

Code: CE7T2

**IV B.Tech - I Semester – Regular/Supplementary Examinations
October - 2019**

**REMOTE SENSING AND GIS APPLICATIONS
(CIVIL ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

PART – A

Answer *all* the questions. All questions carry equal marks

11 x 2 = 22 M

1. a) How do you differentiate the Vertical and Aerial Photographs?
- b) Define the term and passive sensor and list their types.
- c) State the importance of atmospheric windows in remote sensing.
- d) What is meant by Image registration?
- e) Define the term map and give its classification.
- f) Can you distinguish the terms Spatial Data and Non-Spatial Data?
- g) What is meant by overlay map?
- h) How would you classify the characteristics of watershed?
- i) Define the term artificial recharge.
- j) What are the stages of urban planning?
- k) Classify the remote sensing platforms.

PART – B

Answer any **THREE** questions. All questions carry equal marks.

3 x 16 = 48 M

2. a) Discuss about the flight planning procedure in detail. 8 M

b) How would you explain the various elements of visual image interpretation with suitable examples? 8 M
3. a) What is meant by image classification? Explain about the types of image classification. 8 M

b) What are the fundamental operations of GIS and explain in detail about the theoretical frame work for GIS? 8 M
4. a) Explain how raster and vector data models are handled in GIS and state their pros and cons? 8 M

b) Explain the concept of integrated data analysis. 8 M
5. a) How inventory of surface water bodies is obtained using GIS? 8 M

b) Explain how GIS is used to identify sites for artificial recharge structures? 8 M

6. a) How would you explain the use of RS & GIS in utility mapping ? 8 M

b) Explain how aerial photography and satellite images were used in traffic management studies? 8 M