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**KERALA AGRICULTURAL UNIVERSITY**  
**B. Tech. (Agri. Engg.) 2021 Admission**  
**VI Semester Final Examination – June 2024**

Lwre.3209

**Remote Sensing and GIS Applications (1+1)**

**Marks: 50**  
**Time: 2 hours**

**I**

**Fill in the blanks**

**(10x1=10)**

1. In electromagnetic spectrum, the most photo synthetically active region is .....
2. Remote sensing systems which use natural energy from the sun is called .....
3. Greater fineness of the image and detail of the object can be obtained by.....resolution.
4. Number of wave peaks passing a fixed point in a given time is called.....
5. The device that receives the electromagnetic radiation and convert it into signal is known as .....
6. Rasterization is the process of conversion from ..... to .....
7. The colour of the object is defined by the colour of the light it.....
8. A device to measure the spectral distribution of electromagnetic radiation is .....
9. Spectral resolution of LISS-IV sensor is .....
10. Transformation of an image which results in a new image with the pixel stored in a new column geometry is known as .....

**II**

**Write short notes on ANY FIVE of the following**

**(5x2=10)**

1. DEM
2. Raster data
3. GPS
4. Microwave remote sensing
5. Atmospheric window
6. Mosaicking
7. GLONASS

**III**

**Answer ANY FIVE of the following**

**(5x4=20)**

1. Write advantages of remote sensing.
2. What is remote sensing? Write components of remote sensing.
3. Write basic characteristics of a aerial photographs.
4. Discuss remote sensing platforms.
5. What is GIS? Write components of GIS.
6. Write common application of GIS.
7. Define active remote sensing sensors.

**IV**

**Write an essay on ANY ONE of the following**

**(1x10=10)**

1. What is visual image interpretation? Discuss various elements of visual interpretation.
2. Discuss various spectral reflectance characteristics of soils

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