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MANIPAL INSTITUTE OF TECHNOLOGY

MANIPAL

(A constituent institution of MAHE, Manipal)

IV SEMESTER B.TECH. (CIVIL ENGINEERING)

END SEMESTER EXAMINATIONS, APRIL/MAY 2018

**SUBJECT: INTRODUCTION TO REMOTE SENSING AND GIS [CIE 3282]
REVISED CREDIT SYSTEM**

(30/ 04/ 2018)

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

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

| Q.No | | Marks | CO |
|------|---|-------|----|
| 1A. | Define a) Spatial Resolution b) Spectral Resolution c) Radiometric Resolution | 6 | 1 |
| 1B. | What do you mean by georeferencing? Explain. | 4 | 2 |
| 2A. | List different classification of sensors. Explain Active and passive sensors | 6 | 1 |
| 2B. | What are the limitations of Digital Image Processing? | 4 | 2 |
| 3A. | Explain Geometric and radiometric errors. | 6 | 2 |
| 3B. | What are training sites? How this will help in supervised classification? | 4 | 2 |
| 4A. | Explain Rayleigh and Mie scattering in detail | 6 | 1 |
| 4B. | Explain components of GIS | 4 | 3 |
| 5A. | Differentiate between Raster and Vector. | 4 | 3 |
| 5B. | Explain TIN and OEM. Give the fields of application | 4 | 4 |
| 5C. | What are the salient features of topology model? | 2 | 3 |