

Department of Geography
(Prof. Rajendra Singh (Rajju Bhaiya) University, Prayagraj)

Vocational/skill development Course:
(BASICS OF REMOTE SENSING AND GIS)

Credits:03

Course Code: I010011T

MM=100

Course Objectives: To understand the basic idea of Remote sensing Techniques and Geographical Information System and its application.

Unit	Topic	No. of Hours
I	Remote Sensing: Meaning, Definition, and Scope; Historical Development; EMR Characteristics, spectral regions and bands. Stages or Process of Remote Sensing.	15
II	Remote sensing satellites: Platform and sensors. Resolution: Spatial, Spectral, Temporal, Radiometric Resolution. Types of Satellites.	10
III	Remote Sensing data processing and applications: Visual and digital image processing techniques. Remote sensing Application	10
IV	Introduction to GIS: Definition, and development of GIS, Elements of GIS. Raster and vector data.	10

REFERENCE BOOKS:

1. Choniya, D D, (2016) Sudur Samvaden evam Bhogolic Suchna Pranali ke sighthant, Sharda Pustak Bhavan, Allahabad.
2. Lillesand, T.M. and Kiefer, R.W. (2000): Remote Sensing and Image Interpretation. 4th edition. John Wiley and Sons, New York
3. Campbell, J.B. (2002): Introduction to Remote Sensing. 5th edition, Taylor and Francis, London
4. Bhatta, B. (2010): Remote Sensing and GIS, Oxford University Press, New Delhi.

1. This course can be opted as an elective by the students of All subjects: Open for all

2. Evaluation Methods: (Internal Evaluation)

- **Practical (Training) = 60 Marks**
- **Theoretical Exam = 40 Marks**
- **Minimum Passing Marks = 40%**

3. Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as “SWAYAM” in India and Abroad.