**Department of Geography**

**B.A. /B.Sc. (IIISemester SEC)**

**Thematic Cartography**

**Topic: Concept of Thematic Cartography: Importance of Thematic Map**

Cartography can be defined as a branch geography that studies the art, science and techniques of

map and chart making. The map of an area can be prepared with the help of original ground

survey. Making of charts, globes and relief model is also included in cartography. Almost all the

branches of knowledge make use of some amount of cartography for the representation of data in

the form of maps and charts. According to F.J. Monkhouse, Cartography is “in widest sense, the

whole series of map making, from an actual survey of the ground to printing the map; in a more

limited sense, the drawing of a map.”

From the above definition it is quite clear that the main purpose of cartography is the making of

maps, globes, diagrams, charts, model etc. This gives us an idea of the magnitude, variety and

interrelationship of the process involved in it. Thus the scope of cartography is very wide and

extensive. Recently, several specialized branches of cartography have been emerged. These

include geographical cartography, statistical cartography, digital cartography, thematic

cartography (cartographic techniques specialises in preparing maps, charts and globes on

particular themes or subjects) and journalistic cartography.

Thematic Map: An Introduction

A map can be defined in most simple terms as a representation of earth or a part thereof, on plane

surface and this representation is true to scale and depicts direction accurately. Maps have been

classified on the basis of scale and purpose. On the basis of scale, it is categorised into large

scale and small scale. On the basis of purpose, maps can be classified in to two types. These are

general purpose maps and thematic maps. In this chapter, we will learn more about thematic

maps.

A thematic map is also known as special-purpose, single-topic, or statistical map. Thematic

map is a type of map specially designed to show a particular theme or purpose. It can portray

physical, social, political, cultural, economic, sociological, or any other aspects of a city, state,

region, country, continent, or the entire globe. A thematic map is designed to serve a special

purpose or to illustrate a particular subject, in contrast to a general map, on which a variety of

phenomena appear together, such as landforms, lines of transportation, settlements, and political

boundaries.

Thematic map is just opposite of Topographic map, which show the wide variety of

information in a single map. Thematic maps also emphasize spatial variation of one or a number

of geographic distributions. These distributions may be physical phenomena such as climate or

human characteristics such as population density and health issues.

Today thematic maps have acquired special status in modern cartography as they portray special

variations of a single phenomenon or the relationships between phenomena. They deal with a

large variety of geographical phenomena such as geomorphology, soil, climate, agriculture, land

use, irrigation, industry, economic development, population and social dimensions etc. Such

maps highlight the most important structural element of a natural or cultural land scape or of

regional economic activites. For example, in agricultural land scape, the map has to show the

types of agriculture (agricultural typologies) as well as their regional differentiation rather than

the distribution of a certain agricultural product. The National Atlas and Thematic Mapping

Organization (NATMO, Kolkata), has prepared several types of thematic maps of India. These

include Geomorphic Maps, Climatic Maps, Population Maps, District Planning Maps, Transport

Map, Land Use Map, Industrial Map, Cultural Maps, Environmental Maps etc. The organization

has also produced Planning Atlas of Uttar Pradesh and Bihar.

**Uses of Thematic Maps**

Thematic maps serve three primary purposes.

1. They provide specific information about particular locations.
2. They provide general information about spatial patterns.
3. They can be used to compare patterns on two or more maps.

Common examples are maps of demographic data such as population density. When designing a thematic map, cartographers must balance a number of factors in order to effectively represent the data. Besides spatial accuracy, and aesthetics, quirks of human visual perception and the presentation format must be taken into account.

**Importance of Thematic Maps**

 Thematic Map is based on a specific theme or a particular subject. It provides specific

information about particular locations.

 It shows single information (e.g. weather, rail route, air route, road route, population

density etc.) in a map. While the general map shows a variety of features (multiple

information) in a single map.

 Thematic maps can be used to compare patterns on two or more maps (e.g. income

distribution of a region in two time period). In other words, we can say that the Thematic

maps are useful in studying the relationship between two or more variables in a region.

 The geographical, social, physical, political, cultural and economic aspects of a region can

be analysed with the help of thematic map.

 Thematic Maps can be used for spatial data analysis, formulating hypotheses, synthesizing

spatial data by revealing patterns and relationships, and data presentation.

 Thematic Maps are based on base map and statistical data. These two elements are

prerequisite for the making of a thematic map.

 Thematic maps use various colours, symbols and shades to depict a particular theme e.g.

population density, income distribution, population distribution etc. The use of various

colours, shades and symbols makes it unique.

 Thematic Maps are very easy for the students and researcher to use and understand.