

CONCEPT OF UTILITY

Utility is the amount of satisfaction a person (consumer) derives from consuming given unit(s) of a commodity may be injurious or even pernicious but if the satisfies an economic want, it possess utility. Subjectivity is associated with utility i.e. the satisfaction exists in mind or being imagined by the consumer. Utility varies among individuals.

THE TWO APPROACHES TO UTILITY ANALYSIS

Cardinalist Approach:

This assumes that utility can be measure in unit which is called utils. If a consumer imagines that one mango has 8 utils and an apple 4 utils, it implies that the utility of one mango is twice that of an apple.

Ordinalist Approach:

This is a modern approach to utility and it argued that utility cannot be measured or express in abstract terms but can only be ranked.

TYPES OF UTILITY

1. **Total Utility**
   It connotes the sum total of utilities obtained by the consumer from different units of a commodity. Suppose a consumer can consumes two units of a commodity at a time and derived utility as U_1, U_2, then his total utility for commodity $Y(TU_y)$ will be
   $TU_y = U_1 + U_2$

2. **Marginal Utility**
   The extral satisfaction derived from consuming one additional unit of a commodity. It is derived by subtracting the preceding total utility from the present total utility; i.e. $MU = MU_u – MU_{u-1}$ alternatively, it can be deduced by dividing the change in total utility by the change in quantity consumed i.e
   $MU = \Delta TU / \Delta Q$

3. **Average Utility**
   The amount of satisfaction a person (consumer) derives from consuming a giving unit of a given commodity. It is derived by dividing the total utility by the quantity consumed; i.e. $AU = TU / Q$

RELATIONSHIP BETWEEN TOTAL UTILITY AND MARGINAL UTILITY

This can be explain with the help of the table below

U	TU	MU
0	20	0
1	20	20

2	**35**	**15**
3	**45**	**10**
4	**50**	**5**
5	**50**	**0**
6	**45**	**-5**
7	**35**	**-10**

So long as total utility is increasing, marginal utility is decreasing up to the 4th unit. When total utility is maximum at 5th unit, marginal utility is zero. This is the point of satiety for the consumer. When total utility is decreasing, marginal utility is negative (i.e. 6th and 7th units). These units give disutility or dissatisfaction, so it is no use having them.

The Law of Diminishing Marginal Utility

The law state that as more and more units of a commodity is consumed, the utility derived from each unit decreases.

THEORY OF SUPPLY

Supply can be defined as the quantity of a commodity that a producer (seller) is willing and able to offer for sale at a give time.

FACTOR AFFECTING SUPPLY

1. The price of the commodity
2. The price of other related commodities
3. The price of factors of production
4. Goals of the producer: maximizing profits or sales
5. Government Policy
6. State of technology

MARKET EQUILIBRIUM

The interactive forces of demand and supply is explained in the table and graph below

The equilibrium point is that point where quantity supplied is the same as the quantity demanded (i.e. where demand curve intersect supply curve in the graph). The market is cleared at the equilibrium price and there is neither surplus nor shortage. Above the equilibrium price, quantity supplied is greater than quantity demand and there is surplus of goods and services, below the equilibrium price, demand is greater than supply and there is shortage of goods and services. By this, the market only stabilized at the equilibrium price, any price above or below the equilibrium price will set in motion forces that make the price to tend towards the equilibrium price.

MATHEMATICALLY

If

$Qd = 160 – 6p$

$Qs = 100 + 4p$

At equilibrium $Qd = Qs$

i.e.

$160 – 6p = 100 + 4p$

Collect like terms

$160 = 100 = 6p + 4p$

$60 = 10p$

Divide both sides by 10

$6 = p$

Hence, equilibrium price P = 6.

To calculate for the equilibrium quantity Qd, we substitute the calculated price ($P = 6$) into the demand function

$Qd = 160 – 6p$

$Qd = 160 – 6(6)$

$Qd = 160 – 36$

$Qd = 124.$

Hence, equilibrium Quantity demand Qd is 124.

To calculate for the equilibrium Quantity supply Qs, we substitute the calculated price (p = 6) into the supply function

Qs = 100 + 4p
Qs = 100 + 4(6)
Qs = 100 + 24
Qs = 124
Hence, equilibrium Quantity supply Qs is 124.

ELASTICITY OF DEMAND

There are many elasticity of demand and its determinants. The most important of the elasticity are;

1. Price Elasticity of demand
2. Income elasticity of demand
3. The cross elasticity of demand

The Price Elasticity of Demand

This is the degree of responsiveness of demand to a change (increase or decrease) in price. In the words of Prof. Lipsey, “Elasticity of demand may be defined as the ratio of the percentage change in demand to the percentage change in price. It is calculated as follow;
$Ep = \%\Delta Qd / \%\Delta P$.

The coefficient of price elasticity of demand is always negative because when price change demand moves in the opposite direction. It is however, customary to disregard the negative sign. If the percentage for quantities and prices are known, the value of the coefficient can be calculated.

Price elasticity of demand may by unity, greater than unity, less than, zero, infinite. These five cases are explained below

Price elasticity of demand is unity when the change in demand is exactly proportionate to the change in price.

When change in demand is more than proportionate to the change in price, price elasticity of demand is greater than unity. It is also known as relatively elastic demand.

If however the change in demand sis less than proportionate to the change in price, price elasticity of demand is less than unity, this is also called relatively inelastic demand.

Zero elasticity of demand says whatever the change in price; there is absolutely no change in demand. This is also called perfectly inelastic demand.

Lastly, price elasticity of demand is infinity when a very small in price leads to an infinitely change in demand. Visibly, no changes in price cause an infinite change in demand.

METHOD OF MEASURING PRICE ELASTICITY OF DEMAND

The following are the methods of measuring price elasticity of demand

1. The percentage method
2. The point method
3. The total outlay method

The percentage method

$$E_p = \%\Delta Q_d / \%\Delta P.$$

If Ep > 1, demand is elastic
If Ep < 1, demand is inelastic
If Ep = 1, demand is unitary

For example, suppose the price of commodity fall from ₦5 per Kg to ₦3 per kg, and its quantity demanded increases from 10kg to 30kg then

$E_p = (\Delta Q_d / \Delta P) \times (P / Q)$
$= (30 - 10) /(3 - 5) \times (5/10) = 5$
$E_p = 5$,
$E_p > 1$, this shows elastic demand

INCOME ELASTICITY OF DEMAND

This is the degree of responsiveness of quantity demanded of a commodity to a change (increase or decrease) in the consumer's income

$Ey = \%\Delta Qd / \%\Delta Y$.
$= (\Delta Q / \Delta Y) \times (Y/Q)$.
For inferior goods,
Ey = negative i.e. less is demanded as income increases
For normal goods, Ey = positive i.e. more is demanded as income increases.

For necessity goods Ey = 0 i.e. quantity demanded remains the same regardless of change in income

CROSS ELASTICITY OF DEMAND

This is the degree of responsiveness of quantity demanded of a good (e. g. A) to a change in the price of another related good (e. g. B). The cross elasticity of demand between goods A and B is

$EBA = \%\Delta QB / \%\Delta PA$.
$= \Delta QB / \Delta PA \times PA/QB$

For substitute goods, EBA is positive
For complementary goods, EBA is negative
For unrelated goods, EBA is zero

THEORY OF COST

The firms cost determine its supply. Supply along with demand demands price. To understand the principle of price determination and the forces behind supply we need to understand the nature of cost.

There are different types of cost. These are

1. Money (Accounting or explicit) cost:
   These are the total money expenses incurred by a firm in producing a commodity.

2. Economic (implicit) cost:
   These are the imputed value of the entrepreneurs own resources or services.

3. Production Cost:
   These are the expenses incurred by a firm on both fixed and variable factors (input) used in production

4. Real Cost:
   Efforts and sacrifices undergone by the various members of the society in producing a commodity e.g. effort of workers forgoing leisure.

5. **Opportunity Cost:**
   The opportunity cost of anything is the next best alternative that could be producing the same inputs.

6. **Private Cost:**
   It include explicit and implicit cost

7. **Social Cost:**
   The production activities of a firm may lead to economic benefit or harm for others. Production of petroleum product pollute the environment which is harmful to the residents, cost incurred in taking care of the harm is the social cost.

COST CONCEPT

Total Cost (TC):

Addition of fixed and variable cost, i.e.

TC = FC + VC

TC is divided into two; Total Fixed Cost (TFC); cost which do not vary with the level of output e.g. rend, machinery, wages of the permanent staff.

TFC = TC – TVC.

Total Variable Cost (TVC):

Cost which varies with the level of output e.g. raw materials, wages of factory workers etc.

TVC = TC – TFC

Average Cost (AC):

It is cost of producing one unit of output i.e.

AC = TC / Q

It is divided into two

1. Average Fixed Cost (AFC):

Cost of producing unit output

AFC = TFC/Q

Average Variable Cost (AVC):

Variable cost of producing one unit of output

AVC = TVC/Q

Marginal Cost (MC):

Cost of producing one extra unit of output or change in total cost (TC) as a result of producing one more unit of output i.e.

$MC = \Delta TC/\Delta Q$

SHORT-RUN AND LONG-RUN COST

Short-run: This is a period of time in which at least one input (factor of production) is fixed. A producer can only increase (or reduce) output by varying the variable inputs.

Long-run: This a period of time in which all factors of production are variable. A producer can increase (or reduce) output by varying all factors (inputs);

However, there is no fixed length of time in terms of weeks, months or years for either period. It depends on the type of industry of production unit.

THEORY OF PRODUCTION

Meaning of Production:
Production is the creation of goods and provision of services to satisfy human wants.

Forms/Types of Production

i. Primary Production:

This involves extraction of raw materials and food from nature, e.g. farming, fishing, mining etc.

ii. Secondary Production

This involves processing and conversion of raw materials into finished goods e.g. manufacturing, construction.

iii. Tertiary Production

This involves distribution of goods (trade and aids to trade) and rendering of services (direct and indirect) e.g. transportation, insurance, teaching, services of the lawyer etc.

Factors of Production

i. Land

Gift of nature used in production. E.g. soil, forest, fishing ground, rivers, minerals, vegetable, rocks etc.

ii. Labour

Human efforts (mental or physical) used in production process. Labour can be skilled e.g engineer, semi-skilled e.g. a carpenter and unskilled e.g. a cleaner

iii. Capital

Man-made assets used in the production process or wealth set aside for production of further wealth. Capital can be fixed. e.g factory building, circulating or working e.g. cash, raw materials and social e.g. infrastructural facilities

iv. Entrepreneur:

An entrepreneur is a person who organizes, control and coordinates other factors to obtain maximum output at minimum cost with a view of making profit.

REWARDS FOR FACTORS OF PRODUCTION
Land -rent
Labour -wages/salaries
Capital -interest
Entrepreneur –profit

MEANING OF A PRODUCT

Products are output or finished goods; that is, end result of a production process. They are goods or services which result from combination of appropriate quantities of factors of production. Examples of products are yam, beer, cement, hair-cuts, and legal services.

CONCEPT OF TOTAL, AVERAGE AND MARGINAL PRODUCT

Total Product: Total amount of output produced during some period of time by all factors of production employed.

Average Product: Output per unit of variable factor (labour or capital) employed
Average product = Total Product/Number of men (or capital employed.

Marginal Product: Addition to total product due to addition of one more unit of variable input.
MP = Change in total product / change in labour input

THE LAW OF DIMINISHING RETURN

The law states that as more and more of a variable input (e.g. labour) is applied to a fixed input (land), production will increase up to a point when the marginal and average product will begin to decrease. It is also called law of variable proportion. It is a short-run phenomenon.

THE LAW OF RETURN TO SCALE

This describes the relationship between output and the scale of input in the long-run when all inputs are increased in the same proportion. As the scale of production expand the effect on output shows three stages:

1. Increasing returns to scale – Increase in total output is more than proportional to the increase in all inputs

2. Constant Return to Scale – Increase in total output in exact proportion to the increase in input.

3. **Diminishing return to scale –** Increase in total output less than the proportionate to the increase in inputs.

PRODUCTION –POSSIBILITY FRONTIER

A production-possibility frontier (PPF), sometimes called a production-possibility curve, production-possibility boundary or product transformation curve, is a curve or graph showing the combination of two goods that can be produced given the available resources.

OPPORTUNITY COST IN PPC

The PPC slopes downward from left to right reflecting that opportunity cost is involved in any combination, i.e. if much resources is used to produce more of a goods, less resources will be available for the other.

The two main determinants of the position of the PPF at any given time are the state of technology and management expertise (which are reflected in the available production functions) and the available quantities and productivity of factors of production. Only point on or within a PPF are actually possible to achieve in the short-run. In the long-run, if technology improves or if the productivity or supply of factors of production increases, the economy's capacity to produce goods increases, i.e. economic growth occurs. This increase is shown by a shift of the production-possibility frontier to the right. Conversely, a natural, military or ecological disaster might move the PPF to the left, in response to a production in an economy's productivity. Thus, all points on or within the curve are parts of the production set. i.e., combination of goods that the economy could potentially produce.

MARKET STRUCTURE

A market is any arrangement or medium that brings buyers and sellers in to close contact to transact business. It may be a fixed place, by phone or through internet.

Classification of Market

Market is classified in two based on their features **– perfect and imperfect market**

Characteristics of Perfect Market

Generally, a perfectly competitive market exists when every participant is a price taker and no participant influences the price of the product it buys or sells. Specific characteristics may include;

Large number of buyers and sellers: - there is large number of buyers and sellers each of whom has no control over the ruling market price

Free entry and exit: - It is relatively easy for a business to enter or exit in a perfectly competitive market.

Perfect mobility of goods and factors: - goods can move to other places where they can sell them at higher prices and factors can also move from a low paid industry to a high paid industry.

Perfect Information: - Prices and quality of products are assumed to be known to all consumers and producers

Absence of transport costs: - No transport cost is involved in moving goods from one place to another and that is why same product has same price.

Profit Maximization Goal: - Every firm has one goal of maximizing its profit.

Homogeneous products: - The characteristics of any given market goods or services do not vary across suppliers.

Absence of artificial restriction: - Sellers are free to sell their goods to any buyer and buyers are free to buy from any seller of their choice.

Condition necessary for imperfect market

The features of imperfect market are usually the opposite to the perfect market when one or more conditions do not exist.

- Few buyers and sellers
- Difficult condition (barriers) of entry and exit
- Heterogeneous product goods in this market can be similar but not the same
- Lack of adequate information of market conditions
- Presence of preferential treatment

TYPES OF IMPERFECT MARKET

Monopoly: This is a market situation in which there is only one seller of a product which has no substitute.

Causes of Monopoly

- Patent rights
- Ownership of strategic raw materials
- Government legislation
- Large capital requirement
- Cartel formation – merger of two or more firms e.g. OPEC

Monopolistic Competition: a market where there are many sellers of similar products that can be differentiated using brand names e.g. Omo multi active, aerial, Klin etc. Here no one seller is large enough to dominate the market.

Doupoly: A market with only two sellers

Oligopoly: a market with a few sellers e.g. cements.

Monopsony: A market with a single buyers e.g. when consumers organized themselves as a unit.

Duopsony: A market with only two buyers

Oligopsony: A market with few buyers.

INDUSTRIALIZATION

A firm: this is an independently administered business unit carrying out production

An industry: is a group of firms producing similar or identical products or services e.g. all commercial banks.

Industrialization: Is a process of increasing the volume of production in industrial sector of the economy.

Localization of industry: is the location of industry

FACTORS AFFECTING THE LOCATION OF INDUSTRY

Raw materials: the factory needs to be close to these if they are heavy and bulky to transport.

Labour: A large cheap labour force is required for labour-intensive manufacturing industries. High-tech industries have to locate where suitable skilled workers are available.

Market: An accessible place to sell the products is essential for many industries:

- Those that produce bulky, heavy goods that are expensive to transport e.g. block industry
- Those that produce perishable or fragile goods bread and glass
- Those that provide services to people e.g. hair dressing, lawyer.

Transport: A good transport network is required to:

- to move materials from their source to industrial site
- To move finished goods from industrial site to the market
- To move workers to and from industrial site.

Nearness to capital: this is the money that is invested to start the business. The availability of financial institutions such as banks and stock exchange influence the sitting of many industries.

Government Policies: Industrial development is encourage in some areas and restricted in others. Industries that locate in depressed (development) areas may receive financial incentives from the government in the form of low-rent and rates.

ROLE OF INDUSTRIALIZATION IN ECONOMIC DEVELOPMENT OF THE COUNTRY

Increase in National Income

Industrialization makes possible the optimum utilization of the scarce resources of the country. If helps in increasing the quantity of various kinds of manufactured goods and thereby makes a large contribution to gross national product.

Higher standard of living

Industrialization helps in increasing the value of output per worker. The income of the labour due to higher productivity increases. The rise in income raises the living standard of the people.

Economic Stability

Industrialization is the best way of providing economic stability to the country. A nation which depends upon the production and export of raw material alone cannot achieve a rapid rate of economic growth. Industrialization will add value to these raw materials which can be consume locally or exported which promote economic stability.

Improvement in balance of payments

Industrialization brings structural changes in the pattern of foreign trade of the country. It helps in increasing the export of manufactured goods and thus earns foreign exchange. On the other hand, the processing of raw material at home curtails the import of goods and thereby helps in conserving foreign exchange. The export orientation and import substitution effects of industrialization help in the improvement of balance of payment.

Stimulates progress in other sector

Industrialization stimulates progress in other sectors of the economy.

Increased employment opportunities

Industrialization provides increased employment opportunities in small and large scale industries. In an agrarian economy, industry absorbs underemployed and unemployed workers of agricultural sector and thereby increases the income of the community.

Rise in Agricultural Production

Industrialization provides machinery like tractors, threshers, harvesters, bulldozers, transport, aerial spray etc., to be used in the farm sector. The increased use of modern input has increased the yield of crops per hectare. The increase in the income of the farmers has given boost to economic development in the country.

Development of Markets

With the development of industries the market for raw materials and finished goods widen in the country.

Increase in Government Revenue

Industrialization increases the supply of goods for internal external markets. The export of goods provides foreign exchange. The customs excise duties and other taxes levied on the production of goods increase the revenue of the state. The income tax received from the industrialist adds to the revenue stream of the government which eventually is spent for the welfare of the people as a whole.

PROBLEM OF INDUSTRIALIZATION IN NIGERIA

1. Inadequate Capital
2. Infrastructural constraints
3. Small size of market for industrial goods
4. Inadequate skilled manpower
5. Low level of technology
6. Unfavorable government policy
7. Political instability
8. A shortage of certain raw material

INDIGENIZATION POLICY IN NIGERIA

Indigenization policy in Nigeria is a deliberate effort by the government to encourage the active participation of indigenes in the industrial sector of the economy.

The federal Government in 1972 promulgated the Nigeria Enterprise Promotion Decree No. 4/1972. Its primary aims are;

1. To create more opportunities for Nigerians indigenous business men
2. To maximize local retention of profits
3. To raise the level of intermediate and capital goods production.

The decree was modified in 1977 to correct the shortcomings of the 1972.

OBJECTIVES OF INDIGENIZATION

1. To encourage greater participation of Nigerians in the industrial sector
2. To maximize local retention of profits
3. To reduce dependency on foreign economy
4. Reduction in unemployment with respect to Nigerians
5. To encourage retention of profit in Nigeria
6. To encourage locally manufacture goods.

Advantages

1. Promote indigenous participation in productive sector
2. Reduce the rate of capital flight abroad
3. Promote rapid industrialization process

Disadvantages

1. Could discourage foreign investors
2. Wealth could be concentrated in the hands of few and give way to exploitation.

BRANCHES OF ECONOMICS

Microeconomics

The word micro was derived from the Greek word ‘milkros’ meaning small. Microeconomics is the study of economic actions of individuals and small group of individuals and small group of individuals. It includes the study of a particular household, a particular firm(s), price of a particular commodity, wage of a particular labour, individual income etc. **Adam Smith is the founder of this branch**

Macroeconomics

Is also derived from Greek word 'makros' meaning large. It deals with aggregates of this quantities, not with individual income but national income, not with price pf a particular goods but general price level, not with wage of a particular labour but general minimum wage, etc., it discuses issues such as national income and output, employment, inflation etc. **modern macroeconomics was introduced by John Mayland Kynes.**

MONEY

Money is any object that is generally accepted as payment for goods and services and payment of debts in a given socio-economic context or country.

Functions of money

Medium of exchange: money is used to intermediate the exchange of goods and services, lit is performing a function as a medium of exchange. It thereby avoids the inefficiencies of a barter system, such as the double coincidence of wants problem.

Unit of Account: It makes accounting possible since the values of goods and services are measured in terms of money.

Store of Value: To act as a store of value, money must be able to be reliably saved, stored and retrieved – and be predictably usable as a medium of exchange when it is retrieved. The value of the money must also remain stable over time. Some have argued that inflation, by reducing the value of money, diminishes the ability of money to function as store of value.

Standard of deferred payment: Money enables goods and services to be sold now while payment takes place at a later date.

Measure of Value: Money offers a parameter for determining the value of wealth, goods and services.

QUALITIES OF GOOD MONEY

To be able to perform the function of money will, the money material must possess the following qualities

General Acceptability

The material of which money is made should be acceptable to all without any hesitation. In this connection, gold and silver are considered as good money material because they are readily acceptable to the general public. Apart from being used as money, these metals can also be put to other uses (e.g. making ornaments).

Portability

Money should be easily carried or transferred from one place to another. In other words, the money material must have large value in small bulk. On this ground, various animals cannot be used as money.

Durability

Money material must last for a long time without losing its value. Ice and fruits cannot become good money because they lose their value with the passage of time. Ice melts and fruits perish.

Divisibility

Money materials must be easily sub-divided to allow for the purchase of smaller units of the commodities. Cows, for example, cannot function as good money because a cow cannot be divided without losing its value; a fraction of cow is quite different entity than a whole cow.

Homogeneity

Money should be homogeneous. Its units should be identical; they should be of equal quality and physically indistinguishable. If money is not homogeneous, the individuals will not be certain of what they are receiving when they make transaction.

Reconcilability

Money should be easily recognized. If it is not easily recognizable, it would be difficult for the individuals to determine whether they are dealing with money or some inferior asset.

Stability

The value of money should remain stable and should not change for a long period of time. If the value of money is not stable, it will not be able to function as a measure of value, as a store of value and as a standard of differed payment.

Relative Scarcity

The commodity which is use to serve as money must be relatively scarce; otherwise, it will lose its value and people will have to carry large quantity of it to exchange with small quantity of goods and services.

TRADE BY BARTER

This is the exchange of goods for goods, services and goods for services.

Shortcoming of Barter System

1. Double coincidence of wants: A producer has to find someone who has what he wants and wants what he has or produces. It makes exchange clumsy, time consuming and very difficult.

2. The reverse of all qualities of money

TYPES/HISTORICAL STAGES OF MONEY

- The use of objects under barter system
- Commodity money e.g. cowries shells, beads etc.
- The use of metals e.g. gold, silver etc.
- The use of coins.
- Paper money – receipts which is the value of the gold kept with gold smiths.
- Flat currency
- Modern money – bank notes and coins created by CBN.

{Note completed}

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
FIRST SEMESTER CA / EXAMINATIONS
GST 104/EBS 114 PAST QUESTIONS AND ANSWERS.

Question 1

Economic a science which studies human behaviour as a relationship between ends and scarce means which have alternative uses "Ends" here refers to

(A) resources
(B) wants
(C) choice
(D)output

Question 2:

The price of the commodity is determine by the

(A) Supplier
(B) Consumer
(C) Quantity of goods demanded
(D) Interaction of demand and supply

Question 3:

In which of the following economic systems is the consumer referred to as "The king"?

(A) Planned economy
(B) Mixed economy
(C) traditional economy
(D) Free market economy

Question 4:

A normal demand curve

(A) is concave to the point of origin
(B) is convex to the point of origin
(C) is parallel to x-axis
(D) is parallel to y-axis

Question 5:
A demand schedule is
(A) a table containing the price of goods
(B) a table showing the relationship between price and quantity demanded of a commodity
(C) a table showing the consumer demand in order of importance
(D) The quantity of goods a consumer is prepared to buy

Question 6:
Which of these factors does not cause a change in demand?
(A) income
(B) Taste and fashion
(C) Population
(D) Price of the commodity concerned

Question 7:
When the price of commodity A increases, the demand for commodity B decreases, then, A and B are
(A) Close substitute
(B) Complementary goods
(C) Supplementary goods
(D) gifften goods

Question 8:
In any economic system, which of the following is not an economic problem?
(A) What goods and services to produce
(B) For whom to produce goods or services
(C) What technique of production to be adopted
(D) Equal distribution of the goods and services

Question 9:

An economic system in which most capital goods are owned by the individuals and private firms is known as
(A) mixed economy
(B) planned economy
(C) Capitalist economy
(D) Traditional economy

Question 10:
The coefficient of price elasticity of demand is zero when demand is
(A) fairly elastic
(B) Perfectly inelastic
(C) fairly inelastic
(D) Unitary elastic

Question 11:
When the demand of a commodity is inelastic, who bears greater burden of the indirect tax?
Option: The producer
Option: The government
option : The retailer
Answer: The consumer

Question 12:
All the following are sources of finance to a joint stock company EXCEPT
option : bank loan
option : equity shares
option : debentures
answer : cooperative thrift

Question 13:
Data presented in tables are usually arranged in
option : charts and tables
answer : rows and columns

option : graphs and rows
option : pictograms and columns

Question 14:
A firm is said to be a public joint stock company when it
option : is owned by the government
option : operate as a public corporation
option : is a limited liability company
answer : sells its shares to members of the public

Question 15:
One of the advantages of a sole proprietorship is that
option : risks are unlimited
option : technological progress is often out of reach
option : shares and stocks can be issued to raise funds
answer : initiative can be use in all cases

Question 16:
The money paid per hour or week for work done is known as
option : cost
option : time rate
option : bonus
answer : wage rate

Question 17:
Demand in Economics is synonymous with
option : need
option : wants of the consumers
option : all goods demanded in the market
answer : wants supported with ability to pay

Question 18:
A rational consumer tends to do all the following EXCEPT

answer : buying more at a high price than at a low price
option : buying more at a low price than at a high price
option : buying at utility maximization
option: complying with the law of demand

Question 19:
Limited liability in Economics means that
answer : A shareholder's liability in the event of debt or bankruptcy is limited to the amount he has invested
option : A shareholder's liability for the debt company is dependent on how much he is owing
option : Shareholders cannot be asked to pay for the debt of the company
option : Shareholders try to ensure that only a small proportion of the debt come to them

Question 20:
When a business has unlimited liability
option : the owners are not responsible for all its financial debts
option : all its profit can be taxed by the government
answer : the owners are responsible for all its financial debts
option : all its assets belong to the members of its board of directors

Question 21:
Choice is necessary because resources
option : are available
option : can be found everywhere
option : are constant
answer : are scarce

Question 22:

A movement along the demand curve for some goods may be caused by a change in
Option: consumer income
Answer: the price of goods
option : consumer taste
option : the price of other goods

Question 23:
A shift of the demand curve to the right when the supply curve remains constant, implies that
answer : both price and quantity demanded will increase
option : only price increases
option : both price and quantity demanded will decrease
option : the price remains constant

Question 24:
In the event of a limited liability company going into liquidation, each shareholders
Answer: may lose a maximum of amount he has invested
option : loses nothing
option : loses everything including his house
option : may have an unlimited liability

Question 25:
Which of the following is a public corporation?
option : Roads (Nigeria) Plc.
option : National Oil and Chemical Marketing Co., Plc.
option : Vokswadgen of Nigeria Plc.
answer: Federal Radio Corporation of Nigeria

Question 26:
A vertical demand curve shows
answer : perfectly inelastic demand
option : perfectly elastic demand

option : zero elasticity
option : fairly elastic demand

Question 27:
Opportunity cost is defined as the
option : money cost
option : cost of production
answer : real cost
option : variable cost

Question 28:
The equilibrium price of oranges is 50K. If for some reasons the price rises to 60K, there will be
option : excess demand
answer : excess supply
option : shortage in the market
option : many buyers in the market

Question 29:
A society that is on its production possibility curve
option : has attained full employment but not full production
option : has attained full production but not full employment
option : is using it resources ineffeciently
answer : has attained both full employment and full production

Question 30:
If the price of margarine rises substancially, the equilibrium price and quantity of butter demanded will
option : decrease
answer : increase
option : remain constant

option : fluctuate

Question 31:
Change in supply implies a
option : shift in supply curve to the right and not to the left
option : shift in supply curve to the left and not to the right
answer : shift in the supply curve to the left or to the right
option : movement along the supply curve

Question 32:
The real cost of a commodity is
option : the cost of the alternative that has to be sacrifice for it
answer : the alternative that has to be foregone in order to purchase it
option : its market price
option : the alternative cost involve when the opportunity of buying the commodity is mixed

Question 33:
Given that the demand and supply functions are
Q = 25 - 4p and Q = 40 + 5p respectively.
Determine the equilibrium price
answer : N1.67
option : N5.20
option : N4
option : N10

Question 34:
An inferior goods is one
option: that is too bad for consumption

option: whose price is lower than the prices of other goods
answer : whose demand falls when the income of its consumers increases
Option: that is easily perishable

Question 35:
Price elasticity of demand is defined as the
Answer: responsiveness of demand to changes in price
option : responsiveness to changes in demand
option : increase in demand resulting from a rise in price
option : unit decrease in price resulting from a fall in demand

Question 36:
The method by which a country approaches the major economic problem confronting her is known as
option : problem-solving approach
option : proactive measure
answer : economic system
option : reactive measure

Question 37:
In 2005, Mr Gorge's total demand for an item was 2500 units with an annual income of N300,000. In 2010, his total demand increased to 3000 units as a result of a 20% increase in his annual income. What is the coefficient of income elasticity?
option : 3
answer : 1
option : 1.6
option : 2

Question 38:

The demand for beans in bags is given by the function Q = 36 + 0.4p = 0, where p is price in naira and Q is the quantity, find Q when P = N20
option : 12 bags
option : 24 bags
answer : 38 bags
option : 30 bags

Question 39:
The satisfaction derived from the use of a commodity is its
option : demand
option : elasticity
option : wealth
answer : utility

Question 40:
The three principal economic units in any system are
option : trade, industry and banking
option : workers, consumers and shareholders
answer : households, firms and governments
option : companies, industries and plants