

--	--	--	--	--	--	--	--	--	--	--

## GEOINFORMATICS ENGINEERING BRANCH

## SECOND SEMESTER

## GI 9151 - REMOTE SENSING

(REGULATIONS 2008)

Time : 3 Hours

Answer ALL Questions

Max. Marks 100

## PART-A (10 x 2 = 20 Marks)

1. Define remote sensing?
2. State stefan-boltzmann law.
3. What is refraction?
4. State the use of atmospheric windows?
5. What is specular and diffuse reflectors?
6. State energy balance equation?
7. What is spectral resolution?
8. List the uses of microwave remote sensing?
9. What is the use of elimination keys?
10. What do you mean by quick look products?

**Part – B ( 5 x 16 = 80 marks)**

- 11 i. Explain in detail about the components of remote sensing. (8)  
ii. Discuss the merits and demerits of data collection between conventional and remote sensing methods? (8)
- 12 a) i. Explain in detail about the mechanisms of atmospheric scattering. (16)  

**OR**

b) i. Discuss in detail about the effects of atmospheric absorption (16)
13. a)i. With a neat sketch, explain the spectral reflectance curves for vegetation, soil and water. (16)  

**OR**

b)i. Explain the geometric manner in which an object reflects energy? (16)
14. a) i. Explain in detail about the operation of along track multispectral scanning. (16)  

**OR**

b) i. Explain in detail about the working principle of sun synchronous satellites? (16)
15. a) i. Discuss in detail about the keys used for visual image interpretation process? (16)  

**OR**

b) i. Explain the sequence employed in processing a color positive transparency. (16)