**UNIT II**

**(Surveying and Positioning )**

**Q.1. Define surveying .Write the principles of surveying. What are the types of surveying?**

**Q.2. What are the instruments used for surveying, discuss with neat sketches.**

**Q.3. What is the principle of chain surveying? Write the errors in chain surveying.**

**Q.4.Define open traverse and closed traverse. Also define the precautions taken during plotting of traverse.**

**Q.5. Define the back bearing and fore bearing of a line. What is local attraction?**

**Q.6. Explain ranging. Explain reciprocal ranging with neat sketches.**

**Q.7 Define the term leveling .Write the types of levelling.**

**Q.8.** **(A) Differentiate between Prismatic Compass and Surveyor Compass. Also draw a neat sketch of Prismatic Compass with components.**

**Q.9. Determine the value of included angles in a closed compass traverse ABCD conducted in clockwise direction, given the following Fore Bearing of the respective lines :**

|  |  |
| --- | --- |
| **Line** | **F.B.** |
| **AB** | **40°** |
| **BC** | **70°** |
| **CD** | **210°** |
| **DA** | **280°** |

**Q10. The following consecutive readings were taken with a Dumpy level along a chain line at a common interval of 15 m the RL of BM is 150. Instrument was shifted after 4TH and 9TH readings.**

**3.450, 2.54, 1.25, 0.75, 3.25, 2.5, 1.85, 1.45, 1.95, 1.5, 2.5, 3.05 m**

**Find the RL of all points by (i) Rise and Fall method (ii) Height of Instrument Method.**