SHAHEED BHAGAT SINGH STATE TECHNICAL CAMPUS, FEROZEPUR

ROLL No: | | | | | | | | | | | | | **Total number of pages:[2]**

Total number of questions:06

B.Tech. || CE || 4ThSem

Geomatics Engineering

Subject Code:BTCE-401

Paper ID:

Time allowed: 3 Hrs **Max Marks: 60**

Important Instructions:

- **All questions are compulsory**
- **Assume any missing data**

PART A (2×10)

Q. 1. Short-Answer Questions:

(a) Define crab and drift.
(b) Differentiate between Mosaic and Map.
(c) Define laws of radiation modulation.
(d) Classify EDM instruments with examples.
(e) What is basic principles involved in remote sensing.
(f) What are the application of remote sensing.
(g) What are the components of GIS.
(h) How would you do network analysis in GIS.
(i) What is DGPS?
(j) State the resources of errors in GPS

PART B (8×5)

Q. 2 Explain parallax bar by neat sketch . CO1

OR

Explain the basic principle involved in photogrammetry. Also explain how to find length of ground line between two points by ground co-ordinates. CO1

Q. 3. What are the different types of satellites and illustrate their characteristics CO2

OR

What are sensors. Give there types and explain each in detail. CO2

Q.4 What are spatial and non spatial data. Write its significance and types. CO3

OR

Explain GIS errors and GIS failure in detail. CO3

Q. 5. Classify different types of co-ordinate systems used in GPS. CO4

OR

What is the principle used in GPS and also write its applications. CO4

Q.6 What are the effects of atmospheric conditions on EDM instruments? CO5

OR

A pair of photographs was taken with an aerial camera from an altitude of 4500 m above mean sea level. The mean principles based measured is 120 mm. The difference in parallax between the two points is 3m. Find the difference in height between the two points if the elevation of lower point is 500m above datum. What will be the difference in elevation if the parallax difference is 25mm.

CO5