DAILY ASSESSMENT FORMAT

Date:	30 JUNE 2020	Name:	PAVITHRAN S
Course:	**Satellite Photogrammetry and its Applications**	USN:	4AL17EC068
Topic:	Concepts of Stereophotogrammetry	Semester & Section:	6TH B
Github Repository:	Pavithran		

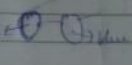| FORENOON SESSION DETAILS |
|---|
| **Image of session** |
|
30 June 2020_Concepts of Stereophotogrammetry by Dr. Poonam S. Tiwari
6,227 watching now • Started streaming 44 minutes ago

30 June 2020_Concepts of Stereophotogrammetry by Dr. Poonam S. Tiwari
6,191 watching now • Started streaming 47 minutes ago |

Report – Report can be typed or hand written for up to two pages.

* Viewing Stereophotographs in analog environment
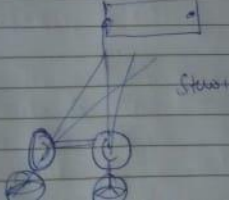
    · Pocket
    · Mirror &
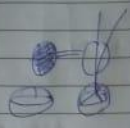   · Scanning

* Anaglyph

    Red ⊙ ⊙ blue

    To view 3D image

* Separation by polarisation

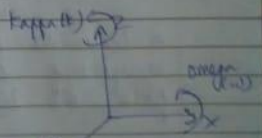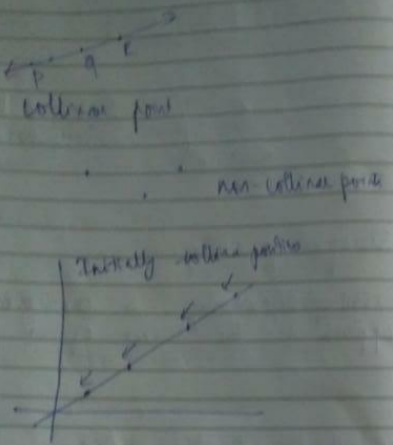   Restric the vibration of the eye

    Stereo

left glass black, left eye sees nothing

Stereophoto grammetry:

→ Stereophotogrammetry is the general term applied to the science of

understanding Rotation matrix

$$M = \begin{bmatrix} m_{11} & m_{12} & m_{13} \\ m_{21} & m_{22} & m_{23} \\ m_{31} & m_{32} & m_{33} \end{bmatrix}$$

kappa(t)

omega

collinear point

non-collinear point

Initially collinear position

When photograph is perfectly

* Co-planarity condition:

    The two exposure stations of a stereop air any object point and its corresponding image points on the 2 photos all lie in a common plane

Unknowns:
→ Image co-ordinates
→ Exposure station co-ordinates
→ orientation of photographs

Orientation of Steropair:

measured photo co-ordinates
↓ Inner/interior orientation
Refined photo co-ordinates
↓ Relative orientation : 5 unknown (stand)
Model co-ordinates
↓ Absolute orientation 12 unknown and (Setting)
ground co-ordinates

Exterior orientation GCP 12 unknowns req'd

Relative Orientation of model:

Purpose:
Make the reconstruct model and fit to train (ground control points)

* Digitization in 3D:

Free hand for moving the cursor.
XYZ direction

The instrument used: Topomouse