**DAILY ASSESSMENT FORMAT**

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| **Date:** | **29/June/2020** | **Name:** | **Prashantha naik** |
| **Course:** | **Satellite photogrammetry and its applications** | **USN:** | **4AL17EC074** |
| **Topic:** | **Introducing photogrammetry concepts** | **Semester & Section:** | **6th B** |
| **Github Repository:** | **prashanth\_course** |  |  |

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| **Image of the session** |
| **Report – Report can be typed or hand written for up to two pages.**  **Photogrammetry**  **Photogrammetry is the technique of acquiring measurements from photographic images, generally**  **stereoscopic. The term photogrammetry was first used by the Prussian architect Albrecht Meydenbauer in**  **1867 who produced some of the earliest topographic plans and elevation drawings. The use of**  **photogrammetry in topographic mapping is well established but in recent years the technique has been**  **widely applied in the fields of architecture, industry, engineering, forensic, underwater, medicine, geology**  **and many others for the production of precise 3D survey data.**  **Data acquired by photogrammetric methods is an integral part of the data input to both geographical**  **information systems (GIS) and computer aided design (CAD). Indeed it has a role in any area where**  **accurate spatial data is required.**  **Remote Sensing**  **Remote Sensing is a closely aligned technology to photogrammetry in that it also collects information from**  **imagery. The term is derived from the fact that information about objects and features is collected without**  **coming into contact with them. Where remote sensing differs from photogrammetry is in the type of**  **information collected, which tends to be based on differences in colour, so land use and land cover is a**  **primary output of remote sensing processing. Remote sensing was originally developed to exploit the large**  **number of colour bands in satellite imagery to create 2D data primarily for GIS. Nowadays remote sensing**  **tools are used with all types of imagery to assist in 2D data collection and derivation, such as slope.**  **Software tools today tend to embrace a much wider range of image technologies such as image mosaicing,**  **3D visualisation, GIS, radar as well as softcopy photogrammetry** |
| **Photogrammetry and Remote Sensing Applications**  **Topographic Mapping**  **Photogrammetry is most commonly associated with the production of topographic mapping generally from**  **conventional aerial stereo photography although digital and satellite imagery is increasingly being used.**  **Photogrammetry using imagery obtained from fixed wing aircraft helicopters and from satellites is used to**  **produce mapping at a variety of scales. Recent improvements in camera design and photogrammetric**  **instrumentation have led to increases in accuracies enabling mapping at scales as large as 1:200 to be**  **produced from conventional aerial photography. Photogrammetrically derived three dimensional information**  **produced from analytical or digital stereo plotting instruments is used to produce maps and plans and**  **provide the source data for ground modelling packages, orthophotos and geographical information systems.**  **Photogrammetry is used to provide national mapping and map revision at small and medium scales. At**  **larger scales, photogrammetric data form the basis for three-dimensional modelling in a wide variety of**  **applications including highway design, floodplain studies and pipeline routing.** |