**DAILY ASSESSMENT FORMAT**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date:** | **29/06/2020** | **Name:** | **PRIYA P RAO** |
| **Course:** | **IIRS Outreach Program on Satellite Photyogrammetry and it’s Application** | **USN:** | **4AL18EC041** |
| **Topic:** | **Introducing Photogrammetric Concepts** | **Semester & Section:** | **4th sem ‘A’ section.** |
| **Github Repository:** | **Priya-Rao** |  |  |

|  |
| --- |
| **FORENOON SESSION DETAILS** |
| **Image of session**  **C:\Users\Pawan\Desktop\z1.PNG**  **C:\Users\Pawan\Desktop\z2.PNG** |
| **In today’s session I have learnt about:**   * **Photogrammetry**   **The science of quantitative analysis of measurements from photographs**   * **Photos – Light** * **Gramma – to draw** * **Metron – to measure**   **Photogrammetry is the science of making measurements from photographs. The input to photogrammetry is photographs, and the output is typically a map, a drawing, a measurement, or a 3D model of some real-world object or scene.**  **The fundamental principle used by Photogrammetry is triangulation or more specifically called Aerial Triangulation. By taking photographs from at least two different locations, so-called “**[**lines of sight**](https://gislounge.com/line-of-sight-in-gis/)**” can be developed from each camera to points on the object. These lines of sight are mathematically intersected to produce the 3-dimensional coordinates of the points of interest.**  **Branches of Photogrammetry:**   * **Aerial Photogrammetry:**   **Aerial photogrammetry is the branch of surveying that deals with production of maps such as planimetric or topographic maps by compiling number of photographs taken in that area.** Procedure of Aerial Photogrammetry:  * **Establishing control points** * **Flight planning and photography** * **Photo interpretation and stereoscopy** * **Parallax and measurement of parallax** * **Construction of map and cartography** * **Applications of Aerial Photogrammetry** * **Land surveying** * **Disaster relief** * **Catography** * **Public safety** * **Satellite Photogrammetry:**   **Space photogrammetry is considered with reference to various aspects of the astronomical-geodetic and cartographic investigation of the solar-system planets. Attention is given to the theory of the photogrammetric processing of various types of space photographs, including frame photographs, and TV and radar panoramas.**   * **Applications of Satellite Photogrammetry:** * **Orthomosaics** * **Planimetric mapping** * **Classification mapping** * **Topographic mapping** * **Drone Photogrammetry:**   **In photogrammetry, a drone captures a large number of high-resolution photos over an area. These images overlap such that the same point on the ground is visible in multiple photos and from different vantage points.**   * **Procedure for Drone Photogrammetry:** * **Select drone as per the requirement** * **Choose Software** * **Flight Planning** * **Check Camera settings** * **Fly and review** * **Image processing** * **Applications of Drone Photogrammetry:** * **Surveying and GIS** * **Mining and Aggregates** * **Agriculture** * **Environment and Research** * **Construction** * **Ground Photogrammetry:**   **It is the application of photogrammetric techniques and instruments to geology. ... Techniques and equipment developed mainly for topographic mapping were adopted by photogeologists and modified to make certain geologic measurements directly.** |