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Manipal Institute of Technology, Manipal

(A Constituent Institute of Manipal University)



IV SEMESTER B.TECH ENGINEERING

END SEMESTER EXAMINATIONS, MAY 2016

SUBJECT: REMOTE SENSING AND GIS [CIE-3282] REVISED CREDIT SYSTEM

Time: 3 Hours

17-05-2016

MAX. MARKS: 50

Instructions to Candidates:

- ❖ Answer ALL the questions.
- ❖ Missing data may be suitably assumed

1A.	What are training sets? How are they selected and refined? Please explain.	5
1B.	What is Rayleigh and MIE scattering? Please explain. Also give examples of parts of the EMS that are affected by them.	5
2A.	Explain the different kind of sensors available based on the method of scanning. What are the advantages and disadvantages of each type of scanner?	5
2B.	What are multispectral images? Please explain any two types of multi-spectral images.	5
3A.	Please explain any five applications of remote sensing.	5
3B.	What is a vector? Explain the spaghetti and topological vector data models.	5
4A.	How is GIS a database management system? How is it different from other DBMS? Please explain by taking any four DBMS.	5
4B.	What is DEM? Please list out the advantages and disadvantages of DEM.	5
5A.	Explain the five geometric errors that can occur on air plane mounted sensors	5
5B.	Explain the following: (a) TIN (b) Systematic and non-systematic source of geometric errors (c) Edge enhancement	5