

Code: CE7T2

**IV B.Tech - I Semester – Regular/Supplementary Examinations
JANUARY 2022**

**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) What is meant by an Orthophoto?
- b) What is Stereoscopic Parallax?
- c) Define Remote Sensing.
- d) Outline converging evidence.
- e) What is meant by supervised image classification.
- f) List various data input methods in GIS.
- g) Illustrate spatial data and non-spatial data.
- h) Contrast Land Use and Land Cover.
- i) Outline the GIS layers developed for ground water Targeting?
- j) Write about the Base Map.
- k) Illustrate Remote sensing platforms useful for urban studies.

PART – B

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

3 x 16 = 48 M

2. a) Classify the Types of Aerial Photographs Based on the Position of the Cameral Axis. 8 M
- b) Make use of a sketch explain the components of Remote Sensing. 8 M
3. a) Explain the Image Classification Techniques in detail. 8 M
- b) Identify the key components of GIS and explain them in detail. 8 M
4. a) Explain Manual digitizing in data entry process of GIS with their advantages and limitations. 8 M
- b) Explain in detail about visual analysis method. 8 M
5. a) Examine the importance of Land Use and Land Cover mapping using RS and GIS. 8 M
- b) Analyze the methodology for Identification of Sites for Artificial Recharge Structures using RS and GIS technologies. 8 M

6. a) Explain urban planning theory along with their applications. 8 M

b) Examine the Remote Sensing Platforms and sensors useful for urban planning. 8 M