



R18 Regulation *Subject code:2P7AB*
TKR COLLEGE OF ENGINEERING AND TECHNOLOGY
 (Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VII Semester Supplementary Examinations, December 2024

**Remote Sensing & Geographic Information System
 (Civil Engineering)**

Maximum Marks: 70

Date:04.01.2025

Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
 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		(10X2M=20) Marks)	CO	Bloom Tx
1	Define fiducial mark.		1	L1
2	Explain Forward lap.		1	L1
3	Define resolution.		2	L1
4	List out the elements of Visual Image Interpretation technique.		2	L1
5	Define GIS.		3	L1
6	List out the different operations performed in GIS?		3	L1
7	What is meant by vector data?		4	L1
8	What are the advantages of vector data over raster data?		4	L1
9	List out the elements of Raster data model.		5	L1
10	What is meant by on screen digitization?		5	L1

Part-B

Answer All the following questions.		(5X10M=50Marks)	CO	Bloom Tx
11	a) List out the Applications of Photogrammetry. [5M] b) Differentiate map and mosaic. [5M]		1	L2
OR				
12	What are the Advantages and Disadvantages of Aerial Photogrammetry. [10M]		1	L2
13	Discuss briefly each term involved in interacting the energy with atmosphere. [10M]		2	L2
OR				
14	a) What are the applications of Remote sensing? [5M] b) What is meant by Refraction? Explain it briefly with Snell's law. [5M]		2	L2
15	a) Define GIS along with its inbuilt subsystems. [5M] b) Explain various advantages of GIS. [5M]		3	L2
OR				
16	a) What is GIS. Explain in details the different types of GIS data. [5M] b) Explain in details the map projection parameters. [5M]		3	L2
17	a) How does a vector data is represented? Explain in brief. [5M] b) What is a class? What are the different types of classes in vector data? [5M]		4	L2

	OR			
18	a) What are the topological rules applicable to line segments? [5M] b) What are the advantages and disadvantages of vector data? [5M]	4	L2	
19	a) Discuss the various types of errors occur during digitization with a neat sketch. [5M] b) Explain in detail the Rasterization and Vectorization. [5M]	5	L2	
	OR			
20	a) What are the different methods of data input in GIS? [5M] b) What are the advantages and disadvantages of manual digitizing? [5M]	5	L2	