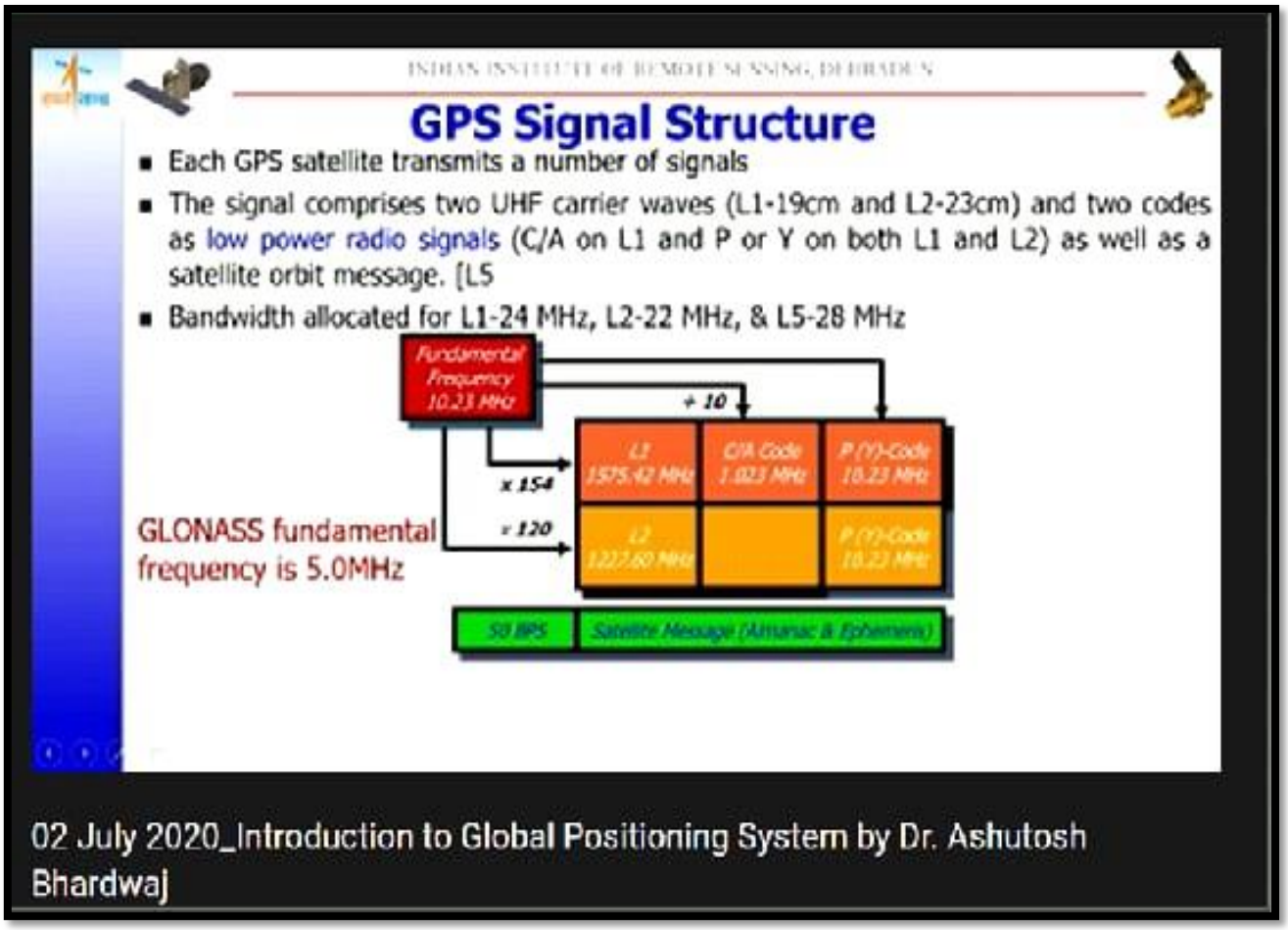
DAILY ASSESSMENT

Date:	02-July-2020	Name:	Swastik R Gowda
Course:	Satellite Photogrammetry and its applications	USN:	4AL17EC091
Topic:	Introduction to Global Positioning System	Semester & Section:	6th Sem 'B' Sec
Github Repository:	swastik-gowda		

FORENOON SESSION DETAILS

Image of session



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

The Global Positioning System :

- **The Global Positioning System (GPS) is a satellite-based navigation system made up of a network of 24 satellites placed into orbit by the U.S. Department of Defense. GPS was originally intended for military applications, but in the 1980's, the government made the system available for civilian use.**
- **GPS Stands for "Global Positioning System." GPS is a satellite navigation system used to determine the ground position of an object. ... The satellites are evenly spread out so that four satellites are accessible via direct line-of-sight from anywhere on the globe.**

Global Positioning System PDF :

- **Global Positioning System (GPS) is part of satellites orbiting round the universe. It sends the details of their position in space back to earth. ... It is available to any user with a GPS receiver. It has its usefulness in military, weather conditions, vehicle location, farms, mapping and many other areas.**

What is GPS?

- **The Global Positioning System (GPS) is a network of about 30 satellites orbiting the Earth at an altitude of 20,000 km. ... These signals, travelling at the speed of light, are intercepted by your GPS receiver, which calculates how far away each satellite is based on how long it took for the messages to arrive.**

The 3 components of GPS :

- **The Global Positioning System (GPS) is a U.S.-owned utility that provides users with positioning, navigation, and timing (PNT) services.**
- **This system consists of three segments: the space segment, the control segment, and the user segment**
- **The Global Positioning System (GPS), originally NAVSTAR GPS, is a satellite-based radio navigation system owned by the United States government and operated by the United States Space Force.**
- **The GPS does not require the user to transmit any data, and it operates independently of any telephonic or internet reception, though these technologies can enhance the usefulness of the GPS positioning information.**
- **The GPS project was started by the U.S. Department of Defence in 1973, with the first prototype spacecraft launched in 1978 and the full constellation of 24 satellites operational in 1993.**
- **The GPS service is provided by the United States government, which can selectively deny access to the system, as happened to the Indian military in 1999 during the Kargil War, or degrade the service at any time.**
- **When selective availability was lifted in 2000, GPS had about a five-meter (16 ft.) accuracy.**

How Does GPS Work?

- **GPS satellites circle the earth twice a day in a very precise orbit and transmit signal information to earth.**
- **GPS receivers take this information and use triangulation to calculate the user's exact location.**
- **Essentially, the GPS receiver compares the time a signal was transmitted by a satellite with the time it was received. The time difference tells the GPS receiver how far away the satellite is.**
- **Now, with distance measurements from a few more satellites, the receiver can determine the user's position and display it on the user's electronic map.**
- **A GPS receiver must be locked on to the signal of at least three satellites to calculate a 2D position (latitude and longitude) and track movement.**

Date:	02-July-2020	Name:	Swastik R Gowda
Course:	Webinar	USN:	4AL17EC091
Topic:	Career opportunities and Industry readiness during difficult times	Semester & Section:	6th Sem 'B' Sec

AFTERNOON SESSION DETAILS

Image of session