

**Advance Course on “HYPER SPECTRAL REMOTE SENSING”**

13<sup>th</sup> February 2012 – 30<sup>th</sup> March 2012

S. No.	Date & Time (Hrs)	Days	Lecture Description	Lecture/ Practical	Faculty
1	13-02-2012 1600-1730	Monday	Hyperspectral remote sensing: An Overview	L	Ms. Shefali Agarwal, IIRS
2	15-02-2012 1600-1730	Wednesday	Spectroscopy: Theory and Practice	L	Dr. D. Ramakrishnan, IITB
3	17-02-2012 1600-1730	Friday	Introduction to Hyperspectral tools and Familiarization with Hyperspectral Data	P	Ms. Manu Mehta, IIRS
4	22-02-2012 1600-1730	Wednesday	Spectral Libraries and Familiarization of USGS, JHU, IGCP, JPL and other spectral libraries	L	Dr Senthil Kumar, NRSC
5	23-02-2012 1600-1730	Thursday	Demonstration of Laboratory spectra collection using ASD Spectro-Radiometer	P	Mr. Vinay Kumar, IIRS
6	24-02-2012 1600-1730	Friday	Hyperspectral Image pre-processing; noise removal, atmospheric corrections procedures and data calibration	L	Dr Senthil Kumar, NRSC
7	27-02-2012 1600-1730	Monday	Hyperspectral IR sounding and retrieval of Atmospheric parameters	L	Dr. P. K. Thapliyal, SAC
8	29-02-2012 1600-1730	Wednesday	Image Preprocessing; atmospheric and geometric corrections	P	Ms. Manu Mehta, IIRS
9	05-03-2012 1600-1730	Monday	Hyperspectral Remote Sensing Data Processing (Data reduction, feature extraction and end member selection)	L	Dr. P. Srinivas, ADRIN
10	07-03-2012 1600-1730	Wednesday	Hyperspectral Remote Sensing Data Processing (Data reduction & feature extraction)	P	Ms. Richa Upadhyay, IIRS
11	09-03-2012 1600-1730	Friday	Hyperspectral Remote Sensing Data Processing (End member selection)	P	Ms. Richa Upadhyay, IIRS
12	12-03-2012 1600-1730	Monday	Hyperspectral Image classification algorithms	L	Dr. M. K. Arora, IITR
13	14-03-2012 1600-1730	Wednesday	Hyperspectral Image classification	P	Mr. Vinay Kumar, IIRS
14	16-03-2012 1600-1730	Friday	Hyperspectral Remote sensing and its applications in Mineral exploration	L	Dr. S. Sanjeevi, Anna University
15	19-03-2012 1600-1730	Monday	Hyperspectral Remote sensing and its applications in Water quality	L	Dr. Prakash Chauhan, SAC
16	20-03-2012 1600-1730	Tuesday	Hyperspectral Remote sensing and its applications in Planetary exploration	L	Dr. Prakash Chauhan, SAC
17	21-03-2012 1600-1730	Wednesday	Hyperspectral Remote sensing and its applications in Snow, Ice and Glacier Studies	L	Dr. H. S. Negi, SASE
18	23-03-2012 1600-1730	Friday	Hyperspectral Remote sensing and its applications in Agriculture & Soil mapping	L	Dr. R. N. Sahoo, IARI
19	26-03-2012 1600-1730	Monday	Hyperspectral Remote sensing and its applications in Forestry	L	Dr. Sarnam Singh, IIRS
20	30-03-2012	Friday	Exam		

L=Lecture, P=Practical