**DAILY ASSESSMENT FORMAT**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date:** | **29/06/2020** | **Name:** | **Bhavana.B** |
| **Course:** | **IIRS** | **USN:** | **4al18ec009** |
| **Topic:** | **Introducing photogrammetry concept** | **Semester & Section:** | **4th A** |
| **Github Repository:** | **Bhavana-b** |  |  |

|  |
| --- |
| **FORENOON SESSION DETAILS** |
| **Image of session** |
| **Report**  **Photogrammetry**  **Photogrammetry is the science and technology of obtaining reliable information about physical objects and the environment through the process of recording, measuring and interpreting photographic images and patterns of electromagnetic radiant imagery and other phenomena.**  **As human eyes are naturally capable of seeing 3D around them in the real world, the stereophotogrammetry technique mimics the same by restoring the 3D positions and orientations of an overlapping image pair. With the filtering of anaglyph red-cyan glasses, 3D glasses or 3D screens, it allows us to see only one corresponding image out of a two-image pair for each eye, which lets our brain generate the 3D from the parallax.**  **Fundamentals of photogrammetry**    **The fundamental principle used by photogrammetry is triangulation. By taking photographs from at least two different locations, so-called “lines of sight” 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.**    **Parallax**    **The displacement of an object caused by a change in the point of observation is called Parallax. Stereoscopic parallax is caused by taking photographs of the same object but from the different point of observation. Change in position of an image from one photo to the next is caused by aircraft’s motion.**  **Two important aspects of stereoscopic parallax:**   * **Parallax of any point is directly related to the elevation of the point** * **Parallax is greater for high points than for low points**   **Types of photogrammetry**   1. **Aerial Photogrammetry** 2. **Terrestrial Photogrammetry** 3. **Space Photogrammetry** 4. **Interpretative Photogrammetry** 5. **Metric Photogrammetry** |