

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2025***Sixth Semester**Electronics and Communication Engineering***CEC348 – Remote Sensing***Regulations - 2021***Duration : 3 Hrs****Maximum : 100 Marks****PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)**

Q.No	Questions	BLT	CO	Marks
1.	Give an overview of remote sensing and list few components of RS.	L1	1	2
2.	State Stefan's Boltzmann law and how it is utilized for astrophysics?	L1	1	2
3.	What do you understand the term atmospheric windows?	L2	2	2
4.	Compare specular and diffuse reflectors.	L2	2	2
5.	List the types of remote sensing platforms.	L1	3	2
6.	Give an overview of satellite orbit and also list the orbit elements.	L1	3	2
7.	Classify remote sensors with few examples.	L2	4	2
8.	Why is sensor calibration being Important?	L2	4	2
9.	What are the different types of remote sensing data products based on level of processing?	L1	5	2
10.	Write the example for edge enhancement technique.	L1	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

Q.No	Questions	BLT	CO	Marks
11. a	Discuss the history of remote sensing and also analyze the various merits and demerits of collation between conventional and remote sensing methods.	L1	1	16
	Or			
b	Analyse in detail about electromagnetic spectrum, Key principles and concepts and also how visible electromagnetic spectrum used in remote sensing?	L1	1	16
12. a	Discuss the following: i. Mechanism of atmospheric scattering ii. Atmospheric absorption	L2	2	16
	Or			
b	With a neat sketch, explain the spectral reflectance curves for vegetation, soil and water.	L2	2	16

13.	a	Analyze the different laws related to motions of planets and satellites, discuss how satellite moves in a circular path?	L4	3	16
		Or			
	b	Discuss the working principles of the following satellites: i. Sun synchronous ii. Geo Synchronous	L4	3	16
14.	a	Analyze with the neat sketch of the following sensors: i. Microwave sensors ii. Optical-infrared sensors	L3	4	16
		Or			
	b	With the neat structure, identify the sensor which is uses remote sensing technology, laser beams to measure distances and create detailed 3D maps of an environment.	L3	4	16
15.	a	What are the different processing levels in satellite data products? Briefly describe each.	L4	5	16
		Or			
	b	Discuss satellite data products and also examine how visual image interpretation process has been validated?	L4	5	16