KUMARAGURU
college of technology
character is life

B.E/B.TECH DEGREE EXAMINATIONS: NOV /DEC 2024

(Regulation 2018)

Fourth Semester

CIVIL ENGINEERING

U18CEI4203: Remote Sensing and Geographic Information Systems

COURSE OUTCOMES

CO1:   Analyze the principles and components of photogrammetry and remote sensing.

CO2:   Process of data acquisition of satellite images and their characteristics.

CO3:   Analyze an image visually and digitally with digital image processing techniques.

CO4:   Explain the concepts and fundamentals of GIS.

CO5:   Apply the knowledge of remote sensing and GIS in different civil engineering filed.

Time: Three Hours   **Maximum Marks: 100**

Answer all the Questions:-
PART A (10 x 2 = 20 Marks)
(Answer not more than 40 words)

1.	Define remote sensing.	CO1	[K$_1$]
2.	State the Wein's displacement law.	CO1	[K$_2$]
3.	What are the types of platform?	CO2	[K$_1$]
4.	What you understand by Geo –Synchronous orbit?	CO2	[K$_2$]
5.	Differentiate supervised and Unsupervised classification.	CO3	[K$_3$]
6.	Enumerate the different interpretation keys.	CO3	[K$_5$]
7.	List the various components of GIS.	CO4	[K$_2$]
8.	State constraint maps.	CO4	[K$_2$]
9.	What is meant by LIS.	CO5	[K$_1$]
10.	Write short note on data compression.	CO5	[K$_4$]

Answer any FIVE Questions:-
PART B (5 x 16 = 80 Marks)
(Answer not more than 400 words)

11.	Explain the interaction of Electromagnetic energy with earth surface feature in terms of reflected transmitted and absorbed energy.	16	CO1	[K$_3$]
12.	Discuss briefly about pay load description of important earth resources and meteorological satellites.	16	CO2	[K$_4$]
13.	(i) Explain in detail about different types of data products. (ii) Explain in detail about types of image interpretation.	8 8	CO3	[K$_2$]

14.	Write detailed notes on following.
	    (i) Map and map projection.
	    (ii) Map analysis.
		8
		8
			CO4	[K$_2$]

15.	Discuss in detail about Data Base Management Systems(DBMS).	16	CO4	[K$_3$]

16.	Write detailed notes on following.
	    (i) Attribute data analysis.
	    (ii) Integrated data analysis.
		16	CO5	[K$_2$]

****