

**5th SEMESTER
SKILL ENHANCEMENT COURSE**

GG517S: GIS & GPS APPLICATION

CREDITS: THEORY: 2, PRACTICAL: 2

THEORY (CREDITS: 2)

UNIT-I

- 1) Definition and Scope of GIS
- 2) Components of GIS
- 3) Spatial and Non-spatial Data
- 4) Data Processing and Analysis

UNIT -II

- 1) Global Positioning System- An Introduction
- 2) GPS Structure (Segments)
- 3) Fundamentals of GPS Positioning

PRACTICALS: (Credits: 2)

UNIT - III

- 1) Generation of Thematic Layers-Point, Line & Polygon - **(18 exercises)**

UNIT -IV

- 1) GPS operations: Calibration-Determination of Latitude, Longitude and Altitude **(10 Exercises)**
- 2) Mapping of Different Land Use/Land cover Parcel With GPS **(10 Exercises)**

Suggested Readings

1. Kali Charan Sahu, Textbook of Remote Sensing and Geographic Information System, Atlantic Publishers and Distributors 2008
2. B.C. Panda, Remote Sensing- Principles and Applications, Viva Books 2008
3. Jensen, R Fundamentals of Remote Sensing. Shree Maitree Printech Pvt Limited Noida 2007
4. Gopal Singh, Map World and Practical Geography, Vikas Publishing House 2000