

	Indraprastha College for Women University of Delhi Work Plan for ODD SEMESTER –2026
Course Name:	B A Hons. Geography
Paper Title:	Fundamentals of Remote Sensing (Practical)
Unique Paper Code:	2292102303
Semester:	3rd
Faculty(s):	Dr Aakash Upadhyay
Year:	August 2026 - December 2026

Work Plan			
Period	Unit No.	Learning Objective	Topics to be Covered
1 st Aug -3 rd Aug	Unit 1	Basic understanding on Satellite Remote Sensing and its application	Basic Concepts and Definition Understanding the Principles and Resolutions EMR Interaction with Atmosphere and Earth's Surface Major Satellites and Sensors (LANDSAT, IRS, IKONOS, SPOT, MODIS, Sentinel, QUICKBIRD), any Two
5 th Aug-10 th Aug	Unit 2	Aerial Photos	Geometry and Types of Aerial Photography, Stereoscope, Annotation, Interpretation Keys, and Interpretation
12 th Aug-17 th Aug	Unit 2	Aerial Photos	Calculation of photo scale, Orientation of Aerial Photo, Annotation and Interpretation Keys
19 th Aug-24 th Aug	Unit 3	Downloading the satellite Images (Bhuvan and LANDSAT data) and interpretation of Images	Basics of Downloading Bhuvan Data Downloading LANDSAT data (EARTHDATA) Band-wise reflection of EMR
26 th Aug-31 st Aug	Unit 4	Satellite Image Processing Image Processing Techniques	Satellite Image Processing Explaining DIP, Pre-processing, Image Enhancement T and other processing techniques
2 nd Sep-7 th Sep	Unit 4	Image Classification	Unsupervised Classification, LULC Classification, Geometric Corrections
9 th Sep-14 th Sep	Unit 5	Application of Remote Sensing:	Introduction and Theoretical Background
16 th Sep-21 st Sep	Unit 5	Practical Demonstration	Land Use/ Cover

23 rd Sep-28 th Sep	Unit 5	Hands-on exercises	Urban Sprawling
30 th Sep-5 th Oct	Unit 5		Vegetation Monitoring
7 th Oct-12 th Oct	Practical		Hands-on Exercise
14 th Oct-19 th Oct	Practical		Hands-on Exercise
18 th Oct-25 th Oct		BREAK	MID-SEMESTER BREAK
27 th Nov-2 nd Nov	Practical		Hands-on Exercise
4 th Nov-9 th Nov	Practical		Hands-on Exercise
11 th Nov-16 th Nov	Practical		Hands-on Exercise
20 th Nov	DISPERSAL OF CLASSES		

Unit	TOPICS
I	Introduction to Remote Sensing
II	Aerial Photos: Geometry and Types of Aerial Photography, Stereoscope, Annotation, Interpretation Keys, and Interpretation
III	Satellite Remote Sensing
IV	Satellite Image Processing
V	Application of Remote Sensing
S. No.	Name of Authors/Books/Publishers
1.	Anji Reddy, Remote Sensing and Geographical Information Systems, BS Publications 2001
2.	Lillesand T.M. and Kiefer R.W. Remote Sensing and Image Interpretation, John Wiley and Sons, Inc, New York.
3.	Barrow, G. M., 1962, Introduction to Molecular Spectroscopy, New York, McGraw-Hill.
4.	Hunt, G. R, Salisbury, J. W., and Lenyoff, C. J., 1973, Visible and Near Infrared Spectra of Minerals and Rocks. V11. Acidic Igneous Rocks, Modern Geology, Vol. 4, pp 217-224.
5	Campbell, J. C., and Wynne, R. H. (2022) Introduction to Remote Sensing, 5th ed. The Guilford Press. New York 622p.

	Paper Components		
Credits	Lecture (L)	Tutorial (T)	Practical (P)
4	0	0	8
Assessment Scheme			

S.No.	Component	Marking Scheme	Total Marks
1	Internal Assessment • Assignment/Quiz/Project/Presentation	25 Marks File Record	25
2.	Continuous Assessment	CA 1 – 15 Marks	15
3	End Semester Exam	80 Final Exam 40 Viva	120