

PAPER NO- 6: Thematic Cartography

Course Objectives

The aim of this paper is to introduce the concept and elements of map design. Students learn to present data on maps by using quantitative mapping techniques. They will also prepare a thematic atlas. The outcome of this paper will increase the ability of map making, designing and instrumentation of geographical techniques to the students.

1. Map Design

1.1 Goals and Process of Map Design

1.2 Elements of Map Design

1.3 Data Classification

- Slocum, T. A., Robert, B. M., Fritz, C.K. and Hugh, H.H. (2009) Thematic Cartography and Geovisualization, Pearson Prentice-Hall. Chapter 12
- Dent, B. (1993) Cartography-Thematic Map Design, Wm.C.Brown Publishers. Chapter 6.

2. Diagrammatic Representation of Data

2.1 Flow Map

2.2 Line Graph

2.3 Bar Diagram

- Dent, B. (1993) Cartography: Thematic Map Design, Wm.C. Brown Publishers, McGraw Hill. Chapter 9.
- Campbell, J.O. (2006) Map Use and Analysis, McGraw Hill, New York. Chapter 15

3. Thematic Mapping Techniques

3.1 Quantitative Technique: Thematic Choropleth.

3.2 Techniques of Mapping Point Phenomena- Dot and Proportional Circles.

3.3 Geographical Volume: Israthmic-Isopleth.

- Dent, B. (1993) Cartography: Thematic Map Design, Wm.C. Brown Publishers, McGraw Hill. Chapter 6
- Slocum, Terry et al. (2009) Thematic Cartography and Geovisualization, Pearson Prentice-Hall. Chapter 17 and 19

4 Thematic Maps – Preparation and Interpretation of 5 Plates

Practical Record: A Thematic Atlas should be prepared on a specific theme with five plates for any state in India.

Further Readings

- Mishra, R. P. and Ramesh, A. (1989) Fundamentals of Cartography, Concept, New Delhi.
- Peterson, G.A. (2009) GIS Cartography: A Guide to Effective Map Design, CRS Press, Taylor and Francis.
- Sharma, J. P. (2011) Prayogic Bhugol, Rastogi Publishers, Meerut.
- Singh, L. R. and Singh, R. (1977) Manchitra or Pryaogatamek Bhugol, Central Book Depot, Allahabad
- Singh, R. L. and Singh, R. P. B. (1999) Elements of Practical Geography, Kalyani Publishers.
- Tyner, J.A. (2010) Principles of Map Design, Guilford Press.