Microeconomics D1

Topic - cardinal approach.

Consumers equilibrium is a situation in which a consumer has allocated his given income on different available commodities in such a manner that gets the highest possible utility.

cardinal approach to the determination of consumer's behaviour postulates that utility can be measured. The utility can be measured by the monetary units that the consumer is willing to pay for another unit of the commodity.

Approach is based on two further assumptions :-

Axiom of diminishing marginal utility - The utility gained from successive units of a commodity diminishes.

The total utility of a basket of goods depends on the quantities of individual commodities.

If there are n commodities in the bundle with quantities q1

$q_2 \cdots q_n$ the total utility is

$U = f(q_1, q_1 \cdots, q_n)$

The theory states that the condition for the equilibrium of the consumers is the quantity equality of the ratios of the marginal utilities of the individual commodities to their prices.

$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y} = \cdots \frac{MU_n}{P_n}.$$

The utility derived from spending on additional unit of money must be same for all the commodities.

Derivation of Demand curve

Inverse relation b/w prices and quantity demanded for a normal commodity can be derived with the help of condition laid down for consumer's equilibrium

$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y} = \cdots \frac{MU_n}{P_n}$$

Weaknesses

The assumption of cardinal measurement is highly doubtful. Utility is a subjective phenomenon as such it cannot be measured in any objective numbers.

- The axiom of diminishing marginal utility has been established from introspection.