

Code No: R1941013

**R19**

**Set No. 1**

**IV B.Tech I Semester Advance Supplementary Examinations, March – 2023**

**REMOTE SENSING & GIS**

**(Civil Engineering)**

**Time: 3 hours**

**Max. Marks: 75**

*Answer any FIVE Questions  
ONE Question from Each unit  
All Questions Carry Equal Marks*

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**UNIT I**

- 1 a) Explain the electromagnetic spectrum with a neat sketch. [7]  
b) Discuss the types of resolutions and state its merits and demerits [8]  
(OR)
- 2 a) Explain the types of sensors [7]  
b) Explain SPOT and LANDSAT in detail [8]

**UNIT II**

- 3 a) Explain digital image processing in detail [7]  
b) Explain briefly the categories of image classifications and distinguish each other. [8]  
(OR)
- 4 a) Explain the following techniques i) image reduction & magnification [7]  
ii) contrast enhancement [7]  
b) What is supervised classification? Describe the stages in detail [8]

**UNIT III**

- 5 a) Describe 4 M's in detail [7]  
b) Explain (i) Geographical Entities (ii) Topology in detail [8]  
(OR)
- 6 a) Discuss in detail Overlay Analysis [7]  
b) Describe the data input methods [8]

**UNIT IV**

- 7 Explain how Remote Sensing and GIS is handy in managing Land resources of a state. [15]  
(OR)
- 8 How best remote sensing and GIS technology as a tool can help to safe guard forest area of a particular state? [15]

**UNIT V**

- 9 Explain the layers to be developed for ground water potential zoning mapping [15]  
(OR)
- 10 Discuss in detail how remote sensing is useful in watershed management? [15]

