

Semester I

105: Tools and Techniques in Geoinformatics

Unit 1: Basics of Remote Sensing

20 Lectures

- 1.1 Interpretation of remotely sensed data- satellite imagery and aerial photographs
- 1.2 Calculation of scale, height, distance in aerial photographs
- 1.3 Downloading and using satellite data from free platforms
- 1.4 Use of BHUVAN website

Unit 2: Projections and Scale

20 Lectures

- 2.1 Construction of projections- all types
- 2.2 Advantages, disadvantages and uses of projections
- 2.3 Concept of scale, types, conversion, drawing scale from maps
- 2.4 Map layout components

Unit 3: Understanding the World through Maps and Pictures

20 Lectures

- 3.1 Cartographic techniques of mapping- choropleth, isopleth, dot
- 3.2 Interpretation of various maps- NATMO, thematic, weather
- 3.3 Construction of maps- mental maps, pace surveys
- 3.4 Construction of pictures- diagrams, sketches, cartoons

References

1. Anson, R. W. and Ormeling, F. J., (Ed.) (1993): Basic Cartography for Students and Technicians, Vol.I, International Cartographic Association and Elsevier Applied Science Publishers, London.
2. Monkhouse F.J.- Maps & Diagrams, Methuen and Co., London, 1971 (3rd Edition, Revised)
3. Misra R. P. and A. Ramesh, (1969): Fundamentals of Cartography, Prasaranga, University of Mysore
4. Sarkar Ashis – Practical Geography, Orient Black Swan – 2015
5. Robinson, A. H. and Others (1995): Elements of Cartography, VI Edition, John Wiley & Sons, New York.