

5. Thematic Mapping: Concept & Types

Q: **What is thematic map?** / (Concept of thematic map)

What are the types of thematic map? 5 + 5 = 10 marks

Ans: Thematic map focuses on a specific theme. A thematic map shows the spatial distribution of one or more specific data for selected geographic areas. The map may be qualitative or quantitative in nature.

Example of qualitative map: Farm types, Vegetation types, soil types etc.

Example of quantitative map: Percentage of population, Amount of rainfall, amount of crop production etc.

A thematic map is also called a special purpose, single topic or statistical map. Thematic map focuses on the specific distribution or theme. It generally includes some locational information.

All thematic maps are composed of two important elements:-

- i) A base map
- ii) Statistical data

Thematic map can be used for:

- i) Spatial data analysis
- ii) Confirming hypothesis
- iii) Synthesizing the data/ showing relationship or pattern
- iv) Data presentation

Types of thematic map: There are seven types of thematic maps, they are:-

- i) Choropleth map
- ii) Dot distribution map
- iii) Graduated symbol map
- iv) Heat map
- v) Cartogram
- vi) Bivariate choropleth map &
- vii) Value by Alpha map

i. Choropleth map:

- Most frequently used map in Geospatial data
- Here colour is used to represent statistics of an attribute

ii. Dot Distribution map:

- Also known as dot density map
- It uses different types of dots to represent features
- It can visualize the spatial pattern

iii. Graduated symbol map:

- It is an alternative to choropleth map
- It uses points
- The data is likely to store in polygons

iv. Heat map:

- A heat map shows hot spots or concentration of points.
- This method is used when geographical boundaries are not much importance

v. Cartogram:

- In cartograms, the size of an area is rescaled to be proportional to the feature it represents.

- Sometimes cartograms distort area sizes
 - Contagious cartogram is mostly used. Here topology is maintained but shape distorted.
- vi. Bivariate choropleth map:
- It uses two variables on the map
 - This method compares two dissimilar distributions on the same map.
- vii. Value by Alpha map:
- It is also a kind of bivariate choropleth map.
 - Two variables is used to affect each other
 - The second variable acts as an equalizer.

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