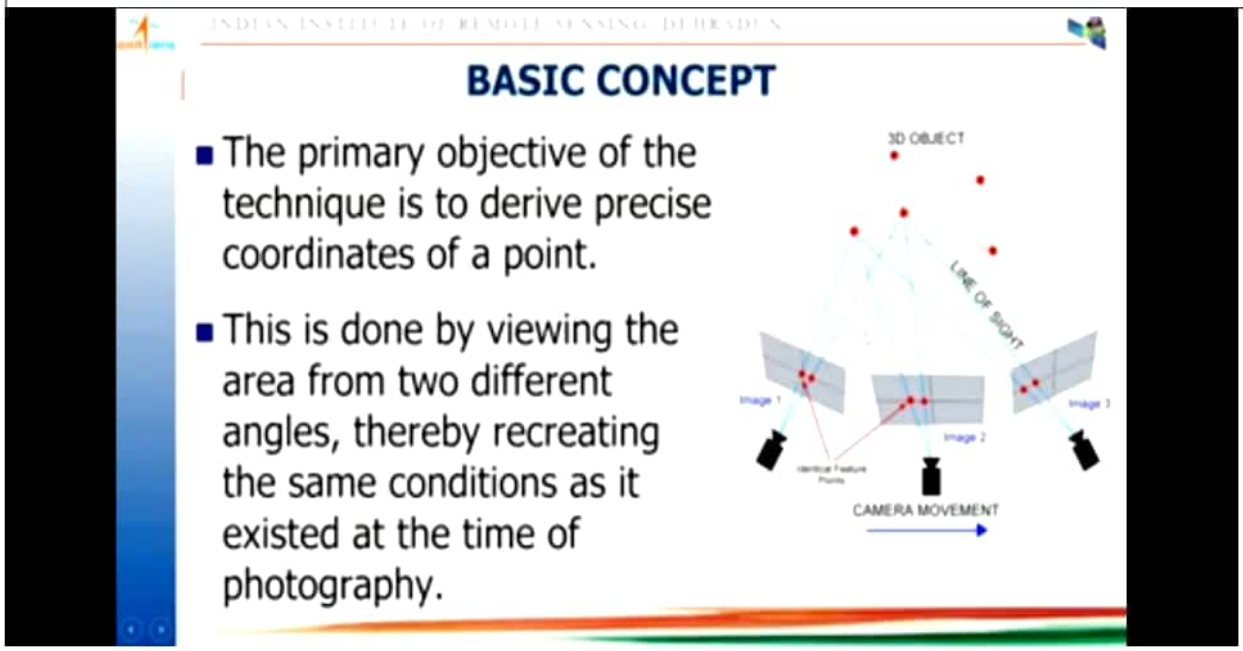
DAILY ASSESSMENT FORMAT

Date:	19-06-2020	Name:	PREETHAM S RAI
Topic	Introducing Photogrammetric Concepts	USN:	4AL18EC040
Course	IIRS Outreach Program on Satellite Photyogrammetry and it's Application	Semester & Section:	4th sem 'A' sec
GitHub Repository:	Psraipreetham		

FORENOON SESSION DETAILS



FORENOON SESSION DETAILS

In today's session I have learnt about:

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" 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