

Code: CE7T2

**IV B.Tech - I Semester – Regular/Supplementary Examinations
October - 2018**

**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) List out various elements in Remote Sensing.
- b) Explain the principle of Photogrammetry.
- c) What do you mean by pre-processing of digital image processing?
- d) What do you mean by Map Projection?
- e) Define GIS.
- f) Differentiate between Vector Data and Raster Data
- g) What do you mean by Geocoding?
- h) List out at least three analysis methods in GIS.
- i) Explain the term Land use/Land Cover in related to water resources.
- j) Explain the key role of RS & GIS in urban planning.
- k) How do you estimate the water depth using RS & GIS?

PART – B

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

3 x 16 = 48 M

2. a) Explain the various satellite visual interpretation techniques. 8 M
- b) What is electromagnetic spectrum? 8 M
3. a) Explain the functions of GIS. 8 M
- b) What are the limitations of GIS? 8 M
4. What do you understand by spatial, thematic and temporal dimension of geographic data? Classify spatial entity. 16 M
5. Discuss the applications of remote sensing & GIS in the field of watershed management. 16 M
6. Explain the usage of Aerial Photography and Satellite data in traffic management. 16 M