**DAILY ASSESSMENT FORMAT**

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| **Date:** | **29-06-2020** | **Name:** | **Bhavith** |
| **Course:** | **Satellite photography and its applications** | **USN:** | **4AL17EC009** |
| **Topic:** | **Areal photography technics** | **Semester & Section:** | **6th,A** |
| **Github Repository:** | **Bhavith-Online-Courses** |  |  |

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| **AFTERNOON SESSION DETAILS** |
| **Image of session**  **Screenshot (165)** |
| **Report – Report can be typed or hand written for up to two pages.**  **Screenshot (166)**   * **Here are five types of resolution when discussing satellite imagery in remote sensing: spatial, spectral, temporal, radiometric and geometric. Campbell (2002) defines these as follows:** * **spatial resolution is defined as the pixel size of an image representing the size of the surface area (i.e. m2) being measured on the ground, determined by the sensors' instantaneous field of view (IFOV);** * **spectral resolution is defined by the wavelength interval size (discrete segment of the Electromagnetic Spectrum) and number of intervals that the sensor is measuring;** * **temporal resolution is defined by the amount of time (e.g. days) that passes between imagery collection periods for a given surface location** * **Radiometric resolution is defined as the ability of an imaging system to record many levels of brightness (contrast for example) and to the effective bit-depth of the sensor (number of grayscale levels) and is typically expressed as 8-bit .** * **Geometric resolution refers to the satellite sensor's ability to effectively image a portion of the Earth's surface in a single pixel and is typically expressed in terms of [Ground sample distance](https://en.wikipedia.org/wiki/Ground_sample_distance" \o "Ground sample distance), or GSD.** * **GSD is a term containing the overall optical and systemic noise sources and is useful for comparing how well one sensor can "see" an object on the ground within a single pixel.** * **For example, the GSD of Landsat is ≈30m, which means the smallest unit that maps to a single pixel within an image is ≈30m x 30m. The latest commercial satellite (GeoEye 1) has a GSD of 0.41 m. This compares to a 0.3 m resolution obtained by some early military film based [Reconnaissance satellite](https://en.wikipedia.org/wiki/Reconnaissance_satellite" \o "Reconnaissance satellite).** |