

## Assignment 1

- ①. Difference between Plane and Geodetic Survey. Define Surveying
- ②. Classification of Surveying
- ③. Ranging - Direct and Indirect.  
(Reciprocal Ranging)
- ④. Types of Tape.
- ~~⑤. Area measurement of field from drawing~~
- ⑤. Define → Grid Meridian
  - ↳ Reduced bearing
  - ↳ Isogonic & Agonic lines
  - ↳ Variation in Magnetic declination
- ⑥. Diff<sup>n</sup> b/w Prismatic and Surveyor's Compass with diagram.



DATE

⑦ What is local attraction? On an old map a line was drawn to a magnetic bearing of  $320^{\circ}30'$ , when declination was  $3^{\circ}30'W$ . Find present bearing of line, if the declination is  $4^{\circ}15'E$ .

⑧ Explain all the tape corrections with their formulas.



Assignment 2.

- ① Explain Reciprocal levelling.
- ② Differentiate dumpy level and tilting level with the help of diagram.
- ③ Following staff readings were observed successively with a level instrument having being moved after 3<sup>rd</sup>, 6<sup>th</sup> & 8<sup>th</sup> reading.  
2.228, 1.606, 0.988, 2.090, 2.864,  
1.262, 0.602, 1.982, 1.044, 2.684.

Enter the above reading in level book.  
Calculate RL of pts., if RL of 1<sup>st</sup> reading is 400 m.



Q(4) Following are bearing Observed in traversing, with a compass, an area with local attraction was suspected. Calculate the interior  $\angle$ s. of the traverse and Correct them if necessary.

| Line | FB               | BB               |
|------|------------------|------------------|
| AB   | $150^{\circ}0'$  | $330^{\circ}0'$  |
| BC   | $230^{\circ}30'$ | $48^{\circ}0'$   |
| CD   | $360^{\circ}15'$ | $127^{\circ}45'$ |
| DE   | $298^{\circ}0'$  | $120^{\circ}$    |
| EA   | $49^{\circ}30'$  | $229^{\circ}30'$ |

Q(5) Readings were observed with Compass

|    |                 |    |                 |
|----|-----------------|----|-----------------|
| AB | $74^{\circ}0'$  | BA | $254^{\circ}$   |
| BC | $91^{\circ}0'$  | CB | $271^{\circ}0'$ |
| CD | $166^{\circ}0'$ | DC | $343^{\circ}0'$ |
| DE | $177^{\circ}0'$ | ED | $0^{\circ}0'$   |
| EA | $189^{\circ}0'$ | AE | $9^{\circ}0'$   |

Find Correct Bearings.

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