## PAPER 4026 UNIT : II CENTRAL PLACE THEORY

Central Place Theory is a geographical theory which attempts to explain the spatial arrangement, size, and number of settlements in an urban system. The German geographer Walter 181 Christaller introduced central-place theory in his book entitled Central Places in Southern Germany. The theory was originally published in 1933. Walter Christaller, who studied the settlement patterns in southern Germany, asserted that settlements simply functioned as 'central places' providing services to surrounding areas. In the flat landscape of southern Germany Christaller observed that towns of a particular size were roughly equidistant. By examining and defining the functions of the settlement structure and the size of the hinterland he found it possible to model the pattern of settlement locations using geometric shapes.

This theory still remains the single most important basis for analysing settlement systems. The essence of this theory is that a certain amount of productive land supports a settlement.

This in turn provides essential services to this land, referred to as complementary area or service area or tertiary area. The settlement itself is a central place. The extent of the tributary area varies with the size of the central place. Size in this case actually relates to the functions performed.

It is observed that a settlement system is made up of settlements of different sizes that fall into hierarchical order. Each of these will have its own tributary area whose size will be determined by the central place. A large tributary area will include several small ones and smaller central places will depend on larger ones for higher order functions. As a result there will be a nested hierarchy of service areas. Theoretically each central place would have a circular tributary area around it. This geometrical pattern of settlement will create overlapping portions. It may also leave a blank or no service area. To solve this problem the perimeters should be flattened so that hexagons are made that fit against each other without overlaps or blanks. Larger central places and their tributary areas would enclose lower order networks. With the emergence of higher and higher order of settlements, the process of nesting continues until the largest settlement of a system emerges as the regional capital and the entire region falls within its tributary area. At each level the sizes of each of the tributary areas remain equal and they are placed side by side. The central places belonging to the same level would be found equidistant from each other. To develop the theory, Christaller made the following simplifying assumptions: All areas have:

I. an unbounded isotropic i.e. all flat, homogeneous, limitless surface or abstract space, so no barriers would exist to impede people's movement across it.

II. an evenly distributed population

III. all settlements are equidistant and exist in a triangular lattice pattern

IV. resources would be evenly distributed

V. distance decay mechanism

VI. perfect competition prevails so all sellers are economic people maximizing their profits

VII. consumers being of the same income level have the same shopping behaviour

VIII. all consumers have a similar purchasing power and demand for goods and services

IX. Consumers visit the nearest central places that provide the function which they demand. Hence, they minimize the distance to be travelled

X. no provider of goods or services is able to earn excess profit for each supplier has a monopoly over a hinterland. As a result, the trade areas of these central places who provide a particular good or service must all be of equal size

XI. There is only one type of transport which helps easy movement in all directions XII. transport cost is proportional to distance travelled so, the longer the distance travelled, the higher would be the transport cost .

## The advantages of central place theory

1. The theory describes the spatial pattern of urbanization. No other economic theory explains why there is a hierarchy of urban centres.

2. It also describes the location of trade and service activity.

## **Disadvantages of central place theory**

- 1. Large areas of flat land are rare,
- 2. Government intervention can dictate the location of industry
- 3. Perfect competition is unreal with some firms making more money than others.
- 4. People vary their shopping trends, not necessarily going to the nearest centre
- 5. People or resources are never perfectly distributed

6. Christaller envisaged each centre with a particular function while they had many changes over time.