

Code: 20CE4701C

**IV B.Tech - I Semester – Regular Examinations - DECEMBER 2023**

**REMOTE SENSING AND GEOGRAPHIC  
INFORMATION SYSTEMS  
(CIVIL ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

Note: 1. This paper contains questions from 5 units of Syllabus. Each unit carries 14 marks and have an internal choice of Questions.

2. All parts of Question must be answered in one place.

BL – Blooms Level

CO – Course Outcome

			BL	CO	Max. Marks
UNIT-I					
1	a)	Explain in detail about the concept of resolution and its importance.	L1	CO1	10 M
	b)	Write about the Orthophoto.	L1	CO1	4 M
OR					
2	a)	Explain in detail about the remote sensing components.	L1	CO1	10 M
	b)	Write the advantages and disadvantages of Remote sensing.	L1	CO1	4 M
UNIT-II					
3	What is spatial data and explain basic concept of GIS?		L2	CO2	14 M
OR					

4	Write a detailed note on i) Non spatial data analysis ii) GIS Categories			L2	CO2	14 M
<b>UNIT-III</b>						
5	a)	Discuss in detail about the Image Classifications.	L3	CO3	10 M	
	b)	Why is atmospheric correction necessary in remote sensing? List the different atmospheric correction method.	L3	CO3	4 M	
<b>OR</b>						
6	a)	Explain about Preprocessing.	L2	CO3	7 M	
	b)	Explain about Geometric correction methods.	L2	CO3	7 M	
<b>UNIT-IV</b>						
7	Explain the process of inputing of Raster data and Vector data. Write briefly the process of digitization by using point, polyline and polygon.			L4	CO4	14 M
<b>OR</b>						
8	a)	Describe the various types of Data representation in GIS.	L3	CO4	7 M	
	b)	Advantages of Raster & Vector GIS.	L3	CO4	7 M	
<b>UNIT-V</b>						
9	Discuss on Traffic Management.			L3	CO5	14 M
<b>OR</b>						

10	a)	Develop application of GIS in Highways.	L2	CO5	7 M
	b)	Discuss about Remote Sensing platforms and Sensor applications in Urban studies.	L3	CO5	7 M