**DAILY ASSESSMENT FORMAT**

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| **Date:** | **29/06/2020** | **Name:** | **Prajwal Kamagethi Chakravarti P L** |
| **Course:** | **Satellite Photogrammetry and its Application** | **USN:** | **4AL17EC073** |
| **Topic:** | **Introduction to Photogrammetric courses** | **Semester & Section:** | **6 & B** |
| **Github Repository:** | **https://github.com/alvas-education-foundation/Prajwal-Kamagethi.git** |  |  |

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| **SESSION DETAILS**  **Session images**    **Photogrammetry and Remote sensing Department, established in 1966 is one of the oldest departments of the institute imparting professional training in the field of photogrammetry, cartography, remote sensing, and image processing to varied course participants: university teachers, academicians, govt. officials, and freshly graduated students. Initially it started with aerial data interpretation, analysis and aerial photogrammetry with a gradual transition to satellite data interpretation, analysis, satellite photogrammetry and its applications. The training programmes are regularly updated by incorporating the state of art technology.**  **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.**[**[1]**](https://en.wikipedia.org/wiki/Photogrammetry#cite_note-1)  **Photogrammetry appeared in the middle of the**[**19th century**](https://en.wikipedia.org/wiki/19th_century)**, almost simultaneously with the appearance of**[**photography**](https://en.wikipedia.org/wiki/Photography)**itself. The use of photographs to create**[**topographic maps**](https://en.wikipedia.org/wiki/Topographic_map)**was first proposed by the French surveyor**[**Dominique F. Arago**](https://en.wikipedia.org/wiki/Fran%C3%A7ois_Arago)**in about 1840.**  **The term photogrammetry was coined by the Prussian architect Albrecht Meydenbauer[[2]](https://en.wikipedia.org/wiki/Photogrammetry" \l "cite_note-2), which appeared his 1867 article "Die Photometrographie."**[**[3]**](https://en.wikipedia.org/wiki/Photogrammetry#cite_note-3)  **There are many variants of photogrammetry. One example is the extraction of three-dimensional measurements from two-dimensional data (i.e. images); for example, the distance between two points that lie on a plane parallel to the photographic**[**image plane**](https://en.wikipedia.org/wiki/Image_plane)**can be determined by measuring their distance on the image, if the**[**scale**](https://en.wikipedia.org/wiki/Scale_(map))**of the image is known. Another is the extraction of accurate [color](https://en.wikipedia.org/wiki/Color" \o "Color) ranges and values representing such quantities as**[**albedo**](https://en.wikipedia.org/wiki/Albedo)**,**[**specular reflection**](https://en.wikipedia.org/wiki/Specular_reflection)**,**[**metallicity**](https://en.wikipedia.org/wiki/Metallicity#Photometric_colors)**, or**[**ambient occlusion**](https://en.wikipedia.org/wiki/Ambient_occlusion)**from photographs of materials for the purposes of**[**physically based rendering**](https://en.wikipedia.org/wiki/Physically_based_rendering)**.**    **Close-range photogrammetry refers to the collection of phot**  **ography from a lesser distance than traditional aerial (or orbital) photogrammetry. Photogrammetric analysis may be applied to one photograph, or may use**[**high-speed photography**](https://en.wikipedia.org/wiki/High-speed_photography)**and**[**remote sensing**](https://en.wikipedia.org/wiki/Remote_sensing)**to detect, measure and record complex 2D and 3D**[**motion fields**](https://en.wikipedia.org/wiki/Motion_field)**by feeding measurements and**[**imagery analysis**](https://en.wikipedia.org/wiki/Imagery_analysis)**into**[**computational models**](https://en.wikipedia.org/wiki/Computer_simulation)**in an attempt to successively estimate, with increasing accuracy, the actual, 3D relative motions.**  **From its beginning with the [stereoplotters](https://en.wikipedia.org/wiki/Stereoplotter" \o "Stereoplotter) used to plot**[**contour lines**](https://en.wikipedia.org/wiki/Contour_line)**on**[**topographic maps**](https://en.wikipedia.org/wiki/Topographic_map)**, it now has a very wide range of uses such as**[**sonar**](https://en.wikipedia.org/wiki/Sonar)**,**[**radar**](https://en.wikipedia.org/wiki/Radar)**, and**[**lidar**](https://en.wikipedia.org/wiki/Lidar)**.** |