

### C) Area, Place and Region:-

The concepts Area, place and regions have been developed by geographers to make sense of the world.

**Area**:- It is defined as a part of space or earth's surface having definite extent. Although an important characteristic of an area is its extent, but it can be of any size. It is a generic concept (2+1+1+2) and therefore it does not have a definite location.

**Place**:- It is an area of definite or indefinite boundary characterised by particularity and specificity in terms of its physical and cultural characteristics or functions. Physical characteristics of a place include landforms, water bodies, soils, temperature, rainfall, wind and animal and plant life. Human characteristics include human settlements, language, religion etc. It has defined absolute location, site and situation. It acquires its characteristics due to constant and dynamic interaction between physical and human elements over a long period of time. A place is also defined by the meaning people attach to it.

**Region :-** It is a highly evolving concept. Regions are characterized by some sort of characteristic that unifies the area. Thus, unlike place, a region is defined as a homogenous area of considerable extent and size having specific location on the earth's surface. Region can be formal, functional, instituted or vernacular.

#### D) Network :-

It is a set of elements interconnected to each other - a set of linked nodes. A spatial network may be viewed as a network of spatial elements. Spatial elements are those, which are located or distributed elements on the earth's surface. Transport networks belong to the wider category of spatial networks. On the other hand, biological system, social network, are examples of non-spatial networks. Geographers are interested in spatial networks.

A symbolic representation of a network and of its connectivity is referred to as graph. It is a set of nodes connected by links. Two most important elements of spatial networks are vertex (nodes) and edge (links).

A vertex (node) is a intersection point or terminal point on a graph. In transport network examples of nodes are road intersection and transport terminal (eg station, harbours & airport).

An edge is a link between two nodes. In transport network edges are the transport infrastructure supporting between movements between nodes. An edge is characterized by direction.

Human geographers are interested in the study of the ways human's social, economic and cultural elements are organized and structured on earth's surface.

### 5) Spatial Interactions:-

The term spatial interaction was coined by Edward L. Ullman (1954) to indicate interdependence between geographical areas. He considered this interdependence as complementary to the society-environment interdependence within a single area.

The relationship of interdependence established between places due to movement of people, goods, services, money, information and ideas is called spatial interaction.

The concept of spatial interaction is similar to the concept of the "geography of circulation". The term circulation refers to all kind of movement.

Edward Ullman has defined 3 basic factors affecting spatial interaction in terms of commodity flow between two regions.

(i) **Complementarity**:- It relates to the character of areas. For interactions between two regions or places to take place, first there must be a demand in one place which can be met from another place. Second the place of demand must be able to pay for the supply so that a two way movements develop. Thus, makes the two places complementary which is the basis of interaction.

(ii) **Transferability**:- It relates to the character of the commodities. Interaction b/w complementary regions will take place if the product can be moved which to some extent depends on the nature of commodity. The transfer of a product is largely determined by the cost of movement. It decreases as economic distances increases.

(iii) **Intervening opportunities**:- It refers to the existence of a closer supply or markets. Interaction between complementary regions can take place if they are no intervening opportunities for buyers and sellers to get what they require more easily. If ~~they are~~ there are closer source of supply of a particular product then the buyer would tend to purchase from closer source/market.