



R22 Regulation

Subject code:4E4AF

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech IV Semester Supplementary Examinations, December 2025

REMOTE SENSING & GEOGRAPHIC INFORMATION SYSTEM

(CE)

Maximum Marks: 60

Date:30.12.2025

Duration: 3 hours

- Note: 1.This question paper contains two parts A and B.
 2. Part A is compulsory which carries 10 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X1M=10 Marks)		Marks	CO	Bloom Tx
1.a)	What is parallax in photogrammetry?	1M	CO1	BT2
b)	Mention two types of aerial photographs.	1M	CO1	BT2
c)	What is false color composite?	1M	CO2	BT1
d)	What is electromagnetic spectrum?	1M	CO2	BT2
e)	Write the use of a datum in GIS?	1M	CO3	BT2
f)	Define attribute data.	1M	CO3	BT1
g)	What is object-based vector data?	1M	CO4	BT2
h)	Define topology in vector data models.	1M	CO4	BT1
i)	Define metadata in GIS.	1M	CO5	BT1
j)	Give two applications of GIS in agriculture	1M	CO5	BT2

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	Bloom Tx
2	Describe the geometry of a vertical aerial photograph and methods of scale measurement.	10M	CO1	BT2
OR				
3	What do you understand by the advantages and limitations of photogrammetry?	10M	CO1	BT2
4	Explain the remote sensing process and its advantages and limitations.	10M	CO2	BT4
OR				
5	Write about Indian satellites and sensors with a focus on their characteristics and resolution.	10M	CO2	BT6
6	Explain the components of GIS and types of geospatial data.	10M	CO3	BT2
OR				
7	Write in detail about types of map projections.	10M	CO3	BT2

8	Explain shapefile structure, components, limitations, and usage in GIS applications.	10M	CO4	BT4
	OR			
9	Discuss the importance of topology in vector data and how it is implemented.	10M	CO4	BT2
10	Compare and contrast raster and vector data models in terms of their advantages, disadvantages and applications.	10M	CO5	BT4
	OR			
11	Describe the structure and components of the raster data model in GIS.	10M	CO5	BT2