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SUBJECT; MICROECNOMICS

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Q1: Explain the following concepts;

1. The benefit principle;

The benefit principle is the idea that government spending should be happened by the people who receive them. In other words, everyone who receives government expenses should fund towards it.

2. Lump- sum Taxes;

A **lump-sum tax** is a special way of taxation, based on a fixed amount, rather than on the real circumstance of the taxed entity.

It is one of the several modes used for taxation: income, things owned (property taxes), money spent (sales taxes), various (excise taxes), etc. It is a regressive tax, such that the lower the income is, the higher the percentage of income applicable to the tax.

3. Marginal tax rate versus average tax rates;

Average tax rates measure tax burden, while marginal tax rates measure the impact of taxes on incentives to earn, save, invest, or spend.

4. Proportional tax;

A proportional tax is an income tax system that levies the same percentage tax to everyone regardless of income. A proportional tax is the same for low, middle, and high-income taxpayers. Proportional taxes are sometimes referred to as flat taxes.

5. Regressive tax;

A regressive tax is a tax applied regularly, taking a larger percentage of income from low-income earners than from high-income earners. It is in opposition to a progressive tax, which takes a larger percentage from high-income earners.

6. Progressive tax;

A progressive tax is a tax that enforces a lower tax rate on low-income earners related to those with a higher income, making it based on the taxpayer's capability to pay. That means it takes a larger percentage from high-income earners than it does from low-income individuals.

Q2: Define elasticity and explain the following elasticity concepts;

Elasticity;

The ability of an object or material to resume its normal shape after being stretched or compressed; stretchiness.

"Aging can decrease the elasticity of your skin"

1. Income elasticity;

He income elasticity of demand is the responsiveness of the quantity demanded for a good to a change in consumer income. It is measured as the ratio of the percentage change in quantity demanded to the percentage change in income.

2. Price elasticity;

It is the degree of responsiveness of quantity demanded of a commodity due to change in price, other things remaining the same.

3. Cross price elasticity of demand;

The cross elasticity of demand is an economic concept that measures the sensitivity in the quantity demanded of one good when the price for another good changes. Also called cross-price elasticity of demand, this quantity is calculated by taking the percentage change in the quantity demanded of one good and dividing it by the percentage change in the price of the other good.

Q3: (a) Define Monopoly and explain characteristics of Monopoly?

Monopoly;

The word monopoly is a Latin term. MONO means single and Poly means Seller.
Monopoly is a form of market organization in which there is only one Seller of the commodity.
There is no close substitute for the commodity sold by the seller.

Characteristics of Monopoly;

- There is only a single seller of a product or service in the market.
- The goods produced by a sole seller have not close substitute.
- The entry of new firm into the industry is effectively barred by legal or natural barriers.
- The firm being the sole supplier of a product constitute industry.
  Firm and thus have single identity.

B.Discuss price determination under monopoly;

A firm under monopoly faces a descending sloping demand curve or average revenue curve. Therefore, the monopolist will be in balance at output OM where marginal revenue is equal to marginal cost and the profits are the greatest.

Q4: Discuss the following models;

The Cournot Model;

Cournot competition is an economic model describing an industry structure in which rival companies offering an identical product compete on the amount of output they produce, independently and at the same time. It is named after its founder, French mathematician Augustine Cournot.

- Cournot competition is an economic model in which competing firms choose a quantity to produce independently and simultaneously.

- The model applies when firms produce identical or standardized goods and it is assumed they cannot collude or form a cartel.

- The idea that one firm reacts to what it believes a rival will produce forms part of the perfect competition theory.

  According to the law of supply and demand, higher output drives down prices, while lower output raises them. As a result, companies must consider how much quantity a competitor is likely to churn out to have a better chance of maximizing profits.

The Stackelberg Model:

The Stackelberg leadership model is a strategic game in economics in which the leader firm moves first and then the follower firms move chronologically. It is named after the German economist Heinrich Freiherr von Stackelberg who available Market Structure and Equilibrium (Marktform und Gleichgewicht) in 1934 which described the model.

In game theory terms, the players of this game are a leader and a follower and they enter on quantity. The Stackelberg leader is sometimes referred to as the Market Leader.

There are some further controls upon the behind of a Stackelberg equilibrium. The leader must know *ex ante* that the follower observes its action. The follower must have no means of committing to a future non-Stackelberg leader's action and the leader must know this. Indeed, if the 'follower' could commit to a Stackelberg leader action and the 'leader' recognized this; the leader's best response would be to play a Stackelberg follower action.

Firms may engage in Stackelberg struggle if one has some sort of advantage enabling it to move first. More generally, the leader must have commitment power. Moving observably first is the most clear means of promise: once the leader has made its move, it cannot undo it - it is committed to that action. Moving first may be possible if the leader was the incumbent monopoly of the industry and the follower is a new applicant. Holding excess volume is another means of promise.

Thank you