



**KERALA AGRICULTURAL UNIVERSITY**  
**B. Tech. (Agrl. Engg.) 2023 & Previous Admissions**  
**VI Semester Final Examination – June 2026**

Lwre 3209

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

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

- I Choose the correct answer (10x1=10)**
- Following is not the example of remote sensing
    - Camera
    - Eyes
    - Thermometer
    - All the above
  - The portion of incident energy is reflected by the surface will depend upon
    - Nature of the surface
    - Wavelength of the energy
    - Angle of illumination
    - All the above
  - Greater fineness of the image and detail of the object can be obtained by
    - Spatial resolution
    - Temporal resolution
    - Spectral resolution
    - All the above
  - Earth station helps satellite in
    - Launching
    - Tracking
    - Guiding and controlling
    - All the above
  - In electromagnetic spectrum, most photo synthetically active region is
    - Ultraviolet region
    - Visible region
    - Infrared region
    - None of these
  - Rasterization is the process of conversion from
    - Vector to raster
    - Raster to vector
    - Both the above
    - None of these
  - 1 mm on a map represents 25 m on the ground. The representative fraction on the map will be
    - 1: 250
    - 1: 2500
    - 1: 25000
    - None of these
  - Transformation of an image which results in a new image with the pixels stored in a new line or column geometry is known as
    - Georeferencing of an image
    - Geocoding of an image
    - Registration of an image
    - None of these

9. Spectral resolution of LISS-IV sensor is  
(a) 5.8 m  
(b) 23.5 m  
(c) 36.5 m  
(d) One of these
10. No of wave peaks passing a fixed point in a given time is known as  
(a) Frequency  
(b) Amplitude  
(c) Wavelength  
(d) None of these

**II Write short notes on ANY FIVE of the following (5x2=10)**

1. FCC
2. Passive Remote Sensing
3. Geostationary Satellite
4. Temporal Resolution
5. Geometric Correction
6. Thematic Map
7. LANDSAT

**III Answer ANY FIVE of the following (5x4=20)**

1. Discuss electromagnetic spectrum
2. What is scattering? Discuss different type of scattering
3. Interaction electromagnetic radiation with water.
4. Remote sensing platforms
5. Advantages of remote sensing.
6. Applications of GIS
7. Spectral resolution

**IV Write an essay on ANY ONE of the following (1x10=10)**

1. What is image classification? Discuss Unsupervised and Supervised image classification.
2. What is visual image interpretation? Discuss various elements of visual interpretation.

\*\*\*\*\*