Microeconomics deals with individual units, problems and provides solution of resource allocation problem.

Macroeconomics deals with national level problems and provides solution of resource utilisation problem.

Classical and neo classical economists contribute in microeconomic theories.

Keynes contributes in macroeconomic theories.

Macro is also known as theory of income and employment.

Micro is known as price theory.

Divide economics on the basis of objective of economic activity

↑

And Ragner Frisch (1933)

↑

Resources/wealth

↑

Economics with

↑

Concerned
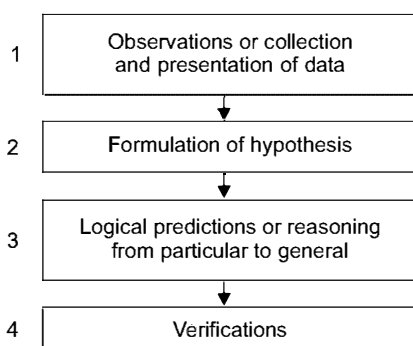
↑

Adam Smith (1776) (origion of Economics)

Flowchart 1.4: Main branch of Economics (modern division of economics)

B. Inductive Method

An another popular method for constructing economic model is "Experimental Method" or "Historical Method" or analytical method or statistical method or a post-priori method or empirical method. This method is favoured by Roscher, Hilderbrand and Fedrik list and cliffie leslie. In this method, researcher goes from particular to general or induction is the process of reaching from particular to general.

```
1    ┌─────────────────────────────┐
     │  Observations or collection │
     │  and presentation of data   │
     └──────────────┬──────────────┘
                    ↓
2    ┌─────────────────────────────┐
     │   Formulation of hypothesis │
     └──────────────┬──────────────┘
                    ↓
3    ┌─────────────────────────────┐
     │  Logical predictions or reasoning │
     │  from particular to general │
     └──────────────┬──────────────┘
                    ↓
4    ┌─────────────────────────────┐
     │        Verifications        │
     └─────────────────────────────┘
```

Flowchart 1.6 : Steps of the inductive method by Clarke

Dr. Engles "Consumption Law" and Malthus "Population Law" are based on this method.

i. Merits of induction method

• More realistic conclusion.
• Dynamic approach.
• Helps in future investigations.

ii. Demerits of induction method

• Possibility of bias.
• Limited scope of verification.
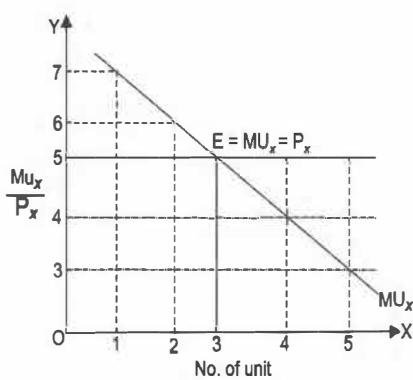• Experience method.
• Limited scope.
• Incomplete method.

Fig. 2.4: Consumer choice

According to Table 2.4 and Figure 2.4 consumer is equilibrium at 3 units where

$$MU_x = P_x$$
$$5 = 5$$

(i) Consumer equilibrium in case of single commodity when MU is measured in terms of utils and P_x is in ₹ (Rupees)

To take decisions by consumer in this case, A new concept is used to convert MU in utils to ₹ that is known as "Measuring Rod" or "Converting unit" and that is MU_m (Marginal utility of money). So, MU_m is satisfaction getting from the goods (Basket of goods) which are purchased by the one additional unit of currency. Assume $MU_m = 2$ utils $P_x = 4$ ₹ and MU_x (utils) is given then a consumer takes decision by

a. MU_m (Marginal Utility of Money in utils)
b. MU_x (Marginal Utility of good X in utils)
c. P_x (Price of commidity X in ₹)

Table 2.5: Consumer choice in case single commodity

Sr. No.	MUx (util)	Utility convert in (util) $=\dfrac{MU_x util}{MU_m util}$	Price (₹) term of money (P_x)	Decision
1.	12	$\dfrac{12}{2} = 6 > 2$	4	More purchase

Contd.

Causes of Diminishing MRS$_{xY}$

- **Law of diminishing utility operates**: If a consumer takes more and more unit of one good that good is utility diminishes and that good he sacrifices, utility increasing so the substitution between good (trade off) will be at diminishing rate.

- **Goods are near substitute**: Goods are not homogenous (perfect substitute). These are near substitutes because of this, MRS_{xy} is diminishing.

If goods are homogenous or perfect substitutes then MRS_{xy} is constant and *IC* curve is straight line and if goods are complimentary then there is no substitution between goods and $MRS_{xy} = 0$ then *IC* is right angled or L shaped curve.
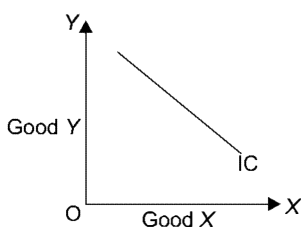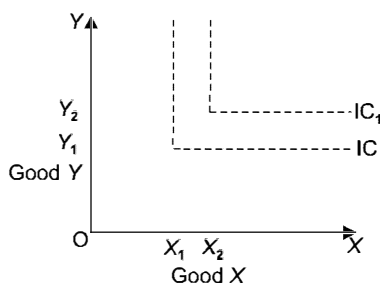

Fig. 2.9: Substitute good   Fig. 2.10: Complimentary good

iv. **Higher IC shows higher satisfaction**: Shift in indifference curve shows the total change in utility as the quantities of both commodities change. The total change in U is caused by change in Y and X.

So, it becomes a family of indifference curve is called indifference curve map.